PROJECT REPORT
(Vol. II)
INFORMATION SYSTEM DEVELOPMENT
FOR ASEA LTD; BANGALORE

SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENTS
FOR THE DEGREE OF
Master of Computer Applications
(M. C. A.)

Harsher Singh Grewal
DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING
THAPAR INSTITUTE OF ENGG. AND TECHNOLOGY, PATIALA
(DEEMED TO BE A UNIVERSITY)
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** OTMAIN.PRG  
** Main menu for Overtime Calculation System (OCS)

clear
set talk off

** initialising variables

CHOICE = ''
MTODAY = space(6)

** Checking if today's date has been set

do PRGDATE
if MTODAY <= '880325'
  @23,0
  wait "Today's date has not been set on booting the system.;
          Please reboot! Press <CR>..." to PRESS
  quit
endif

do while .T.

** Displaying the list of items in the Main Menu

clear
set color to /w
@ 4,38 say 'OCS'
@ 5,35 say 'MAIN MENU'
@ 5,54 say 'VERSION 0'
set color to w
@ 7,25 say '1. Add Personnel Information'
@ 8,25 say '2. Edit Personnel Data'
@ 9,25 say '3. Input OT Hours'
@ 10,25 say '4. Edit OT Hours Details'
@ 11,25 say '5. Enter Manual Adjustments'
@ 12,25 say '6. Check List Menu'
@ 13,25 say '7. Month end Calculations'
@ 14,25 say '8. Query Menu'
@ 15,25 say '9. Print Menu'
@ 16,25 say '0. Exit'
CHOICE = ''
@ 19,25 say 'Enter your choice ; get CHOICE picture ;'
read

** Case Statement

do case
  case CHOICE = '1'
    do PERSINFO
  case CHOICE = '2'
    do EDITPERS
  case CHOICE = '3'
    do OTGENIP
  case CHOICE = '4'
    do EDOTREG
  case CHOICE = '5'

do MANADJT

  case CHOICE = '6'
      do CKLSMNU
  case CHOICE = '7'
      do OTCALC
  case CHOICE = '8'
      do QMENU
  case CHOICE = '9'
      do PRIMENU
  case CHOICE = '0'
      clear all
      return

endcase

enddo
** PRIMENU.PRO **

This is output report menu for getting the output for OT program

```
clear
set talk off

** Initialising the variables **
FRDATE = space(4)
TODATE = space(4)
ANS = ''
DIV = ''
CATEGORY = ''

do while .T.

** Displaying list of output reports available **

clear
set color to w+
@ 4,31 say 'OCS'
@ 5,28 say 'Print Menu'
set color to w
@ 8,22 say '1. Overtime Summary Report-General staff'
@ 9,22 say '2. Overtime Summary Report-Workers'
@ 10,22 say '3. Overtime Summary Report-Temporary employees'
@ 11,22 say '4. Worksheet'
@ 12,22 say '0. Exit to previous Menu'
CHOICE = 0
@ 15,22 say 'Enter your Choice : ' get CHOICE picture '9'
read

** Opening the databases **

select A
use OTREG index OTREG
select B
use PERS index PERS
select C
use TEMPWORK

if CHOICE = 0
    clear
    close database
    return
endif

clear
if CHOICE = 1 or. CHOICE = 2 or. CHOICE = 3 or. CHOICE = 4
    do GETPD with FRDATE, TODATE, ANS
    if ANS = 'N'
        close database
        loop
    endif
endif
endif
if CHOICE = 1
    CATEGORY = 'G'
endif
if CHOICE = 2
    CATEGORY = 'W'
endif
```
if CHOICE = 3
    CATEGORY = 'WT'
endif
if CHOICE = 1 .or. CHOICE = 2 .or. CHOICE = 3
    @ 23,0 clear
    DIV = ''
    @ 23,0 say 'Enter the Division as R or Y for summary report';
    get DIV picture '!'
    read
    do PRISUM with FRDATE, TODATE, CATEGORY, DIV
endif
if CHOICE = 4
    do PRIWKSH with FRDATE, TODATE
endif
endo
close database
return
** CKLSMNU.PRG
** This is the Check list menu to print the inputs as entered

clear
set talk off

** Opening the databases

select A
   use OTREG index OTREG
select B
   use PERS index PERS
select C
   use MAN_ADJ

do while .T.
clear
get color to W
   @ 4,33 say 'OCS'
   @ 5,27 say 'Check List Menu'
get color to W
   @ 8,20 say '1. For personnel information'
   @ 10,20 say '2. For overtime hours'
   @ 12,20 say '3. For manual adjustments'
   @ 14,20 say '0. Exit to previous Menu'
CHOICE = 0
   @ 17,23 say 'Enter your Choice : ' get CHOICE picture ' 9'
read

** Case statement

do case
   case CHOICE = 1
      @ 23,0 clear
      @ 23,0 say 'Set printer on ... and press any key'
      wait ' ' to KEY
      @ 24,0 say 'Printing is going on...'
      select A
      report form PERCKLST to print
   case CHOICE = 2
      do OTCKLST
   case CHOICE = 3
      @ 23,0 clear
      @ 23,0 say 'Set printer on ... and press any key'
      wait ' ' to KEY
      @ 24,0 say 'Printing is going on...'
      select C
      report form MANCKLST for PERDFR = '880217' no eject to print
   case CHOICE = 0
      clear
close database
   endcase
endo
close database
return
** GMENU.PRG  
** This is the Query Menu for asking queries on terminal

clear
set talk off

do while .T.

** Displaying the queries available

clear
set color to W+
@ 4,34 say 'OCS'
@ 5,30 say 'Query Menu'
set color to W
@ 9,15 say ' 1. For a person give the overtime details'
@ 10,22 say 'for the given period'
@ 12,15 say ' 2. For a particular date give'
@ 13,22 say 'the overtime details of employees'
@ 15,15 say ' 0. Exit to previous Menu'
CHOICE = 0
@ 18,22 say 'Enter your Choice : ' get CHOICE picture '9'
read

** Opening the databases

select A
  use OTREG index OTREG
select B
  use PERS index PERS

** Case statement

do case
  case CHOICE = 1
    do OOTEMP
  case CHOICE = 2
    do QEMPDT
  case CHOICE = 0
    clear
    exit
endcase

enddo
** PERSINFO.PRG
** add screen
** Paints the screen for getting information about all the employees

clear
set talk off

** Painting headings
@ 1,20 say 'Personnel Information - Add screen'
@ 2,51 say 'Cate'
@ 2,57 say 'Card'
@ 3,2 say 'Emp.no'
@ 3,19 say 'Name'
@ 3,42 say 'Basic'
@ 3,51 say 'gory'
@ 3,58 say 'no'
@ 3,63 say 'Div.'
@ 3,68 say 'Dept'

** open PERSINFO database **
use PERS index PERS

ROW = 5

** Initialising the variables

XEMP_NO = 
XENAME = space(30)
XBASIC = 0.00
XCATEGORY = 
XCARD_NO = 0
XDIV = 
XDEPT = 
STATUS = 

do while .T.
@ ROW,3 get XEMP_NO picture '999'
@ ROW,9 get XENAME picture '!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!'
@ ROW,41 get XBASIC picture '9999.99'
@ ROW,52 get XCATEGORY picture '!!'
@ ROW,57 get XCARD_NO picture '999'
@ ROW,64 get XDIV picture '!
@ ROW,68 get XDEPT picture '!!!'
read
@ 20,0 clear

** if no name is given, check for going out **

if len(trim(XENAME)) = 0
  ANS = 'N'
  @ 23,0 say 'Do you want to continue ? (Y/N):' get ANS picture '!' read
  if ANS <> 'Y'
    clear
    close database
    return
  else
    @23,0 clear
  loop
endif
endif
** validations program **

```
do VALIDPERS with XEMP_NO, XCATEGORY, XDIV, XDEPT
   if STATUS = 'l'
      loop
   endif
locate for EMP_NO = XEMP_NO
if .not. eof()
   @ 20,0 say 'Employee no. entered already exists, enter a new no.'
   loop
endif
```

** add record to database **

```
append blank
replace EMP_NO with XEMP_NO, ENAME with XENAME, BASIC with XBASIC
replace CATEGORY with XCATEGORY, CARD_NO with XCARD_NO,
replace DIV with XDIV, DEPT with XDEPT
```

** Initialising the variables**

```
XEMP_NO = ' '
XENAME = space(30)
XBASIC = 0.00
XCATEGORY = ' '
XCARD_NO = 0
XDIV = ' '
XDEPT = ' '
PROW=ROW
ROW = ROW + 2
if ROW > 20
   ROW = 5
   @ 5,0 clear
   @ PROW,3 say EMP_NO
   @ PROW,7 say ENAME
   @ PROW,41 say BASIC
   @ PROW,52 say CATEGORY
   @ PROW,57 say CARD_NO
   @ PROW,64 say DIV
   @ PROW,68 say DEPT
endif
if ROW>10
   @ 19,0 clear
endif
enddo
```

close database
return
** EDITPERS.PRG  
** Screen for editing the Personnel Information in PERS File  

    clear  
    set talk off  

** Initialising the variables  

    XPERS_NO = '  
    XENAME = space(30)  
    XBASIC = 0.00  
    XCATEGORY = '  
    XCARD_NO = 0  
    XDIV = '  
    XDEPT = '  
    COMMAND = '  
    STATUS = '  

** Open PERS database  

    use PERS index PERS  
    do while .T.  

** Printing the headings  

    @ 3,20 say 'Personnel Information Editing Screen'  
    set color to /w  
    @ 5,5 say 'N-Next  P-Previous  E-Edit  S-Seek  X-Exit'  
    set color to w  
    @ 8,5 say 'Emp. no: ' + EMP_NO  
    @ 8,26 say 'Name_____: ' + ENAME  
    @ 10,5 say 'Basic__: ' + str(BASIC,7,2)  
    @ 10,26 say 'Category: ' + CATEGORY  
    @ 12,5 say 'Card no: ' + str(CARD_NO,3,0)  
    @ 12,26 say 'Division: ' + DIV  
    @ 12,46 say 'Dept: ' + DEPT  
    do while .T.  

** Using the edit options  

    COMMAND = '  
    @ 1,0 say 'Give Command: ' get COMMAND picture '!'  
    read  
    @20,0 clear  
    do case  

    case COMMAND = 'N'  
        if .not. eof()  
            skip  
        endif  
        if eof()  
            @ 23,0 say 'End of file, no more records after this !'  
        else  
            @ 8,14 say EMP_NO  
            @ 8,36 say ENAME  
            @ 10,14 say BASIC  
            @ 10,36 say CATEGORY  

1
@ 12,14 say CARD_NO
@ 12,36 say DIV
@ 12,53 say DEPT
endif

case COMMAND = 'P'
  if .not. bof()
    skip -1
  endif
  if bof()
    @ 23,0 say 'You are already at the beginning of file !'
  else
    @ B,14 say EMP_NO
    @ B,36 say ENAME
    @ 10,14 say BASIC
    @ 10,36 say CATEGORY
    @ 12,14 say CARD_NO
    @ 12,36 say DIV
    @ 12,53 say DEPT
  endif

case COMMAND = 'S'
do while .T.
  @ 1,20 say 'Give Emp. no: ' get XEMP_NO picture '!999'
  read
  seek XEMP_NO
  if eof()
    @ 23,0 say '* Given Emp. no. not found *'
    ANS = 'N'
  @ 24,0 say 'Do you want to give new Emp. no. ? (Y/N): '
    get ANS picture '!'
    read
    if ANS <> 'Y'
      clear
      close database
      return
    else
      @ 23,0 clear
      loop
    endif
  endif
  @ B,14 say EMP_NO
  @ B,36 say ENAME
  @ 10,14 say BASIC
  @ 10,36 say CATEGORY
  @ 12,14 say CARD_NO
  @ 12,36 say DIV
  @ 12,53 say DEPT
  exit
endo
case COMMAND = 'E'
  XEMP_NO =EMP_NO
  XENAME =ENAME
  XBASIC =BASIC
  XCATEGORY=CATEGORY
  XCARD_NO =CARD_NO
  XDIV =DIV
  XDEPT =DEPT
  do while .T.
    @ B,14 get XEMP_NO picture '!999'

@ 8,36 get XNAME picture '!!!!!!!!!!!!!!!!!!!!!!!!!!!'
@ 10,14 get XBASIC picture '9999.99'
@ 10,36 get XCATEGORY picture '!!!'
@ 12,14 get XCARD_NO picture '999'
@ 12,36 get XDIV picture '!'  
@ 12,53 get XDEPT picture '!!!'
read
@ 20,0 clear
do VALIDPERS with XEMP_NO, XCATEGORY, XDIV, XDEPT
  if STATUS = 'L'
    loop
  else
    exit
  endif
endo
derase EMP_NO with XEMP_NO, ENAME with XENAME, BASIC with XBASIC  
derase CATEGORY with XCATEGORY, CARD_NO with XCARD_NO  
derase DIV with XDIV, DEPT with XDEPT
@23,0 say 'Record updated !'
case COMMAND = 'X'
  exit
endcase
endo

ANS = 'N'
@ 24,0 say 'Do you want to edit information of another employee ?(Y/N):'
  get ANS picture '!'   
read
  if ANS <> 'Y'
    clear
    close database
    return
  endif
@ 6,0 clear
endo
** OTGENIP.PRG
** Paints screen for getting OT details for an employee **

clear
set talk off

** initialising the variables

FRDATE=space(4)
TODATE=space(4)
XEMP_NO=‘
XCARD_NO=0
XHRFR=00.00
XHRTO=00.00
OK = 0
DAYS = ‘
STATUS = ‘

do while .T.

** painting the screen and get period, employee no, card no

set color to w+
@ 1,25 say "OT Hours add screen"
set color to w
@ 2,17 say "Period:"
@ 2,25 get FRDATE picture ‘9999’
set color to /w
@ 2,29 say ‘17’
set color to w
@ 2,33 say "to"
@ 2,37 get TODATE picture ‘9999’
set color to /w
@ 2,41 say ‘16’
set color to w
read
if FRDATE>TODATE
  set color to w*
    @ 23,0 say ‘Error in given period, correct the field’
  set color to w
  loop
endif
FRDATE=FRDATE+’17’
TODATE=TODATE+’16’
do CHKDATE with FRDATE, OK
if OK = 0
  set color to w*
    @ 23,0 say ‘Error in given period, correct the field’
  set color to w
  loop
endif
do CHKDATE with TODATE, OK
if OK = 0
  set color to w*
    @ 23,0 say ‘Error in given period, correct the field’
  set color to w
  loop
endif
exit
enddo
@ 23,0 clear
select A
use PERS index PERS
select B
use OTREG index OTREG

do while .T.

XEMP_NO = ''
@ 2,49 say "Emp. no.:
@ 2,59 get XEMP_NO picture '999'
read

select A
seek XEMP_NO
if .not. eof()
    set color to w+
    @ 3,17 say "Card no.:
    @ 3,28 say CARD_NO
    @ 3,41 say "Name:
    @ 3,48 say ENAME
    set color to w
else
    @23,0 say '** Given Emp. no. not found **'
    ANS = '
    @24,0 say 'Do you want to give new Emp. no.? (Y/N):' get ANS picture '!'
    read
    if ANS <> 'Y'
        clear
        close database
        return
    else
        @23,0 clear
        loop
    endif
endif

select B
go top
locate for EMP_NO=XEMP_NO .and. PERDNR=FRDATE .and. PERDTO=TODATE

if XEMP_NO = EMP_NO
    @ 23,0 say 'Given Emp. no. already present, enter new no.,'
    loop
endif
@ 23,0 clear
append blank
replace EMP_NO with XEMP_NO, PERDNR with FRDATE, PERDTO with TODATE
XDATE = FRDATE
M = substr (XDATE, 3, 2)
Y = substr (XDATE, 1, 2)
do GETDAYS with Y, M, DAYS

ROW=6
COL=0
@ 4,COL+9 say "OT Hours"
@ 5,COL+1 say "Date From To"

do while .T.

    @ ROW,COL+0 say XDATE

2
@ ROW,COL+7 get XHRFR picture '99.99'
@ ROW,COL+13 get XHRTD picture '99.99'
read
  do OTHRCMK with XHRFR, XHRTD, STATUS
    if STATUS = 'E'
      exit
    endif
    if STATUS = 'L'
      loop
    endif
  enddo

D = substr (XDATE, 5, 2)
FR = 'HRFR' + D
TD = 'HRTO' + D
replace &FR with XHRFR, &TD with XHRTD

if XDATE=TODATE
  exit
endif

ROW = ROW + 2
if ROW >21
  ROW=6
  COL = COL + 20
  @ 4,COL+9 say "OT Hours"
  @ 5,COL+1 say "Date From To"
endif
  do GETNXTDTD with XDATE, DAYS
endo

@ 23,0 clear
ANS=''
@24,0 say 'Do you want to enter OT details for another person ?(Y/N):'
  get ANS picture '!'
read
if ANS<> 'Y'
  clear
close database
return
endif
@3,0 clear
endo
** EDOTREG.PRG  
** Screen for editing the Overtime Hours entered in the OTREG file

clear
set talk off

** Initialising the variables

FRDATE = space(4)
TODATE = space(4)
XHRFR = 0.00
XHRTO = 0.00
DAYS = ''
STATUS = ''

select A
use OTREG index OTREG

set color to /w
@ 1,25 say 'OT Hours Editing Screen'
@ 2,0 say 'N = Next     E = Edit     X = Exit'
set color to w

do while .T.

XEMP_NO = ''
COMMAND = ''

** Creates editing screen

@ 3,13 say 'Emp. no:'
@ 3,23 get XEMP_NO picture '!999'
@ 3,31 say 'Period:'
@ 3,39 get FRDATE picture '9999'
set color to /w
@ 3,43 say '17'
set color to w
@ 3,47 say 'to'
@ 3,51 get TODATE picture '9999'
set color to /w
@ 3,55 say '16'
set color to w
read
FRDATE = substr(FRDATE,1,4) + '17'
TODATE = substr(TODATE,1,4) + '16'
select A

locate for EMP_NO = XEMP_NO .and. PERDFR = FRDATE .and. PERDTO = TODATE

if eof()
   @ 23,0 say '* Given Emp. no. for the said period not found *'
   ANS = 'N'
   @ 24,0 say 'Do you want to give new Emp. no ?(Y/N):' get ANS picture '!' read
   if ANS <> 'Y'
      clear
      close database
      return
   else
      @ 23,0 clear
      loop
XDATE = FRDATE
M = substr(XDATE, 3, 2)
Y = substr(XDATE, 1, 2)
do GETDAYS with Y, M, DAYS

ROW = 6
COL = 0
@ 4, COL+9 say 'OT Hours'
@ 5, COL+1 say 'Date From To'
D = substr(XDATE, 5, 2)
FR = 'HRFR' + D
TO = 'HRTO' + D
@ ROW, COL say XDATE
@ ROW, COL+7 say &FR
@ ROW, COL+13 say &TO

do while .T.
  COMMAND =
  do while COMMAND < 'N' .AND. COMMAND < 'E' .AND. COMMAND < 'X'
    @ 0, 0 say 'Give Command:' get COMMAND picture 'I'
    read
  enddo

@ 22, 0 clear
do case
  case COMMAND = 'N'
    do GETNXTDT with XDATE, DAYS
    D = substr(XDATE, 5, 2)
    FR = 'HRFR' + D
    TO = 'HRTO' + D
    ROW = ROW+2
    if ROW > 22
      ROW = 6
      COL = COL+20
      @ 4, COL+9 say 'OT Hours'
      @ 5, COL+1 say 'Date From To'
    else
      if ROW > 21
        ROW = 7
        COL = COL+20
        @ 4, COL+9 say 'OT Hours'
        @ 5, COL+1 say 'Date From To'
      endif
    endif
  endif
  if XDATE > TODATE
    exit
  endif
  @ ROW, COL+0 say XDATE
  @ ROW, COL+7 say &FR
  @ ROW, COL+13 say &TO
  case COMMAND = 'E'
  do while .T.
    XHRFR = &FR
    XHRTO = &TO
    @ ROW, COL+0 say XDATE
    @ ROW, COL+7 get XHRFR picture '99.99'
    @ ROW, COL+13 get XHRTO picture '99.99'
read

   do OTHRCHK with XHRFR, XHRT0, STATUS
     if STATUS = 'L'
       loop
     else
       exit
     endif
   enddo

   D = substr(XDATE, 5, 2)
   FR = 'HRFR' + D
   TO = 'HRTO' + D
   replace &FR with XHRFR, &TO with XHRT0
   @ 22,0 say 'Record updated !'

   case COMMAND = 'X'
     exit
   endcase
   enddo

   ANS = 'N'
   @ 24,0 say 'Do you want to edit information of another employee ?(Y/N):';
   get ANS picture '!

   read
   if ANS <> 'Y'
     clear
     close database
     return
   endif
   @ 6,0 clear
   enddo
** OTCALC.PRG
** Program to do month end overtime calculations
    clear
    set talk off

** Initialising the variables
    FRDATE= space(4)
    TODATE= space(4)
    TOTHRS= 0.00
    TAMT = 0.00
    DFAY = 0.00
    DASL = 0.00
    DASH = 0.00
    DAW = 0.00
    ANS = ''
    XDIV = ''

** Opening the databases
    select A
        use OTREG index OTREG
    select B
        use PERS index PERS
    select C
        use TEMPWORK
            zap
    select D
        use MAN_ADJ

** Getting the period for which calculations are to be done
    do GETPD with FRDATE, TODATE, ANS
        if ANS = 'N'
            clear
            close database
            return
        endif
    select A
    go top
    seek FRDATE+TODATE
    if eof()
        @ 23,0 clear
        @ 23,0 say 'No OT details found for the given period, press any key' to ANYKEY
        wait ''
        return
    endif
    do WKSHEET with FRDATE, TODATE
        @ 23,0 clear
        @ 23,10 say 'Enter the D.A. for all for the above period'
        @ 24,0 say 'DA Gen-Basic <101>:' get DASL picture '999.99'
        @ 24,31 say 'DA Gen-Others:' get DASH picture '999.99'
        @ 24,58 say 'DA Workers:' get DAW picture '999.99'
        read
        @ 23,0 clear
@ 24,0 say 'Calculating OT amount...'

select A
go top
seek FRDATE+TODATE

do while .T.
  DPAY = 0.00
  TAMT = 0.00
  SHRS = 0.00
  ADJT = 0.00
  select B
  seek A->EMP_NO
  XCATGY = substr(CATEGORY, 1, 1)
  if XCATGY = 'G'. and. BASIC < 101
    DPAY = (BASIC+DASL)/208.00
  else
    if XCATGY = 'G'
      DPAY = (BASIC+DASH)/208.00
    else
      if (XCATGY = 'W' .and. substr(CATEGORY, 2,1) = 'T')
        .or. (XCATGY = 'N' .and. substr(CATEGORY, 2,1) = 'G')
        DPAY = BASIC/208.00
      else
        if XCATGY = 'W'
          DPAY = (BASIC+DAW)/208.00
        endif
    endif
  endif
endif
endif
select D
go top
locate for PERDFR = FRDATE .and. PERDTO = TODATE .and. EMP_NO= A->EMP_NO
store HRS_SGL to SHRS
store AMT_ADJ to ADJT
select A
TOTHRS = (TOT_OT_HRS*2) - SHRS
TAMT = DPAY*TOTHRS + ADJT
replace OT_AMT with TAMT
skip
if (PERDFR<FRDATE .or. PERDTO<TODATE) .or. eof()
  exit
endif
enddo
@ 21,0 clear
@ 23,0 say 'Month end calculations complete, press any key'
wait '' to KEY
close database
return
** WKSHEET.PRG
** Outputs a Worksheet showing daily overtime hours and monthly totals

    clear
    set talk off
    parameters FRDATE, TODATE

** Initialising the variables

    DAYS =  
    XHRFR = SPACE(6)
    XHRTO = SPACE(6)
    FR=0.00
    TO=0.00
    DIFF = 0.00

    @23,0 clear
    @ 23,0 say 'Wait, .... doing the calculations'
    NOE=1

** Total OT hours calculation

    do while .T.
        XDATE = FRDATE
        M = substr(XDATE, 3, 2)
        Y = substr(XDATE, 1, 2)
        do GETDAYS with Y, M, DAYS

        @23,40 say 'No of emp : '+str(NOE,3)
        select B
        seek A->EMP_NO
        select C
        append blank
        replace EMP_NO with A->EMP_NO
        replace ENAME with B->ENAME
        replace PERDFR with FRDATE, PERDTO with TODATE
        TOTHR5 = 0.00

        do while .T.
            DIFF = 0.00
            select A
            DT = substr(XDATE, 5, 2)
            XHRFR='HRFR'+DT
            XHRTO='HRTO'+DT
            FR=&XHRFR
            TO=&XHRTO
            select C
            HD = 'D' + DT

            if (FR>0.00 .and. TO>0.00)
                do HRSDIFF with FR, TO, DIFF
                if (FR < 12.00 .and. TO > 12.30)
                    DIFF = DIFF - 0.50
                endif
                if TO > 21.45
                    DIFF = DIFF - 0.50
                endif
            endif
replace &HD with DIFF
TOTHRS = TOTHRS + DIFF
else
    replace &HD with 0.00
endif
if (DT > '09' .and. DT < '28')
    NEWD = str(val(DT)+1, 2)
    XDATE = substr(XDATE, 1, 4)+NEWD
else
do GETNXTDT with XDATE, DAYS
endif
if XDATE > TODATE
    exit
endif
enddo
replace TOT_OT_HRS with TOTHRS, CALC_DATE with MTODAY
select A
replace TOT_OT_HRS with TOTHRS
skip
if (PERDFR<>FRDATE .or. PERDTOK<>TODATE) .or. eof()          
    exit
endif
NOE=NOE+1
enddo
@24,0
@24,0 say 'Worksheet calculation complete...Press any key'
wait '' to KEYPRS
return
** QEMPDT.PRG
** Query program for displaying the overtime details for the employees
** for a given date

clear
set talk off

** Initialising the variables
XDATE = space(6)
PFR = space(4)
PTO = space(4)
OK = 0
CNT = '
DAYS = '
DT = '
YM = '

** Painting the screen

do while .T.
   XDATE = space(6)
   @ 2,2 say 'Give date for which data required: get XDATE picture '999999'
   read
   do CHKDATE with XDATE, OK
      if OK = 0
        @ 23,0 say 'Error in given date'
        ANS = 'N'
        @ 24,0 say 'Do you want to give another date ?(Y/N):';
        get ANS picture '
      read
      if ANS <> 'Y'
         clear
         return
      else
        @ 23,0 clear
        loop
    endif
   endif

   select A
   go top
   DT = substr(XDATE, 5, 2)
   YM = substr(XDATE, 1, 4)

   if val(DT) >= 17
      locate for substr(PERDFR, 1, 4) = YM
      if eof()
         @ 24,0 say 'Given date not found, give new one'
      loop
      endif
   else
      locate for substr(PERDTO, 1, 4) = YM
      if eof()
         @ 24,0 say 'Given date not found, give new one'
      loop
      endif
   endif

   @ 1,0 clear
   set color to w+
   @ 1,25 say 'Overtime details'
set color to w
@ 2,1 say 'Date:'+XDATE
@ 2,41 say 'DT Hours'
@ 3,1 say 'Emp. no'+space(8)+'Name'+space(20)+'From       To'
@ 3,58 say 'Dept.'

FR = 'HRFR' + DT
TO = 'HRTD' + DT
ROW = 4

do while YM = substr(PERDFR,1,4) .or. YM = substr(PERDTO,1,4)
   if (&FR >0.00 .and. &TO >0.00)
      @ ROW,2 say EMP_NO
      select B
      seek A->EMP_NO
      @ ROW,10 say ENAME
      @ ROW,59 say DEPT
      select A
      @ ROW,39 say &FR
      @ ROW,46 say &TO
      ROW = ROW + 2
      if ROW > 21
         @ 24,0 say 'Press space bar to continue'
         wait '' to PAGE
         @ 4,0 clear
         ROW = 4
      endif
      skip
   endif
endo
do
   @ 23,0 say 'Press any key to exit'
   wait '' to CNT
   exit
endo
clear
close database
return
** OTCKLST.PRG
** Check list to print the overtime hours entered in OTREG file

clear
set talk off

** Initialising the variables

FRDATE = space(4)
TODATE = space(4)
DAYS = ' ' 
ANS = ' '

do while .T.
do GETPD with FRDATE, TODATE, ANS
if ANS = 'N'
clear
return
endif
select A
goto top
locate for PERDFR = FRDATE .and. PERDTO = TODATE
if eof()
   @ 23,0 say 'No OT details found for the given period, press a key'
   wait ' ' to KEY
   clear
   return
endif
exit
dendo

@ 23,0 clear
@ 23,0 say 'Set printer on ... and press any key'
wait ' ' to FRT
set print on
@ 23,0 clear
@ 24,0 say 'Printing the checklist...'
set console off
? space(22)+'OT Hours - Check list'
? space(22)+'Period: '+FRDATE+' to '+TODATE

do while .T.
select B
seek A->EMP_NO
EMPCNT = 0
?
?'Emp no: '+EMP_NO+space(4)+'Name: '+ENAME
? space(8)+'OT Hours'+space(12)+'OT Hours'+space(12)+'OT Hours'+
    space(12)+'OT Hours'
? 'Date From To '+Y date From To '+Y date From To '
XDATE = FRDATE
M = substr(XDATE, 3, 2)
Y = substr(XDATE, 1, 2)
do GETDAYS with Y, M, DAYS

select A
do while .T.
   ?
   ?
CNT = 0

do while CNT < 4
    D = substr(XDATE, 5, 2)
    FR = 'HRFR' + D
    TO = 'HRTO' + D
    ?? XDATE+ ' +str(&FR,5,2)+ ' +str(&TO,5,2)+ ' 
    CNT = CNT + 1
    do GETNXTDT with XDATE, DAYS
    if XDATE > TODATE
        exit
    endif
    endif
    if XDATE > TODATE
        exit
    endif
endo
EMPCNT = EMPCNT + 1
if EMPCNT = 3
    eject
    exit
endif
skip
?

if PERDFR <> FRDATE .or. PERDTO <> TODATE .or. eof()
    exit
endif

dendo

set print off
set console on
@ 23,0 clear
@ 24,0 say 'Printing is over, press a key'
wait '' to KEY
return
**getnxtdt.pro**

**Program for changing the date according to the calendar**

parameters XDATE, DAYS

\[ D = \text{substr}(XDATE, 5, 2) \]
\[ M = \text{substr}(XDATE, 3, 2) \]
\[ Y = \text{substr}(XDATE, 1, 2) \]
\[ \text{VAL} \_D = \text{val}(D) + 1 \]
\[ \text{V} \_DAYS = \text{val}(DAYS) \]
if \[ \text{VAL}\_D > \text{V}\_DAYS \]
\[ \text{VAL}\_D = 1 \]
\[ \text{VAL}\_M = \text{val}(M) + 1 \]
if \[ \text{VAL}\_M = 13 \]
\[ \text{VAL}\_M = 1 \]
\[ \text{VAL}\_Y = \text{val}(Y) + 1 \]
\[ Y = \text{str}(\text{VAL}\_Y, 2) \]
endif

if \[ \text{VAL}\_M<10 \]
\[ M = '0' + \text{str}(\text{VAL}\_M, 1) \]
else
\[ M = \text{str}(\text{VAL}\_M, 2) \]
endif

if \[ \text{VAL}\_D<10 \]
\[ D = '0' + \text{str}(\text{VAL}\_D, 1) \]
else
\[ D = \text{str}(\text{VAL}\_D, 2) \]
endif

\[ \text{XDATE} = Y + M + D \]

return
** QOTEMP.PRG
** Query program for displaying the OT details for a person for a given period

clear
set talk off

** Initialising the variables
FRDATE = space(4)
TODATE = space(4)
XEMP_NO= ' '
DAYS = ' '
ANS = ' '

** getting the period for which OT details wanted

do while .T.

@ 1,10 say 'Enter the period for which you want the information'
@ 2,10 say 'Period: ' get FRDATE picture '9999'
set color to /w
@ 2,22 say '17'
set color to w
@ 2,25 say 'to' get TODATE picture '9999'
set color to /w
@ 2,32 say '16'
set color to w
read
FRDATE = substr(FRDATE, 1, 4) + '17'
TODATE = substr(TODATE, 1, 4) + '16'

@ 2,48 say 'Emp. no: ' get XEMP_NO picture '!!!999'
read

select A
go top
locate for PERDFR = FRDATE .and. PERDTO = TODATE .and. EMP_NO = XEMP_NO
if eof()

@ 23,0 say '* Given Emp. no. for the said period not found *
ANS = 'N'
@ 24,0 say 'Do you want to give new Emp. no. ?(Y/N): ' get ANS picture '
read
if ANS <> 'Y'
clear
return
else
@ 23,0 clear
loop
endif
endif

** Displaying the OT details

clear
set color to w+
@ 1,23 say 'OT details for an employee'
set color to w
@ 2,1 say 'Period: '+FRDATE+' to '+TODATE+space(23)+'Emp. no: '+XEMP_NO
select B
seek A->EMP_NO
3,1 say 'Name : +ENAME+space(7)+Div : +DIV+space(5)+Dept : +DEPT
ROW = 6
COL = 0
@ 4,COL+9 say 'OT Hours'
@ 5,COL+1 say 'Date From To'
select A
XDATE = FRDATE
M = substr(XDATE, 3, 2)
Y = substr(XDATE, 1, 2)
do GETDAYS with Y, M, DAYS

do while .T.
    D = substr(XDATE, 5, 2)
    FR = 'HRFR' + D
    TO = 'HRTO' + D
    @ ROW,COL+0 say XDATE
    @ ROW,COL+7 say &FR
    @ ROW,COL+13 say &TO
    ROW = ROW + 2
    if ROW > 21
        ROW = 6
        COL = COL + 20
        @ 4,COL+9 say 'OT Hours'
        @ 5,COL+1 say 'Date From To'
    endif
    if XDATE = TODATE
        exit
    endif
    do GETNXTDTE with XDATE, DAYS
endo do

@ 22,0 say 'Total OT Hours: '
@ 22,16 say TOT_OT_HRS
@ 22,34 say 'Total OT Amt: Rs.'
@ 22,51 say OT_AMT

ANS = 'N'
@ 24,0 say 'Do you want to see OT Details for another employee?';
    get ANS picture 'Y'
read
    if ANS <> 'Y'
        clear
        return
    else
        @ 24,0 clear
    loop
endif
enddo
** MANADJT.FRG
** add screen
** Paints the screen for getting OT adjustment information about employees

clear
set talk off

** Painting headings

set color to w+
@ 1,25 say 'Manual Adjustment Screen'
set color to w
@ 2,8 say 'Period'+'+'+'Period'+'+'+'Single'
@ 2,31 say 'Adjust'+space(33)+'Entered'
@ 3,1 say 'Emp.no'+'+'+'From'+'+'+'To'+'+'+'Hours'
@ 3,31 say 'Amount'+space(8)+'Reason'+space(19)+'By-name'

** open Manual Adjustment database **

use MAN_ADJ

ROW = 5

** initialising the variables

XEMP_NO = '
XPERDFR = space(6)
XPERDTO = space(6)
XHRS_SGL= 0.00
XAMT_ADJ= 0.00
XREASON = space(30)
XENTD_BY= space(10)

do while .T.

@ ROW,2 get XEMP_NO picture '!999'
@ ROW,3 get XPERDFR picture '999999'
@ ROW,16 get XPERDTO picture '999999'
@ ROW,24 get XHRS_SGL picture '99.99'
@ ROW,31 get XAMT_ADJ picture '9999.99'
@ ROW,39 get XREASON picture '!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!'
@ ROW,70 get XENTD_BY picture '!!!!!!!!!!'
read
@ 20,0 clear

** if no period is given, check for going out **

if XPERDFR = ' ' and XPERDTO = ' ' ANS = 'N'
@ 23,0 say 'Do you want to continue ? (Y/N):' get ANS picture '!
read
if ANS <> 'Y'
clear
close database
return
else
@23,0 clear
loop
endif
endif
** validations program **

locate for EMP_NO = XEMP_NO .and. PERDFR = XPERDFR .and. PERDTO = XPERDTO
if .not. eof()
   @ 20,0 say 'Employee no. entered already exists, enter a new no.'
   loop
endif

** add record to database **

append blank
replace EMP_NO with XEMP_NO, PERDFR with XPERDFR, PERDTO with XPERDTO
replace HRS_SGL with XHRS_SGL, AMT_ADJ with XAMT_ADJ, REASON;
    with XREASON, ENTD_BY with XENTD_BY

** Initialising the variables**

XEMP_NO =
XPERDFR = space(6)
XPERDTO = space(6)
XHRS_SGL= 0.00
XAMT_ADJ= 0.00
XREASON = space(30)
XENTD_BY= space(10)

PROC=ROW
ROW = ROW + 2
if ROW > 20
   RDW = 5
   @ 5,0 clear
   @ ROW,3 say XEMP_NO
   @ ROW,9 say XPERDFR
   @ ROW,17say XPERDTO
   @ ROW,25say XHRS_SGL
   @ ROW,31say XAMT_ADJ
   @ ROW,38 say XREASON
   @ ROW,69 say XENTD_BY
endif
if ROW>10
   @ 19,0 clear
endif
enddo

close database
return

return
** PRISUM.PRG
** To print output reports for the overtime hours and amount

clear
set talk off
parameters FRDATE, TODATE, CATEG, XDIV

** initialising the variables

SNO = 0
ANS = '
HEADING = 0
KEY = '

select A
go top
locate for PERDFR = FRDATE .and. PERDTO = TODATE
if eof()
   @ 23,0 say 'No OT details found for the given period'
   return
endif

** printing the summary

@ 23,0 clear
@ 23,0 say 'Set printer on ... and press any key' get ANS
read
set print on
eject
SNO = 1
NOOTDET = 1

** printing the headings

do while .T.
   select B
   seek A->EMP_NO
   XCATGY = CATEGORY
   if (XCATGY = CATEG .and. XCATGY <> 'WT') .or.
     (CATEG = 'G' .and. XCATGY = 'NG')
    .or. (CATEG = 'WT' .and. XCATGY = 'WT')

   select A
   if substr(EMP_NO, 1, 1) = XDIV
      if HEADING = 0
         @ 24,0 say 'Printing ........'
         ? space(48)+'Date: '+MTODAY
         ? chr(27)+chr(69)+space(22)+'Overtime Summary Report'
         if CATEG = 'G' .or. XCATGY = 'NG'
            ? space(26)+'(General Staff)'
         endif
         if CATEG = 'W' .and. XCATGY<>'WT'
            ? space(28)+'(Workers)'
         endif
         if CATEG = 'WT'
            ? space(24)+'(Temporary Employees)'
         endif
         ? chr(27)+chr(70)
      endif
   endif
   YRS = substr(FRDATE,1,2)
   NYR = substr(TODATE,1,2)
YR = '19' + YRS
? space(7)+'Year : '+YR
if NYR > YRS
   ?? '- '+NYR
endif

??space(29)+'Division: '+XDIV
? space(7)+'Period: '+FRDATE+ ' to '+TODATE
?
? space(7)+'SNO'+space(4)+'Emp. no'+space(5)+'Total OT Hours'
??space(7)+'Total OT Amount'
? '---------------------'
?? '----------'
?

HEADING = 1

NOTDET = 0

** printing the data

? str(SNO)+space(6)+EMP_NO+space(10)+str(TOT_OT_HRS,6,2)
??space(14)+str(OT_AMT,7,2)
?
SNO = SNO + 1
endif
endif
select A
skip
if (PERDFR<FRDATE .or. PERDTO<TODATE) .or. eof()
   exit
endif
enddo
if NOTDET = 1
   @ 23,0 say 'No OT details found for this Category'
   @ 24,0 say 'Press any key... to continue' get KEY
   read
   return
endif

clear
@ 24,0 say 'Printing is over, press any key'
set print off
wait '' to ANYKEY
return
**PRIWKSH.PRG**

**Outputs a Worksheet showing daily overtime hours and monthly totals**

clear
set talk off
parameters FRDATE, TODATE

**Initialising the variables**

DAYS = ' ' 
ANS = ' ' 

select C 
if .not. (PERDFR = FRDATE .and. PERDTO = TODATE)
  @ 23,0 clear 
  @ 23,0 say 'No data available for the given period, press a key' 
  wait '' to ANYKEY 
  return
else
**Set printer on** 
  @ 23,0 say 'Set printer on and press any key...' get ANS picture '!' read 
  set print on
  @ 23,0
  @ 23,0 say 'Printing is going on...' set console off

? chr(27)+chr(15) 
?? 'Report Date: '+MTODAY 
?? space(62)+'WORKSHEET'+ for '+'Period: '+FRDATE+ to '+TODATE 
?? 
?? space(84)+'UT in Hours for dates in first row' 
?? 'Emp. no.'

XDATE = FRDATE 
M = substr(XDATE, 3, 2) 
Y = substr(XDATE, 1, 2) 
do GETDAYS with Y, M, DAYS if DAYS = '20' 
  ? ' 17 '+' 18 '+' 19 '+' 20 '+' 21 '+' 22 '+' 23 ' 
  ? ' 24 '+' 25 '+' 26 '+' 27 '+' 28 ' endif 
if DAYS = '29' 
  ? ' 17 '+' 18 '+' 19 '+' 20 '+' 21 '+' 22 '+' 23 ' 
  ? ' 24 '+' 25 '+' 26 '+' 27 '+' 28 '+' 29 ' endif 
if DAYS = '30' 
  ? ' 17 '+' 18 '+' 19 '+' 20 '+' 21 '+' 22 '+' 23 ' 
  ? ' 24 '+' 25 '+' 26 '+' 27 '+' 28 '+' 29 '+' 30 ' endif 
if DAYS = '31' 
  ? ' 17 '+' 18 '+' 19 '+' 20 '+' 21 '+' 22 '+' 23 ' 
  ? ' 24 '+' 25 '+' 26 '+' 27 '+' 28 '+' 29 '+' 30 '+' 31 ' endif

?? ' 1 '+' 2 '+' 3 '+' 4 '+' 5 '+' 6 '+' 7 ' 
?? ' 8 '+' 9 '+' 10 '+' 11 '+' 12 '+' 13 '+' 14 ' 
?? ' 15 '+' 16 ' 
??' Total OT Hrs'+space(3)+'Calc Date'
do while .not. eof()
   ? space(1)+EMP_NUM+space(4)
   XDATE = FRDATE
   do while XDATE <= TCDATE
      D = substr(XDATE, 5, 2)
      HD = 'D' + D
      if &HD = 0.00
         ?? space(6)
      else
         ?? str(&HD,5,2)+'
      endif
      do GETNXTDT with XDATE, DAYS
      enddo
      ??space(4)+str(TDT_CRT_HRS,6,2)+space(6)+CALC_DATE
      skip
   enddo
endif

?chr(18)
set print off
set console on
@ 24,0 clear
@ 24,0 say 'Printing is over'
return

return
** OTHRCHK.FRG
** Program for validating the OT Hours entered

parameters XHRFR, XHRTD, STATUS

STATUS = ' '

FRS = ' '
FRM = ' '
TOS = ' '
TOM = ' '

NOERR = .T.
FRS = str(XHRFR, 5, 2)
FRM = substr(FRS, 4, 2)
TOS = str(XHRTD, 5, 2)
TOM = substr(TOS, 4, 2)

NOERR= (FRM='15' .or. FRM='30' .or. FRM='45' .or. FRM='00') ;
.and. (TOM='15' .or. TOM='30' .or. TOM='45' .or. TOM='00')

if .not. (XHRFR=0.00 .and. XHRTD=0.00)
  if XHRFR > 24.0 .or. XHRTD > 24.0 .or. XHRFR=XHRTD .or. .not. NOERR
    NOERR = ' '
    @ 23,0 say 'Error in time. Do you want to continue? (Y/N):';
    get ANS picture '!'
    read
    if ANS <> 'Y'
      STATUS = 'E'
    else
      @23,0 clear
      STATUS = 'L'
    endif
  endif
endif
return
**VALIDPERS.PRG**

**Program to validate various parameters in persinfo file**

parameters XEMP_NO, XCATEGORY, XDIV, XDEPT

STATUS = ' '

**EMP_NO starts with 'Y', 'R' and greater than 300**

if (substr(XEMP_NO, 1, 1) <> 'R' .and. substr(XEMP_NO, 1, 1) <> 'Y');
    .or. substr(XEMP_NO, 2, 3) < '300' .or. XEMP_NO = ''
    @ 21,0 say 'Error in Emp. no. ,give >= R300 or Y300 '
    STATUS = 'L'
endif

**CATEGORY's first character is 'G', 'W', 'T', 'M' or 'N'**

XCATGY = substr(XCATEGORY, 1, 1)
if (XCATGY <> 'G' .and. XCATGY <> 'M' .and. XCATGY <> 'T' .and. XCATGY <> 'W' .and. XCATGY <> 'N')
    @ 22,0 say "Error in Category type, give first figure only as;
        'G', 'W', 'T', 'N' or 'M'"
    STATUS = 'L'
endif

**DIV is 'R', 'Y' and DIV= 1st character in EMP_NO**

if (XDIV <> 'R' .and. XDIV <> 'Y') .or. XDIV = ''
    .or. XDIV <> substr(XEMP_NO, 1, 1)
    @ 23,0 say "Error in Division type, give only 'R' or 'Y';
        and same as in Emp. no."
    STATUS = 'L'
endif

**DEPT starts with 'R' or 'Y' only**

if substr(XDEPT,1, 1) <> substr(XEMP_NO, 1, 1) .or. XDEPT = ''
    @ 24,0 say "Error in Dept. type, give first letter same as in Emp. no."
    STATUS = 'L'
endif

return
**GETPD.PRG**

**Gets the period for which computations are to be done**

```
clear
set talk off
parameters FRDATE, TODATE, ANS

**Initialising the variables**

FRDATE = space(4)
TODATE = space(4)

do while .T.

FRDATE = space(4)
TODATE = space(4)
@ 21,10 say 'Enter the period for which you want the information'
@ 22,10 say 'Period: ' get FRDATE picture '9999'
set color to /w
@ 22,22 say '17'
set color to w
@ 22,25 say 'to' get TODATE picture '9999'
set color to /w
@ 22,32 say '16'
set color to w
read
```

```
if FRDATE = ' ' .or. TODATE = '
   ANS = 'N'
@ 23,0 say 'Error in period. Do you want to continue?(Y/N)?:'
   get ANS picture '!!'
   read
   if ANS <> 'Y'
      ANS = 'N'
      exit
   else
      @ 23,0 clear
      loop
   endif
endif
```

```
FRDATE = FRDATE + '17'
TODATE = TODATE + '16'
exit
```

```
endo
return
```
** GETDAYS.FR6 **
** Program to get no. of days in the given month **

parameters YEAR, MON, DAYS

** initialising variable **

LY = 0.00
Y = 0.0
LYINT = 0

** checking for months with 31 days **

if MON = '01' .or. MON = '03' .or. MON = '05' .or. MON = '07';
   .or. MON = '08' .or. MON = '10' .or. MON = '12'
   DAYS = '31'
else

** checking for months with 30 days **

   if MON = '04' .or. MON = '06' .or. MON = '09' .or. MON = '11'
      DAYS = '30'
   endif
endif

** checking for the month of february – leap year or not **

if MON = '02'
   store val(YEAR) to Y
   LY = Y / 4.0
   store int(LY) to LYINT
   if LYINT <> LY
      DAYS = '28'
   else
      DAYS = '29'
   endif
endif
return
return
** CHKDATE.PRG  
** Program for checking the correctness of given date  

parameter DATE, OK  
OK = 1  

** checking the year **  

if substr(DATE, 1, 2) < '88'  
   OK = 0  
endif  

** checking the month **  

if substr(DATE, 3, 2) < '01' .OR. substr(DATE, 3, 2) > '12'  
   OK = 0  
endif  

** checking the date **  

DAYS =  
do GETDAYS with substr(DATE, 1, 2), substr(DATE, 3, 2), DAYS  
if substr(DATE, 5, 2) < '01' .OR. substr(DATE, 5, 2) > DAYS  
   OK = 0  
endif
** HRSDIFF.PRG
** Program to calculate the OT Hours for an employee

   parameters XHRFR, XHRT0, DIFF

** Initialising the variables

   FMIN= 0.00
   Tmin= 0.00
   MHRF= 0.00
   MHRT= 0.00
   XHRF= 0.00
   XHRT= 0.00

** Calculating the overtime hours

   FRS = str(XHRFR, 5, 2)
   TOS = str(XHRT0, 5, 2)
   FMIN =val( substr(FRS, 4, 2 ))
   Tmin =val( substr(TOS, 4, 2 ))
   MHRF = FMIN / 60.0
   MHRT = Tmin / 60.0
   XHRF = MHRF + val( substr(FRS, 1, 2 ))
   XHRT = MHRT + val( substr(TOS, 1, 2 ))
   DIFF = XHRT - XHRF

return
** PROGDATE.PRO
** Extracts ASEA's standard date format from system date

Y=''
M=''
D=''
TEMP=''
MTODAY=''
TEMP=dtoc(Date())
store substr(TEMP,7) to Y
store substr(TEMP,1,2) to M
store substr(TEMP,4,2) to D
MTODAY=Y+M+D
ORDER HANDLING SYSTEM
** OHMENU.PRG
** Main menu for Order Handling System

clear
set talk off

** initialising variables

CHOICE = ' '
MTODAY = space(6)

** checking if today's date has been set

do PRGDATE
if MTODAY < '880301'
 @ 23,0
   wait "Today's date has not been set on booting the system. Please reboot! Press <CR>...", to PRESS
   quit
endif

do while .T.

** Displaying the list of items in the Main Menu

clear
set color to /w
@ 4,33 say 'OHS'
@ 5,30 say `MAIN MENU'
set color to w
@ 7,25 say '1. Adding Menu'
@ 9,25 say '2. Edit Order Information'
@ 11,25 say '3. Edit Activity Information'
@ 13,25 say '4. Print Menu'
@ 15,25 say '5. Checklist Menu'
@ 17,25 say 'Q. Exit'
CHOICE = '
@ 19,25 say 'Enter your choice :' get CHOICE picture '!' read

** Case Statement

do case
  case CHOICE = '1'
    do ADDMENU
  case CHOICE = '2'
    do EDORDER
  case CHOICE = '3'
    do EDACTY
  case CHOICE = '4'
    do PRTMENU
  case CHOICE = '5'
    do CHKMENU
  case CHOICE = 'Q'
    clear all
    return
endcase

enddo
** ADDMENU.PRG
** Menu for Adding Order, Product and Activity Information as well as
** Planned, Revised plan and Actual weeks

clear
set talk off

** Initialising the variables

CHOICE = 0

do while .T.

** Opening weeks, order, activity and product information databases

select A
  use WEEKS index WEEKS

select B
  use ORDINFO index ORDINFO

select C
  use ACTDAT index ACTDAT

select D
  use PROD_ACT index PROD_ACT

** Displaying the options available for adding information

clear
set color to w+
@ 2,32 say 'OHS'
@ 3,30 say 'Add Menu'
set color to w
@ 5,20 say '1. Add Order Information and Planned Weeks'
@ 7,20 say '2. Add Revised Planned Weeks'
@ 9,20 say '3. Add Actual Weeks'
@ 11,20 say '4. Add Activity Information'
@ 13,20 say '5. Add Products and Time Lags'
@ 15,20 say '0. Exit to previous Menu'
CHOICE = 0
@ 18,25 say 'Enter your Choice :' get CHOICE picture '9'
read

do case
  case CHOICE = 1
do ADDORD
  case CHOICE = 2
do ADREVPL
  case CHOICE = 3
do ADACTLWK
  case CHOICE = 4
do ADDACT
  case CHOICE = 5
do ADDPROD
case CHOICE = 0
exit
endcase

enddo
clear
close database
return
** CHK MENU.FRG
** Menu to output checklists for Order, Product and Activity Files

clear
set talk off

** Initialising the variables

CHOICE = 0
XDEPT = ' '

do while .T.

** Opening weeks, order, activity and product information databases

select A
  use WEEKS index WEEKS
use

select B
  use ORDISINFO index ORDISINFO
use

select C
  use ACTDATE index ACTDATE
use

select D
  use PROD ACT index PROD ACT
use

** Displaying the options available for adding information

clear
set color to w+
@ 4,36 say 'OHS'
@ 5,30 say 'Checklist Menu'
set color to w
@ 7,20 say '1. Order Information'
@ 9,20 say '2. Activity Information'
@ 11,20 say '3. Product Information'
@ 13,20 say '0. Exit to Previous Menu'
CHOICE = 0
@ 16,25 say 'Enter your Choice: ' get CHOICE picture '9'
read

** get department for which to print checklist

do while .T.
  @ 23,0 clear
  @ 23,0 say 'Enter Department Name: ' get XDEPT picture '!!'
  read
  select B
  locate for DEPT = XDEPT
  if eof()
    @ 24,0 say 'Given Department name not found, enter name again'
    loop
  endif
  @ 23,0 clear
  exit
endo
do

** set printer on

@ 23,0
wait 'Set printer on ... and press any key' to KEY
set print on
@ 23,0 clear
@ 23,0 say 'Printing is going on....'

do case
  case CHOICE = 1
    report form ORDCKLST for DEPT = XDEPT to print
  case CHOICE = 2
    report form PRDCKLST for substr(ACTY_NO, 1, 2) = XDEPT to print
  case CHOICE = 3
    report form ACTCKLST for substr(ACTY_NO, 1, 2) = XDEPT to print
  case CHOICE = 0
    exit
  set print off
  endcase
  enddo
clear
close database
return
** PRTMENU.PRG
** Menu to choose an option available for printing reports

clear
set talk off

** initialising variables

CHOICE = 0
XDEPT = ' ' 
do while .T.

** opening weeks, order and activity information databases

select A
  use WEEKS index WEEKS

select B
  use ORDINFO index ORDINFO

select C
  use ACTDAT index ACTDAT

** Displaying the list of items in the Print Menu

clear
set color to w+
@ 5,30 say 'Print Menu'
set color to w
@ 7,25 say '1. Completed Activities Report'
@ 9,25 say '2. Future Activities Report'
@ 11,25 say '3. Reminder for Pending Activities'
@ 13,25 say '4. Performance of Delivery Times'
@ 15,25 say '5. Report of Delay in Activities'
@ 17,25 say '6. Report of Loss Suffered'
@ 19,25 say '0. Exit'
CHOICE = 0
@ 21,25 say 'Enter your choice : ' get CHOICE picture '9'
read

** Case Statement

do case
  case CHOICE = 1
do PRICMPWK

  case CHOICE = 2
  do PRIFTRWK

  case CHOICE = 3
  do PRIEMDR

  case CHOICE = 4
  do PRIDVTN

  case CHOICE = 5
  do PRIDELAY

  case CHOICE = 6
do while .T.
   @ 23,0 clear
   @ 23,0 say 'Enter Department Name :' get XDEPT picture '!!'
   read
   select B
   locate for DEPT = XDEPT
   if eof()
      @ 24,0 say 'Given Department name not found, enter name again'
      loop
   endif
   @ 23,0 clear
   @ 23,0 wait 'Set printer on ... and press any key' to KEY
   set print on
   @ 23,0 clear
   @ 23,0 say 'Printing is going on...'
   report form PRILOSS for DEPT = XDEPT .and. D_LOSS > '0'
   plain no eject to print
   set print off
   exit
endo

case CHOICE = 0
   clear
   close database
   return
endcase
endo
** ADDORD.PRG  
** add screen  
** Displays a screen for getting information about all the orders  

clear
set talk off

** Initialising the variables

XOI_NO = space(11)
XOI_DT = space(6)
XCNAME = space(25)
XPNAME = space(10)
XDR_TY = space(4)
XVAL = 0.00
XQTY = 0
STATUS = ' ' 
VALID = ' '
RCPTWK = ' '
DLRYWK = ' '
XW_G_TY = ' '
XDEPT = ' '
XPLAN_WK = ' '
DATECHK = 1

** Painting headings

set color to w+
@ 1,20 say 'Order Information - Add screen'
set color to w
@ 2,3 say 'O.I.' +space(6) + 'O.I.' + 'Customer' +space(15) + 'Product' + 'Order'
@ 2,65 say 'Quan' + 'Wk-gen'
@ 3,3 say 'No.' +space(7) + 'Date' +space(7) + 'Name' +space(19) + 'Name' + 'Type'
@ 3,60 say 'Dept' + 'tity' + 'Value' + 'Type'
ROW = 5
select B

do while .T.

@ ROW,0 get XOI_NO picture '!!!!!!!!!!!'
@ ROW,12 get XOI_DT picture '999999'
@ ROW,19 get XCNAME picture '!!!!!!!!!!!!!!!!!!!!!!'
@ ROW,45 get XPNAME picture '!!!!!!!!!!!'
@ ROW,56 get XDR_TY picture '!!'
@ ROW,61 get XDEPT picture '!!'
@ ROW,65 get XQTY picture '99'
@ ROW,69 get XVAL picture '9999,99'
@ ROW,77 get XW_G_TY picture '!!'
read
@ 21,0 clear

** if no customer name is given, check for going out **

if len(trim(XCNAME)) = 0
    ANS = 'N'
    @ 24,0 say 'Do you want to continue ? (Y/N):' get ANS picture '!!'
read
if ANS <> 'Y'
close database
return
else
   @ 23,0 clear
   loop
endif
endif

* check if O.I. number already exists in the order database
locate for OI_NO = XOI_NO
if .not. eof()
   @ 21,0 say 'O.I. no entered already exists, enter a new no.'
   loop
endif
do CHKDATE with XOI_DT, DATECHK
   if DATECHK = 0
      @ 24,0 say 'Error in date, enter new date in yymmd format'
      loop
   endif
* validate week generation type should be 'A' or 'M' only
if .not. (XW_G TY = 'A', or. XW_G TY = 'M')
   @ 24,0 clear
   @ 24,0 say 'Error in week gen. type, give only A or M'
   loop
endif
* to validate product name, order type and department
do VALIDORD with XPNAME, XOR_TYP, XDEPT, VALID
   if VALID = 'L'
      loop
   else
      exit
   endif
endo
do add record to database **
select B
append blank
replace OI_NO with XOI_NO, OI_DATE with XOI_DT, CNAME with XCNAM
replace PNAM with XPNAME, ORD_TYPE with XOR_TYP, QTY with XQTY
replace DEPT with XDEPT, VALUE with XVAL, WK_GEN_TYP with XW_G TY
** see for week generation type
* if 'A' ie automatic, calculate planned weeks with time lag and display
if XW_G TY = 'A'
do while .T.
   @ 23,0 say 'Enter O.I. Receipt week no:' get RCPTWK picture '999'
   @ 23,41 say 'Enter O.I. Delivery week no:' get DLRYWK picture '999'
   read
   @ 24,0 clear
   if val(substr(RCPTWK, 2, 2)) > 53
      @ 24,0 say 'Error in Receipt week, give last 2 digits <= 53'
      loop
  endif
endo
endif 
if val(substr(DLRYWK, 2, 2)) > 53
  @ 24,0 say 'Error in Delivery week, give last 2 digits <= 53'
  loop
endif
exit
enddo

@ 24,0 say 'Weeks are being calculated'
@ 6,41 say 'Acty no'+space(5)+'Acty - Name'+space(6)+'Plan-Wk'
ROW = 7
COL = 2
select D

do while .T.

   PL_WK = ''
   VALPL_WK = val(RCPTWK) + TIME_LAG
   PL_WK = str(VALPL_WK, 3)

   do NEXTYR WK with PL_WK

   @ ROW, COL say D->ACTY_NO
   select C
   seek D->ACTY_NO
   @ ROW, COL+7 say substr(ACT_NAME, 1, 20)
   @ ROW+1, COL+7 say substr(ACT_NAME, 21, 40)
   @ ROW, COL+30 say PL_WK

   if len(trim(ACT_NAME)) > 20
      ROW = ROW + 2
   else
      ROW = ROW + 1
   endif
   if ROW > 21
      ROW = 7
      COL = COL + 40
   endif

   select A
   append blank
   replace DI_NO with XDI_NO, ACTY_NO with D->ACTY_NO
   replace PLAN_WK with PL_WK, PLAN_DATE with MTODAY

   select D
   skip
   if trim(PNAME)<trim(XPNAME), or, eof()
      skip - 1
      if len(trim(C->ACT_NAME)) > 20
         @ ROW-2, COL+30 say DLRYWK
      else
         @ ROW-1, COL+30 say DLRYWK
      endif
      select A
      replace PLAN_WK with DLRYWK
      exit
   endif
endo
endif
* if week generation type is 'M' ie manual, get planned weeks from user

if XW_B_TY = 'M'
  ROW = 7
  COL = 2
  select D
  go top
  locate for trim(PNAME) = trim(XPNAME)
  @ 6,1 say 'Acty no.'+space(5)+'Acty - Name'+space(6)+'Plan-Wk'
  @ 6,41 say 'Acty no.'+space(5)+'Acty - Name'+space(6)+'Plan-Wk'
  do while .T.
    select D
    seek D->ACTY_NO
    @ ROW, COL say ACTY_NO
    @ ROW, COL+7 say substr(ACTY_NAME, 1, 20)
    @ ROW+1, COL+7 say substr(ACTY_NAME, 21, 40)
    select A
    do while .T.
      @ ROW, COL+30 get XPLAN_WK picture '999'
      read
      @ 24,0 clear
      do CHKWEEEK with XPLAN_WK, STATUS
      if STATUS = 'E'
        @ 24,3 say 'Error in planned week, give last 2 digits <= 53'
      loop
      endif
      if len(trim(XPLAN_WK)) < 3
        @ 24,0 say 'Error in given week, key in all 3 digits'
      loop
      endif
      exit
    enddo
    if len(trim(D->ACTY_NAME)) > 20
      ROW = ROW + 2
    else
      ROW = ROW + 1
    endif
    if ROW > 21
      ROW = 7
      COL = COL + 40
    endif
    select A
    append blank
    replace OI_NO with XOI_NO, ACTY_NO with D->ACTY_NO
    replace PLAN_WK with XPLAN_WK, PLAN_DATE with MTDDAY
    select D
    skip
    if trim(PNAME) <> trim(XPNAME) .or. eof()
    exit
  enddo
endif

** ask if planned weeks need to be changed
* if yes, go back and allow user to enter them manually else return
ANS = ' '  
@ 23,0 clear
do while .not. (ANS = 'Y'.or.ANS = 'N')
  @ 24,0 say 'Do you want the above planned weeks to be stored in database? (Y/N):' get ANS picture ')'!
read  
enddo
if ANS <> 'Y'
  ROW = 7
  COL = 2
  select A
  seek B->DI_NO
  do while .T.
    @ ROW,COL say ACTY_NO
    select C
    seek A->ACTY_NO
    @ ROW, COL+7 say substr(ACT_NAME,1,20)
    @ ROW+1, COL+7 say substr(ACT_NAME,21,40)
    select A
    XPLAN_WK = PLAN_WK
    do while .T.
      @ ROW, COL+30 get XPLAN_WK picture '999'
      read
      @ 24,0 clear
      do CHK_WEEK with XPLAN_WK, STATUS
        if STATUS = 'E'
          @ 24,0 say 'Error in planned week, give last 2 digits <= 53'
          loop
        endif
        if len(trim(XPLAN_WK)) < 3
          @ 24,0 say 'Error in given week, key in all 3 digits'
          loop
        endif
        exit
      enddo
      if len(trim(C->ACT_NAME)) > 20
        ROW = ROW + 2
      else
        ROW = ROW + 1
      endif
      if ROW > 21
        ROW = 7
        COL = COL + 40
      endif
      replace PLAN_WK with XPLAN_WK
      skip
      if OI_NO <> B->OI_NO .or. eof()  
        exit
      endif  
enddo
@ 23,0 clear
@ 24,0 say 'Final Planned Weeks added in database'
endif
clear
close database
return
** ADREVPL.FRG
** Program to add the revised planned weeks in weeks database

```
clear
set talk off

** initializing the variables

XOI_NO = space(11)
XACTY_NO = space(5)
XPLAN_WK = 
XREV_WK = '
STATUS = 

set color to w+
@ 1,23 say 'Adding Screen - Revised Plan Weeks'
set color to w

** ask for OI no whose planned weeks are to be revised and seek from database

do while .T.

XOI_NO = space(11)
@ 2,1 say 'Enter O.I. no for whom to revise plan weeks: ';
get XOI_NO picture '!!!!!!!!!!!!'
read

select B
go top
seek XOI_NO
if eof()
   @ 23,0 say 'O.I. no. entered not found, enter new no.'
   ANS = 'N'
   @ 24,0 say 'Do you want to give new O.I. no.? (Y/N):'; get ANS picture '!
read
   if ANS = 'Y'
      @ 23,0 clear
      loop
   else
      clear
      close database
      return
   endif
endif

@ 3,1 say 'Cust. name: ' + CNAME
@ 3,37 say 'Product name: ' + PNAME
@ 4,1 say 'Acty' + space(5) + 'Activity' + space(11) + 'Plan' + 'Revd.'
@ 5,2 say 'no.' + space(7) + 'name' + space(13) + 'wk' + space(3) + 'wk'

do while .T.
select A
seek XOI_NO
ROW = 6
COL = 1

do while .T.

* getting the revised plan weeks
   @ ROW,COL say ACTY_NO
   select C
```
seek A->ACTY_NO
@ ROW, COL+7 say substr(ACT_NAME, 1, 20)
@ ROW+1, COL+7 say substr(ACT_NAME, 21, 40)

select A
@ ROW, COL+20 say PLAN_WK
@ ROW, COL+33 say REVPL_WK
STATUS = ''

if val(ACT_CMP_WK) = 0
  XREV_WK = REVPL_WK
  do while .T.
    @ ROW, COL+33 get XREV_WK picture '999'
    read
    @ 23,0 clear
    do CHKWEEK with XREV_WK, STATUS
      if STATUS = 'E'
        ANS = 'N'
        @ 23,0 say 'Error in revised week, give last 2 digits <= 53'
        @ 24,0 say 'Do you want to continue?(Y/N):' get ANS picture '!
        read
        if ANS <> 'Y'
          STATUS = 'X'
          exit
        else
          @ 23,0 clear
          loop
      endif
      replace REVPL_WK with XREV_WK, REVDATE with MTDAY
    enddo
  enddo
endif

if STATUS = 'X'
  XREV_WK = ''
  @ ROW, COL+33 say XREV_WK
  exit
endif

* Incrementing the rows and print headings if row > 21
if len(trim(C->ACT_NAME)) > 20
  ROW = ROW + 2
else
  ROW = ROW + 1
endif
if ROW > 21
  ROW = 6
  COL = COL + 40
  @ ROW-2, COL say 'Acty' + space(5) + 'Activity' + space(11) + 'Plan' + 'Revd.'
  @ ROW-1, COL+1 say 'no.' + space(7) + 'name' + space(13) + 'wk' + space(3) + 'wk'
endif
  skip
if D1_NO <> XI_D1_0 .or. eof()
  exit
endif
endo

* Ask if present weeks can be stored in weeks database
@ 23,0 clear
ANS = ' '

do while .not. (ANS = 'Y' .or. ANS = 'N')
   @ 23,0 say 'Shall the above listed revised weeks be updated to the weeks database? (Y/N):'
   get ANS picture '!'
   read
   if ANS = 'Y'
      @ 23,0 clear
      exit
   endif
   if ANS = 'N'
      @ 6,0 clear
      loop
   endif
endo
dodo

* ask for revising plans for another order
ANS = ' '
@ 23,0 clear

do while .not. (ANS = 'Y' .or. ANS = 'N')
   @ 23,0 say 'Revised weeks updated to the database? (Y/N):'
   @ 24,0 say 'Do you want to revise planned weeks for another order?'
   get ANS picture '!'
   read
endo
if ANS = 'Y'
   @ 3,0 clear
   loop
endif
if ANS = 'N'
close database
return
endif
endo
** ADDPROD.PRG
** add screen
** Displays the screen for getting the products and time lags

clear
set talk off

** Initialising the variables

DEPT =
XPNAME = space(10)

** Painting headings and getting dept. and product name

set color to w+
@ 1,15 say 'Product and Activity time-lag - adding screen'
set color to w

do while .T.
  @ 2,1 say 'Name of Dept:' get DEPT picture '!!'
  read
  select C
  go top
  locate for substr(ACTY_NO, 1, 2) = DEPT
  if eof()
    @ 24,0 say 'No activities found for this dept. in activity file, enter new one'
  loop
endif
endo

do while .T.
  @ 2,19 say 'Product Name:' get XPNAME picture '!!!!!!!'
  read
  select D
  go top
  locate for PNAME = XPNAME
  if .not. eof()
    @ 24,0 say 'Product name entered already exists, enter new name'
  loop
endif
endo

XPRDOLD = XPNAME
@ 3,1 say '_acty'+ 'Activity'+space(10)+'Reqd'+ 'Time'
@ 4,2 say 'no.'+ 'name'+space(13)+'Y/N'+ 'Lag'

ROW = 5
COL = 1
select C

do while .T.
** ADDPROD.PRG
** add screen
** Displays the screen for getting the products and time lags

clear
set talk off

** Initialising the variables

DEPT = 
XPNAME = space(10)

** Painting headings and getting dept. and product name

set color to w+
@ 1,15 say 'Product and Activity time-lag = adding screen'
set color to w

do while .T.
   @ 2,1 say 'Name of Dept:' get DEPT picture '!!!'
   read
   select C
   go top
   locate for substr(ACTY_NO, 1, 2) = DEPT
   if eof()
      @ 24,0 say 'No activities found for this dept. in activity file, enter new one'
      loop
   endif
endo

do while .T.
   @ 2,19 say 'Product Name:' get XPNAME picture '!!!!!!!!!!!!'
   read
   select D
   go top
   locate for PNAME = XPNAME
   if .not. eof()
      @ 24,0 say 'Product name entered already exists, enter new name'
      loop
   endif
endo

XPRLD = XPNAME
@ 3,1 say 'Acty'+ 'Activity'+space(10)+'Reqd'+ 'Time'
@ 4,2 say 'no.'+ 'name'+space(13)+'Y/N'+ 'Lag'

ROW = 5
CCL = 1
select C

do while .T.

** ask if activity required, get time lag if affirmative

REQQ = '
XTIME_LAG = 0
@ ROW,CCL say ACTY_NO
@ ROW,CCL+5 say substr(ACT_NAME,1,20)
@ ROW+1,CCL+5 say substr(ACT_NAME,21,40)
@ ROW,CCL+27 get REQQ picture '!'
read

if REQD = 'Y'
   @ ROW,COL+33 get XTIME_LAG picture '99'
   read
   select D
   append blank
   replace PNAME with XPNAME, ACTY_NO with C->ACTY_NO
   replace TIME_LAG with XTIME_LAG
endif
if len(trim(C->ACT_NAME)) > 20
   ROW = ROW + 2
else
   ROW = ROW + 1
endif
if ROW > 21
   ROW = 5
   COL = COL + 41
   @ ROW-2,COL say 'Acty'+'Activity'+space(10)+'Reqd'+'Time'
   @ ROW-1,COL say 'no.'+'name'+space(13)+'Y/N'+'Lag'
endif
select C
skip
if substr(ACTY_NO, 1, 2) <> DEPT .or. eof()
   exit
endif
enddo

* ask if time lags can be stored
ANS = '
@ 23,0 clear
do while .not. (ANS = 'Y' .or. ANS = 'N')
   @ 24,0 say 'Do you want the above time lags to be stored? (Y/N):',
   get ANS picture '!''
   read
endo
doi ANS = 'Y'
clear
close database
return
else
** if No then go back and get time lags again

do while .T.
   @ 2,0 clear
   select D
   locate for PNAME = XPRDOLD
   XPNAME = PNAME
   @ 2,19 say 'Product Name: ' get XPNAME picture '!!!!!!!!!!!'
   read
   if XPRDOLD <> XPNAME
      locate for PNAME = XPNAME
      if .not. eof()
         @ 24,0 say 'Product name entered already exists, enter new one'
         loop
      endif
   endif
   @ 3,1 say 'Acty'+'Activity'+space(10)+'Reqd'+'Time'
   @ 4,2 say 'no.'+'name'+space(13)+'Y/N'+'Lag'
   read
endif

ROW = 5
COL = 1

do while .T.
  @ ROW, COL say ACTY_NO
  @ ROW, COL+5 say substr(C->ACT_NAME, 1, 20)
  @ ROW+1, COL+5 say substr(C->ACT_NAME, 21, 40)
  XTIME_LAG = TIME_LAG
  @ ROW, COL+33 get XTIME_LAG picture '99'
  read
  replace PNAME with XPNAME, TIME_LAG with XTIME_LAG
  if len(trim(C->ACT_NAME)) > 20
    ROW = ROW + 2
  else
    ROW = ROW + 1
  endif
  if ROW > 21
    ROW = 5
    COL = COL + 41
    @ ROW-2, COL say 'Acty'+
    'Activity'+space(10)+'Reqd'+
    '+Time'
    @ ROW-1, COL say 'no.'+
    'name'+space(13)+'Y/N'+
    'Lag'
  endif
  skip
  if PNAME <> XPNAME
    exit
  endif
endo
doo
  @ 23, 0 say 'Product Details Added'
  exit
doo
endif

clear
close database
return
** ADDACT.PRG
** add screen
** Displays the screen for entering information about the activities

clear
set talk off

** Initialising the variables

XACTY_NO = ''
XACTY_NAME = space(40)
XDEPT_RESP1 = space(4)
XDEPT_RESP2 = space(4)
XDEPT_RESP3 = space(4)

** Painting headings

set color to w+
@ 1,15 say 'Activity and Responsibility - adding screen'
set color to w
@ 2,1 say 'Activity'
@ 2,18 say 'Name'
@ 2,45 say 'Department Responsible'
@ 3,1 say 'Number'
@ 3,18 say 'Name'
@ 3,45 say '1st 2nd 3rd'

ROW = 5
select C
go top

do while .T.

@ ROW,2 get XACTY_NO picture '!!999'
@ ROW,10 get XACTY_NAME picture '!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!'
@ ROW,52 get XDEPT_RESP1 picture '!!!!!'
@ ROW,61 get XDEPT_RESP2 picture '!!!!'
@ ROW,71 get XDEPT_RESP3 picture '!!!!'
read
@ 23,0 clear

** if no activity name is given, check for going out **

if len(trim(XACTY_NAME)) = 0
  ANS = 'N'
  @ 23,0 say 'Do you want to continue? (Y/N): ' get ANS picture '!!'
  read
  if ANS <> 'Y'
    clear
    close database
    return
  else
    @ 23,0 clear
    loop
  endif
endif
locate for ACTY_NO = XACTY_NO
if .not. eof()
  @ 20,0 say 'Activity number entered already exists, enter a new no.'
  loop
endif

** add record to database **

append blank
replace ACTY_NO with XACTY_NO, ACT_NAME with XACT_NAME
replace DEPT_RESP1 with XDEPT_RESP1, DEPT_RESP2 with XDEPT_RESP2,
    DEPT_RESP3 with XDEPT_RESP3

** Initialising the variables **

XACTY_NO     = '
XACT_NAME    = space(40)
XDEPT_RESP1  = space(4)
XDEPT_RESP2  = space(4)
XDEPT_RESP3  = space(4)

PROW=ROW
ROW = ROW + 2
if ROW > 20
    ROW = 5
    @ 5,0 clear
    @ PROW,2 say ACTY_NO
    @ PROW,10 say ACT_NAME
    @ PROW,52 say DEPT_RESP1
    @ PROW,61 say DEPT_RESP2
    @ PROW,71 say DEPT_RESP3
endif
if ROW > 10
    @ 19,0 clear
endif
enddo

close database
return
** ADACTLWK.PRG  
** Program to enter the actual completion weeks in weeks database

clear
set talk off

** initializing the variables

XROI_NO = space(11)
XACTY_NO = space(5)
XPLAN_WK = ' '
XREY_WK = ' '
XACT_WK = ' '
STATUS = ' '

** ask for OI no whose actual weeks are to be entered

do while .T.

    set color to w+
    @ 1,25 say 'Adding Screen - Actual Weeks'
    set color to w
    XROI_NO = space(11)
    @ 2,0 say 'Enter O.I. no for whom to enter actual weeks:
    get XROI_NO picture '!!!!!!!!!'
    read

    select B
    go top
    seek XROI_NO
    if eof()
        @ 23,0 say 'O.I. no. entered not found in order information file'
        ANS = 'N'
        @ 24,0 say 'Do you want to give new O.I. no. ?(Y/N):' get ANS picture '!
        read
        if ANS = 'Y'
            @ 23,0 clear
            loop
        else
            clear
            close database
            return
        endif
    endif

    @ 3,0 say 'Cust. name: '+CNAME
    @ 3,5B say 'Product name: '+PNAME
    @ 4,0 say 'Acty'+space(4)+'Activity'+space(9)+'Plan: '+'Revd: '+'Actl'
    @ 5,2 say 'no.'+space(6)+'name'+space(11)+'wk: '+'wk: '+'wk: '

do while .T.
** ADACLWK.PRG
** Program to enter the actual completion weeks in weeks database

clear
set talk off

** initializing the variables

XDI_NO = space(11)
XACTY_NO = space(5)
XPLAN_WK = ''
XREV_WK = ''
XACT_WK = ''
STATUS = ''

** ask for DI no whose actual weeks are to be entered

do while .T.

set color to w+
@ 1.25 say 'Adding Screen - Actual Weeks'
set color to w
XDI_NO = space(11)
@ 2,0 say 'Enter O.I. no for whom to enter actual weeks:,'
get XDI_NO picture '!!!!!!!!!'
read
select B
go top
seek XDI_NO
if eof()

@ 23,0 say 'O.I. no. entered not found in order information file'
ANS = 'N'
@ 24,0 say 'Do you want to give new O.I. no. ?(Y/N):' get ANS picture '!
read
if ANS = 'Y'

@ 23,0 clear
loop
else

clear
close database
return
endif
endif

@ 3,0 say 'Cust. name: ' + CNAME
@ 3,3B say 'Product name: ' + PNAME

@ 4,0 say 'Acty' + space(4) + 'Activity' + space(9) + 'Plan' + 'Revd' + 'Actl'
@ 5,2 say 'no.' + space(6) + 'name' + space(11) + 'wk' + 'wk' + 'wk'
do while .T.
select A
seek XDI_NO
ROW = 6
COL = 0

do while .T.

* getting the actual completion weeks for present OI no.
@ ROW, COL say ACTY_NO
select C
seek A->ACTY_NO
@ ROW, COL+6 say substr(ACT_NAME, 1, 20)
@ ROW+1, COL+6 say substr(ACT_NAME, 21, 40)

select A
@ ROW, COL+26 say PLANWK
@ ROW, COL+31 say REVPLWK
@ ROW, COL+36 say ACT_CMP_WK
STATUS = ' ' if val(ACT_CMP_WK) = 0
XACT_WK = ACT_CMP_WK
  do while .T.
    @ ROW, COL+36 get XACT_WK picture '999'
    read
    @ 23, 0 clear
    if val(XACT_WK) = 0
      @ 23, 0 say 'Actual week is blank, enter all 3 digits'
      loop
    endif
  do CHKWK with XACT_WK, STATUS
    if STATUS = 'E'
      ANS = 'N'
      @ 23, 0 say 'Error in actual week, give last 2 digits <= 53'
      @ 24, 0 say 'Do you want to continue? (Y/N):' get ANS picture 'read'
      if ANS <> 'Y'
        STATUS = 'X'
        exit
      else
        @ 23, 0 clear
        loop
      endif
    endif
    replace ACT_CMP_WK with XACT_WK, ACTL_DATE with MTDAY
  exit
  enddo
  endif
if STATUS = 'X'
  XACT_WK = ' '
  @ ROW, COL+36 say XACT_WK
  exit
endif
if len(trim(C->ACT_NAME)) > 20
  ROW = ROW + 2
else
  ROW = ROW + 1
endif
if ROW > 21
  ROW = 6
  COL = COL + 41
  @ ROW-2, COL say 'Acty'+space(4)+'Activity'+space(9)+'Plan'+';
  + Revd'+ '+'+'Actl'
  @ ROW-1, COL+1 say 'no.'+space(6)+'name'+space(12)+'wk'+ ' '+wk'+
  endif
skip
if OI_NO <> XI0_NO .or. eof()
exit
endif
enddo

* ask if actual weeks can be stored in weeks database
    @ 23,0 clear
    ANS = ''
    do while .not. (ANS = 'Y' .or. ANS = 'N')
      @ 23,0 say 'Shall the above listed actual weeks be updated to the weeks database? (Y/N):';
      get ANS picture '!''
      read
      if ANS = 'Y'
        exit
      endif
      if ANS = 'N'
        @ 6,0 clear
        loop
      endif
    enddo
    @ 6,0 clear
    loop
enddo

* ask if actual weeks for another order are to be entered
    ANS = ''
    @ 23,0 clear
    @ 23,0 say 'Actual weeks updated to the database'
    do while .not. (ANS = 'Y' .or. ANS = 'N')
      @ 24,0 say 'Do you want to enter actual weeks for another order? (Y/N):';
      get ANS picture '!''
      read
      if ANS = 'Y'
        @ 3,0 clear
        loop
      endif
      if ANS = 'N'
        close database
        return
      endif
    enddo
** EDORDER.PRG
** Screen for editing the Order Information in ORDINFO File

clear
clear
set talk off

** Initialising the variables

XOI_NO = space(11)
XOI_DT = space(6)
XCNAME = space(25)
XPNAME = space(10)
XOR_TY = space(4)
XVAL = 0.00
XQTY = 0
XDEPT = '
VALID = '
REM1 = space(70)
REM2 = space(70)
REM3 = space(70)
REM4 = space(70)
REM5 = space(70)

** Opening order information database

select A
use ORDINFO index ORDINFO
select D
use PROD_ACT index PROD_ACT

** Painting headings

do while .T.

set color to w+
say @ 1,20 'Order Information - Editing screen'
say @ 2,1 'N-Next    P-Previous    E-Edit    S-Seek    X-Exit'
set color to w

do while .T.

say @ 3,1 'Enter Dept. Name:' get XDEPT picture '!!'
read
select A
go top
locate for DEPT = XDEPT
if eof()

say @ 24,0 'No order information found for this dept., enter new one'

endif

say @ 23,0 clear

exit

endo
do while .T.
say @ 5,5 'O.I. no : ' + OI_NO
say @ 5,35 'O.I. Date: ' + OI_DATE
say @ 5,50 'Department: ' + DEPT
say @ 7,5 'Cust. Name: ' + CNAME
say @ 7,50 'Prod. Name: ' + PNAME
say @ 9,5 'Order Type: ' + ORD_TYPE
say @ 9,35 'Quantity : ' + str(QTY, 2)
say @ 9,50 'Value : ' + str(VALUE, 7, 2)
do while .T.

** Using the edit options

COMMAND = ' ' 
@ 1,1 say 'Give Command: ' get COMMAND picture '!' 
read 
@20,0 clear

do case

case COMMAND = 'N'
    if (DEPT = XDEPT .or. .not. eof())
        skip
    endif
    if (DEPT <> XDEPT .or. eof())
        @ 23,0 say 'End of file, no more records after this !'
    else
        @ 5,17 say OI_NO
        @ 5,46 say OI_DATE
        @ 5,70 say DEPT
        @ 7,17 say CNAME
        @ 7,70 say PNAME
        @ 9,17 say ORD_TYPE
        @ 9,46 say str(QTY, 2)
        @ 9,70 say str(VALUE, 7, 2)
        @ 11,0 clear
    endif

case COMMAND = 'P'
    if (DEPT = XDEPT .or. .not. bof())
        skip -1
    endif
    if (DEPT <> XDEPT .or. bof())
        @ 23,0 say 'You are already at the beginning of file !'
    else
        @ 5,17 say OI_NO
        @ 5,46 say OI_DATE
        @ 5,70 say DEPT
        @ 7,17 say CNAME
        @ 7,70 say PNAME
        @ 9,17 say ORD_TYPE
        @ 9,46 say str(QTY, 2)
        @ 9,70 say str(VALUE, 7, 2)
        @ 11,0 clear
    endif

case COMMAND = 'S'
    do while .T.
        @ 1,20 say 'Give O.I. no: ' get XOI_NO picture '!!!!!!!!!!!!!!'
        read 
        seek XOI_NO
        if eof()
            @ 23,0 say '* Given O.I. no. not found *
            ANS = 'N'
            @ 24,0 say 'Do you want to give new O.I. no. ? (Y/N): ';
            get ANS picture '!' 
            read 
            if ANS <> 'Y'
                clear
            close database
        endif
        read 
    endif

end do case
return
else
  @ 23,0 clear
  loop
  endif
endif

@ 5,17 say OI_NO
@ 5,46 say OI_DATE
@ 5,70 say DEPT
@ 7,17 say CNAME
@ 7,70 say PNAME
@ 9,17 say ORD_TYPE
@ 9,46 say str(QTY, 2)
@ 7,70 say str(VALUE, 7, 2)
@ 11,0 clear
exit
enddo

case COMMAND = 'E'
  XOI_NO = OI_NO
  XOI_DT = OI_DATE
  XCNAME = CNAME
  XPNAME = PNAME
  XOR_TY = ORD_TYPE
  XVAL  = VALUE
  XQTY  = QTY
  XDEPT = DEPT
  OINOLD = OI_NO
  do while .T.
    @ 5,17 get XOI_NO picture '!!!!!!!!!'
    @ 5,46 get XOI_DT picture '9999999'
    @ 5,70 get XDEPT picture '!!!
    @ 7,17 get XCNAME picture '!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
    @ 7,70 get XPNAME picture '!!!!!'
    @ 9,17 get XOR_TY picture '!!!!'
    @ 9,46 get XQTY picture '??'
    @ 9,70 get XVAL picture '9999.99'
    @ 11,5 say 'Actual Completion Remarks:'
    @ 13,5 get REM1
    @ 14,5 get REM2
    @ 15,5 get REM3
    @ 16,5 get REM4
    @ 17,5 get REM5
    read
    @ 21,0 clear
    if OINOLD <> XOI_NO
      locate for OI_NO = XOI_NO
      if .not. eof()
        @ 24,0 say '0.1. no entered already exists, enter new one:
        loop
      endif
    endif
    do VALIDORD with XPNAME, XOR_TY, XDEPT, VALID
    if VALID = 'L'
      loop
    else
      exit
    endif
  enddo

endif
enddo

XREASON = trim(REM1)+' +trim(REM2)+' +trim(REM3)+' +trim(REM4)+' +trim

** update record to database **

select A
replace D1_NO with XO1_NO, D1_DATE with XO1_DT, CNAME with XCNAME
replace PNAME with XPNAME, ORD_TYPE with XOR_TY, QTY with XQTY
replace VALUE with XVAL, DEPT with XDEPT, D_REASON with XREASON

@23,0 say 'Record updated !'
case COMMAND = 'X'
  exit
endcase
enddo

ANS = 'N'
@ 24,0 clear
@ 24,0 say 'Do you want to edit information of another order ?(Y/N):' get ANS picture read
if ANS <> 'Y'
clear
close database
return
endif
@ 4,0 clear
enddo
** EDACTY.PRG
** Displays the screen for editing the information about the activities

clear
set talk off

** Initialising the variables

XACTY_NO = '
XACT.NAME = space(40)
XDEPT_RESP1 = space(4)
XDEPT_RESP2 = space(4)
XDEPT_RESP3 = space(4)
DEPT = '

** open Activity database **

use ACTDAT index ACTDAT

** Painting headings

set color to w+
@ 1,20 say 'Activity and Responsibility - Editing screen'
set color to w
@ 2,29 say 'N - Next  P - Previous  E - Edit  X - Exit'
set color to w
do while .T.
   @ 2,1 say 'Enter Dept. Name:' get DEPT picture '!!!'
   read
   go top
   locate for substr(ACTY_NO, 1, 2) = DEPT
   if eof()
      @ 24,0 say 'No activities found for this dept. in activity;
                file, enter new one'
      loop
   endif
   exit
enddo

@ 3,1 say 'Activity'
@ 3,18 say 'Activity'
@ 3,52 say 'Department Responsible'
@ 4,1 say 'Number'
@ 4,18 say 'Name'
@ 4,52 say '1st    2nd    3rd'
ROW = 6

@ ROW,2 say ACTY_NO
@ ROW,10 say ACT_NAME
@ ROW,52 say DEPT_RESP1
@ ROW,61 say DEPT_RESP2
@ ROW,71 say DEPT_RESP3

do while .T.

** using the edit options

COMMAND = '
@ 1,1 say 'Give Command:' get COMMAND picture '!!'
read
do case

case COMMAND = 'N'

    if (substr(ACTY_NO, 1, 2) = DEPT.or..not. eof())
        skip
        PROW = ROW
        ROW = ROW + 2
    if ROW > 21
        ROW = 6
        @ 6,0 clear
        @ PROW,2 say ACTY_NO
        @ PROW,10 say ACT_NAME
        @ PROW,52 say DEPT_RESP1
        @ PROW,61 say DEPT_RESP2
        @ PROW,71 say DEPT_RESP3
    else
        @ ROW,2 say ACTY_NO
        @ ROW,10 say ACT_NAME
        @ ROW,52 say DEPT_RESP1
        @ ROW,61 say DEPT_RESP2
        @ ROW,71 say DEPT_RESP3
    endif
    if ROW > 10
        @ 20,0 clear
    endif
else
    @ 23,0 say 'End of file, no more records for this dept. after this'
endif

case COMMAND = 'P'

    if (substr(ACTY_NO, 1, 2) = DEPT.or..not. bof())
        skip - 1
    if substr(ACTY_NO, 1, 2) = DEPT

        PROW = ROW
        ROW = ROW - 2
    if ROW < 6
        ROW = 20
        @ 6,0 clear
        @ PROW,2 say ACTY_NO
        @ PROW,10 say ACT_NAME
        @ PROW,52 say DEPT_RESP1
        @ PROW,61 say DEPT_RESP2
        @ PROW,71 say DEPT_RESP3
    else
        @ ROW,2 say ACTY_NO
        @ ROW,10 say ACT_NAME
        @ ROW,52 say DEPT_RESP1
        @ ROW,61 say DEPT_RESP2
        @ ROW,71 say DEPT_RESP3
    endif
else
    @ 23,0 say 'You are at beginning of records of this dept.'
endif
endif

case COMMAND = 'E'
XACTY_NO = ACTY_NO
XACT_NAME = ACT_NAME
XDEPT_RESP1 = DEPT_RESP1
XDEPT_RESP2 = DEPT_RESP2
XDEPT_RESP3 = DEPT_RESP3

@ ROW,2 get XACTY_NO picture '999'
@ ROW,10 get XACT_NAME picture 'XACT_NAME'
@ ROW,52 get XDEPT_RESP1 picture 'XDEPT_RESP1'
@ ROW,61 get XDEPT_RESP2 picture 'XDEPT_RESP2'
@ ROW,71 get XDEPT_RESP3 picture 'XDEPT_RESP3'
read
@ 23,0 clear

** add record to database **

replace ACTY_NO with XACTY_NO, ACT_NAME with XACT_NAME
replace DEPT_RESP1 with XDEPT_RESP1, DEPT_RESP2 with XDEPT_RESP2,
    DEPT_RESP3 with XDEPT_RESP3
@ 23,0 say 'Record Updated !'

case COMMAND = 'X'
    exit
endcase
enddo
clear
close database
return
** PRIEMDR.FRG **
Program to print a reminder to various departments for activities to be done

clear
set talk off

** initialising the variables **

SNO = 0
CNT = 0
ANS = 
KEY = 
XDIV = 
LEGS = 
XDEPT = 
WKNO = 
ACTWK = 
HEADING = 1

** opening weeks, order and activity information databases **

select A
use weeks index weeks
select B
use ordinfo index ordinfo
select C
use actdat index actdat

dowhile .T.
@ 21,'O say 'Enter Division Name : ' get XDIV picture '!' 
@ 22,'O say 'Enter Department Name: ' get XDEPT picture '!!!!'
@ 23,'O say 'Enter week no. from which to print pending activities:'
get WKNO picture '999'
read
if WKNO = .or. val(substr(WKNO, 2, 2)) > 53
ANS = 'N'
@ 24,'O say 'Error in week no. Do you want to continue ?(Y/N):'
get ANS picture '!' 
read
if ANS <> 'Y'
clear
close database
return
else
@ 24,'O clear
loop
dendif
dendif

select B
locate for substr(DEPT, 1, 1) = XDIV
if eof()
@ 24,'O clear
@ 24,'O say 'No order information found for this division, enter again'
loop
dendif

select C
locate for DEPT_RESP1 = XDEPT .or. DEPT_RESP2 = XDEPT .or.
DEPT_RESP3 = XDEPT
if eof()
@24,0 clear
@24,0 say 'No activities found related to this Department, enter again loop
endif

** setting the printer on

@21,0 clear
ANS = ''
@23,0 say 'Set printer on ... and press any key' get ANS
read
@23,0 clear
@23,0 say 'Printing is on ...'
set print on
set console off
eject

SNO = 0
WKLESS = 0
HEADING = 1

do while .T.
    select A
    seek B->DI_NO
    NEWNO = 1

do while .T.
    LESS = ''
    select C
    seek A->ACTY_NO

    if DEPT_RESP1 = XDEPT .or. DEPT_RESP2 = XDEPT .or. DEPT_RESP3 = XDEPT

        select A
        VLREVD = val(REV_PL_WK)
        if VLREVD = 0
            PLANWK = PLAN_WK
            do DIFFWK with PLANWK, WKNO, LESS
        else
            REVDWK = REV_PL_WK
            do DIFFWK with REVDWK, WKNO, LESS
        endif

        if LESS = 'N'
        if HEADING = 1

            ** printing the headings

            ? space(42)+'PENDING ACTIVITIES FOR ' +XDIV+' DIVISION'+
            space(25)+'DATE: '+
            ?? MTODAY
            ?
            ? space(42)+'REMINDER TO ' +XDEPT+' '
            ? DEPARTMENT AS ON WEEK NO: '+WKNO
            ?
            ? space(42)+'Acty' +space(43)+'Dept's Resp.'+' '+Plan'+
            ? 'Rev'y
            ? 'Sno'+space(3)+'O.I. no.'+space(3)+'Customer's name'+
            space(11)+'no.'
            ?? space(7)+'Activity name '+space(22)+'1st 2nd 3rd'+
            space(3)+'wk'+
            ?'wk'
LINE = '--------------'
WIDTH = 112
do LINEPRT with LINE, WIDTH
? LINE
CNT = CNT + 7
HEADING = 0
endif
if NEWNO = 1
SNQ = SNO + 1
?
? str(SNO, 2) + '+DI_NO+' +B->CNAME
CNT = CNT + 2
NEWNO = 0
endif
WKLESS = 1
select C
seek A->ACTY_NO
select A
?? ACTY_NO+ '+C->ACT_NAME+C->DEPT_RESP1+' +C->DEPT_RESP2+'
?? C->DEPT_RESP3+' +PLAN_WK+' +REV_PL_WK
endif
endif
select A
skip
if (WKLESS = 1 ,and. LESS = 'N')
? space(42)
CNT = CNT + 1
endif
if DI_NO <> B->DI_NO .or. eof()
exit
endif
enddo
select B
skip
if CNT > 50
CNT = 0
HEADING = 1
? LINE
?
eject
endif
if substr(DEPT, 1, 1) <> XDIV .or. eof()
? LINE
?
exit
endif
enddo
if WKLESS = 0
@ 21,0 clear
@ 23,0 say 'No activities found pending for this department'
@ 24,0 say 'Press any key to continue' get KEY
read
close database
return
endif
set print off
set console on
do while .not. (ANS = 'Y' .or. ANS = 'N')
   ANS = '
   @ 23,0 clear
   @ 23,0 say 'Printing is over.'
   @ 24,0 say 'Do you want to print reminder for another department ?(Y/N):'
      get ANS picture '!' 
      read
   enddo
   if ANS = 'Y'
      @ 23,0 clear
      loop
   else
      if ANS = 'N'
         clear
         close database
         return
      endif
   endif
enddo
return
** PRIFTRWK.PRG
** To output the completion weeks for activities to be done in future

clear
set talk off

** initialising the variables

SND = 0
CNT = 0
ANS = '
KEY = '
LESS = ':
XDEPT = '
WKNO = '
ACTWK = '
HEADING= 1

** opening weeks, order and activity information databases

select A
use weeks index weeks
select B
use ordinfo index ordinfo
select C
use actdat index actdat

do while .T.
  @ 22,0 say 'Enter department name :' get XDEPT picture '!!'
  @ 23,0 say 'Enter week no, for which you want future weeks report :'
  get WKNO picture '999'
read
if WKNO = '*' or. val(substr(WKNO, 2, 2)) > 53
  ANS = 'N'
  @ 24,0 say 'Error in week no. Do you want to continue ?(Y/N):'
  get ANS picture '!!'
read
if ANS <> 'Y'
clear
  close database
return
else
  @ 24,0 clear
  loop
endif
endif

select B
locate for DEPT = XDEPT
if eof()
  @ 24,0 clear
  @ 24,0 say 'No order information found for this department, enter again'
  loop
endif
exit
enddo

** setting the printer on

@ 22,0 clear
ANS = ''
@ 23,0 say 'Set printer on ... and press any key' get ANS
read
set print on

SNO = 0
WKLESS = 0

do while .T.
  select A
  seek B->O1_NO
  NEWNO = 1

do while .T.
  LESS = ' '
  VLREVD = val(REV_PL_WK)
  if VLREVD = 0
    PLANWK = PLAN_WK
    do DIFFWK with PLANWK, WKNO, LESS
  else
    REVDWK = REV_PL_WK
    do DIFFWK with REVDWK, WKNO, LESS
  endif

  if LESS = 'N'
    if HEADING = 1

      ** printing the headings

      ? space(35)+'FUTURE ACTIVITIES REPORT AS OF WEEK No: '+WKNO+
         ' for '+XDEPT+' DEPARTMENT'
      ?
      ? space(42)+'Acty'+space(43)+'Dept's Resp.'+'Plan'+
           'Revd'
      ? 'Sno'+space(3)+'0.1. no.'+space(3)+'Customer's name'+
         space(11)+'no.'
      ?? space(7)+'Activity name '+space(22)+'1st 2nd 3rd'+
         space(3)+'wk'+'wk'
      LINE = '------------------'
      WIDTH = 114
      do LINEPRT with LINE, WIDTH

    endif
  endif

  if NEWNO = 1
    SNO = SNO + 1
    ?
    ? str(SNO, 2)+'O1_NO' 'B->CNAME
    NEWNO = 0
    CNT = CNT + 2
  endif

  WKLESS = 1
  select C
  seek A->ACTY_NO
  select A
  ?? ACTY_NO+'+C->ACT_NAME+C->DEPT_RESP1+'+C->DEPT_RESP2+'+C->DEPT_RESP3+'+PLAN_WK++REV_PL_WK
  endif
skip
if (WKLESS = 1 .and. LESS = 'N')
? space(42)
CNT = CNT + 1
endif
  if DI_NO <> B->DI_NO .or. eof()
    exit
  endif
endo
dbselect B
skip
if CNT > 50
  CNT = 0
  HEADING = 1
  ? LINE
  ?
eject
endif
if DEPT <> XDEPT .or. eof()
  exit
endif
endo
if LESS = 'N'
  ? LINE
  ?
endif
if WKLESS = 0
  @ 22,0 clear
  @ 23,0 say 'No future activities found for this department'
  @ 24,0 say 'Press any key to return' get KEY
  read
close database
return
dbclear
@ 24,0 say 'Printing is over, press any key to return'
set print off
wait ' ' to KEY
close database
return
** PRIDVTN.PRG
** To print the performance of delivery times and the deviations from actuals

clear
set talk off

** initialising the variables

SNO = 0
ANS = ‘ ‘
KEY = ‘ ‘
DATA = 0
XDEPT = ‘ ‘
HEADING= 1

** opening weeks, order and activity information databases

select A
use weeks index weeks
select B
use ordinfo index ordinfo
select C
use actdat index actdat

do while .T.
   @ 23,0 say ‘Enter department name : ’ get XDEPT picture ’!!’
   read

   select B
   locate for DEPT = XDEPT
   if eof()
      @ 23,0 clear
      @ 23,0 say ‘No weeks information found for this department’
      ANS = ‘N’
      @ 24,0 say ‘Do you want to continue ?(Y/N): ’ get ANS picture ’!’
      read
      if ANS <> ‘Y’
         close database
         return
      else
         @ 23,0 clear
         loop
      endif
   endif
@enddo

** setting the printer on

@ 22,0 clear
ANS = ‘ ‘
@ 23,0 say ‘Set printer on ... and press any key’ get ANS
read
set print on

SNO = 1
DATA = 0

** seeking an O.I. no. and calculating total planned and actual weeks
do while .T.
    select A
    seek B->O1_NO
    PLCRPT = PLAN_WK
    ACTRCPT = ACT_CMP_WK
    go to

    do while .T.
        TOTPLWK = 0
        TOTACTWK = 0
        skip
        if O1_NO <> B->O1_NO .or. eof()
            skip - 1
            PLDLRY = PLAN_WK
        if val(ACT_CMP_WK) = 0
            exit
        else
            ACTDLRY = ACT_CMP_WK
        endif
    enddo
    if DATA = 1
        if HEADING = 1
            ** do subprogram to calculate total weeks taken to complete
            ** an order
            do DVTNWK with PLCRPT, ACTRCPT, PLDLRY, ACTDLRY, TOTPLWK,;
                TOTACTWK
                DATA = 1
            exit
        endif
    endif
    endif
endif

if DATA = 1
    if HEADING = 1
        ** printing the headings
        ? space(40)+'PERFORMANCE OF DELIVERY TIMES SCHEDULE for '+XDEPT+
            ' DEPARTMENT'
        ?
        ? space(59)+'O.I.'+' '+Actl'+' '+Devia-
        ? space(44)+'Product'+space(8)+'Comp'+' '+Comp'+' '+'tion'
        ? 'Sno'+' '+O.I. no.'+space(3)+'Customer's name'+space(12)+'
            name'+space(7)+'Qty'
        ? '+'wks'+' '+'wks'+' '+'(+-)'+space(15)+'Remarks'
        LINE = '-----------------------------'
        WIDTH = 125
        do LINEPRT with LINE, WIDTH
        ? LINE
        endif
        select B
        ** printing the fields if variable DATA = 1
        ?
        ? str(SNO, 2)+' '+OI_NO+' '+B->CNAME+' '+PNAME+' '+str(QTY, 2)
        ? '+'wks'+'
        ? D_REASON
    endif
    SNO = SNO + 1
    select B
    skip
    if DEPT <> XDEPT .or. eof()
? LINE
?
exit
endif
enddo

if DATA = 0
  @ 22,0 clear
  @ 23,0 say 'No completed orders found for this department'
  @ 24,0 say 'Press any key to continue' get KEY
  read
  close database
  return
endif

clear
@ 24,0 say 'Printing is over, press any key to return'
set print off
wait '' to KEY
close database
return
** PRIDELAY.PRG
** Program to print the delays occurred in various activities and
** the departments responsible for them.

    clear
    set talk off

** initialising the variables

    OK  = 0
    SND = 0
    CNT = 0
    ANS = '
    KEY = '
    LESS = '
    XDEPT = '
    ACTWK = '
    XDELAY = 0
    HEADING= 1
    DATA = 0

** opening weeks, order and activity information databases

    select A
    use weeks index weeks
    select B
    use ordinfo index ordinfo
    select C
    use actdat index actdat
    do while .T.
        @ 23,0 say 'Enter department name : ' get XDEPT picture '!!'
        read
        select B
        locate for DEPT = XDEPT
        if eof()
            @ 23,0 clear
            @ 23,0 say 'No weeks information found for this department'
            ANS = 'N'
            @ 24,0 say 'Do you want to continue ?(Y/N): ' get ANS picture '!
            read
            if ANS <> 'Y'
                clear
                close database
                return
            else
                @ 23,0 clear
                loop
        endif
    endif
    exit
endo

** setting the printer on

    @ 22,0 clear
    ANS = ..
    @ 23,0 say 'Set printer on . . . and press any key' get ANS
    read
    set print on
SNO = 0
DATA = 0

** seek O.I. no. and calculate delay for each activity

do while .T.
   select A
   seek B->OI_NO
   NEWNO = 1

do while .T.

   XDELAY = 0
   VLREVD = val(REV_PL_WK)
   ACTLWK = ACT_CMP_WK
   if VLREVD = 0
      PL_WK = PLAN_WK
      do DELAYWK with PL_WK, ACTLWK, XDELAY
   else
      REVDWK = REV_PL_WK
      do DELAYWK with REVDWK, ACTLWK, XDELAY
   endif
   if XDELAY > 0
      if HEADING = 1

      ** printing the headings

      ? space(42)+'ACTIVITIES DELAYED REPORT for '+XDEPT+' DEPARTMENT'+
      space(10)+'DATE: '+
      ? MTDAY
      ?
      ? space(42)+'Acty'+space(42)+'Dept's Resp.'+'Plan'+'Rvd'+Actl'+Delay'
      ? SNO'+space(3)+'O.I. no.'+space(3)+'Customer's name'+
      space(11)+'no.'
      ? space(7)+'Activity name'+space(21)+'1st 2nd 3rd'+
      'wk'+
      'wk'+
      '+wk'+
      'wk'+
      LINE = '-------------------------------'
      WIDTH = 125
      do LINEPRT with LINE, WIDTH
      ? LINE
      CNT = CNT + 5
      HEADING = 0
      endif
      if NEWNO = 1
      SNO = SNO + 1
      ?
      ? str(SNO, 2)+' '+OI_NO'+B->CNAME
      CNT = CNT + 2
      NEWNO = 0
      endif

      ** printing the data if DATA = 1

      DATA = 1
      select C
      seek A->ACTY NO
      select A

?? ACTY_NO+ 'C->ACT_NAME+C->DEPT_RESP1+ 'C->DEPT_RESP2+' +
C->DEPT_RESP3

?? PLAN_WK+  ' +REV_PL_WK+  ' +ACT_CMP_WK+  ' +str(XDELAY, 2)
endif
skip
if (DATA = 1 .and. XDELAY > 0)
  space(42)
  CNT = CNT + 1
endif
if OI_NO <> B->OI_NO .or. eof()
  exit
endif
enddo

select B
skip
if CNT > 50
  CNT = 0
  HEADING = 1
  ? LINE
  ?
  eject
endif
if DEPT <> XDEPT .or. eof()
  ? LINE
  ?
  exit
endif
enddo
if DATA = 0
  @ 22,0 clear
  @ 23,0 say 'No delayed activities found for this department'
  @ 24,0 say 'Press any key to continue' get KEY
  read
  close database
  return
endif

clear
@ 24,0 say 'Printing is over, press any key to return'
set print off
wait '' to KEY
close database
return
** PRICMPWK.PRG
** To output the completion weeks for activities completed

    clear
    set talk off

** initialising the variables

    SNO = 0
    CNT = 0
    ANS = ' ';
    KEY = ' ';
    LESS = ' ';
    XDEPT = ' ';
    WKNO = ' ';
    ACTWK = ' ';
    HEADING= 1

** opening weeks, order and activity information databases

    select A
        use weeks index weeks
    select B
        use ordinfo index ordinfo
    select C
        use actdat index actdat

    do while .T.
        @ 22,0 say 'Enter department name:' get XDEPT picture '!!'
        @ 23,0 say 'Enter week no. for which you want activity completion:
                    report : ' get WKNO picture '999'
        read
        if WKNO = ' ' or val(substr(WKNO, 2, 2)) > 53
            ANS = 'N'
            @ 24,0 say 'Error in week no. Do you want to continue ?(Y/N):'
            get ANS picture '!''
            read
            if ANS <> 'Y'
                clear
                close database
                return
            else
                @ 24,0 clear
                loop
            endif
        endif

    select B
    locate for DEPT = XDEPT
    if eof()
        @ 24,0 clear
        @ 24,0 say 'No order information found for this department,';
                    enter again'
        loop
    endif
    exit
endo

** setting the printer on

    @ 22,0 clear
ANS = ''
@ 23,0 say 'Set printer on ... and press any key' get ANS
read
set print on
SNO = 0
WKLESS = 0

do while .T.
   select A
   seek B->DI_NO
   NEWNO = 1
   do while .T.
      LESS = ' '
      ACTWK = ACT_CMP_WK
      do DIFFWK with ACTWK, WKNO, LESS
      if LESS = 'Y'
         if HEADING = 1
            ** printing the headings
            ? space(35)+'ACTIVITIES COMPLETED REPORT UPTO WEEK No: '+WKNO+
            'for '+XDEPT+' DEPARTMENT'
            ?
            ? space(42)+'Acty'+space(43)+'Dept's Resp.'+'Plan'
            '+Revd'+'Actl'
            ? 'Sno'+space(3)+'O.I. no.'+space(3)+'Customer’s name'+
            space(11)+'no.'
            ?? space(7)+'Activity name '+space(22)+'1st 2nd 3rd'+
            space(3)+'wk'+ 'wk'+'wk'
            LINE = '---------------------'
            WIDTH = 119
            do LINEPRT with LINE, WIDTH
            ? LINE
            CNT = CNT + 5
            HEADING = 0
         endif
         if NEWNO = 1
            SNO = SNO + 1
            ?
            ? str(SNO, 2)+'DI_NO'+B->CNAME
            CNT = CNT + 2
            NEWNO = 0
         endif
         WKLESS = 1
         select C
         select A
         ?? ACTY_NO+ 'C->ACT_NAME+C->DEPT_RESP1'+
         'C->DEPT_RESP2'+'C->DEPT_RESP3'
         ?? PLAN_WK+ REV_PL_WK+ ACT_CMP_WK
         endif
      skip
      if (WKLESS = 1 .and. LESS = 'Y')
         ? space(42)
         CNT = CNT + 1
      endif
      if DI_NO <> B->DI_NO .or. eof()
exit
endif
dendo

select B
skip
if CNT > 50
CNT = 0
HEADING = 1
? LINE
?
eject
endif

if DEPT <> XDEPT .or. eof()
? LINE
?
exit
endif
dendo
if WKLESS = 0
@ 22,0 clear
@ 23,0 say 'No actual weeks less than given week'
@ 24,0 say 'Press any key to return' get KEY
read
close database
return
endif
clear
@ 24,0 say 'Printing is over, press any key to return'
set print off
wait ' ' to KEY
close database
return
** NEXTYRWK.PRG  
** Program to give the next year's week no. in case it is > 53

parameters WEEK

WKS = val(substr(WEEK, 2, 2))
if WKS > 53
    NYR = val(substr(WEEK, 1, 1)) + 1
    if NYR > 9
        NYR = 0
    endif
endif

NWKS = WKS - 53
if NWKS <= 9
    WEEK = str(NYR, 1) + '0' + str(NWKS, 1)
else
    WEEK = str(NYR, 1) + str(NWKS, 2)
endif
endif

return
** LINEPRT.PRG
** Program to print a line of a given length

parameters LINE, SIZE

FLINE = LINE

do while .T.

   FLINE = FLINE + LINE

   if len(FLINE) >= SIZE
      LINE = FLINE
      exit
   endif
endo

return
** VALIDORD.PRG  
** Program to validate the data entered in fields of order information file  
parameters PRODUCT, ORDTYPE, DEPRMT, VALID  

VALID = ' '  
* check for existence of product name in products file  

select D  
go top  
locate for trim(PNAME) = trim(PRODUCT)  
if eof()  
   @ 21,0 say 'Product name not found in products file, enter new name'  
   VALID = 'L'  
endif  
* validate that order type is external or IDTO only  
if .not. (ORDTYPE = 'EXT' .or. ORDTYPE = 'IDTO')  
   @ 22,0 say 'Error in order type, give only EXT or IDTO'  
   VALID = 'L'  
endif  
* validate that department is of proper type  
if .not. (DEPRMT='YT' .or. DEPRMT='YA' .or. DEPRMT='RK' .or. DEPRMT='RE')  
   @ 23,0 say 'Error in department type, give YT, YA, RK or RE only'  
   VALID = 'L'  
endif  
return
*************** PRGDATE ***************
* Extracts ASEA's standard date format from system date
***************

Y=','
M=','
D=','
TEMP=' '
MTODAY=''
TEMP=dtoc(Date())
store substr(TEMP,7) to Y
store substr(TEMP,1,2) to M
store substr(TEMP,4,2) to D
MTODAY=Y+M+D
** DVTNWK.FRG
** Program to calculate the deviations of actuals from planned weeks
parameters PLRCT, ACTRCT, PLDRY, ACDRY, TOTPL, TOTACT
** initialising the variables

TOTPL = 0
TOTACT = 0
LOSS = 0.00

** separating years and weeks

VLPLRCT = val(substr(PLRCT, 1, 1))
VLPLDRY = val(substr(PLDRY, 1, 1))
VLACRCT = val(substr(ACRCT, 1, 1))
VLACDRY = val(substr(ACDRY, 1, 1))

if VLPLRCT = VLPLDRY
    TOTPL = val(PLDRY) - val(PLRCT)
else
    WKPLDRY = val(substr(PLDRY, 2, 2))
    WKPLRCT = val(substr(PLRCT, 2, 2))
    TOTPL = WKPLDRY + (53 - WKPLRCT)
endif
if VLACRCT = VLACDRY
    TOTACT = val(ACDRY) - val(ACRCT)
else
    WKACDRY = val(substr(ACDRY, 2, 2))
    WKACRCT = val(substr(ACRCT, 2, 2))
    TOTACT = WKACDRY + (53 - WKACRCT)
endif
if TOTACT >= TOTPL
    select B
    XDVTN = TOTACT - TOTPL
    if XDVTN < 10
        POSDVTN = '+' + '0' + str(XDVTN, 1)
    else
        POSDVTN = '+' + str(XDVTN, 2)
    endif
    YRLLOSS = VALUE * (18.0/100.00)
    WKLOSS = YRLLOSS * (XDVTN/53)
    replace D_WEEK with POSDVTN
    replace D_LOSS with str(WKLOSS, 4)
else
    XDVTN = TOTPL - TOTACT
    if XDVTN < 10
        NEGDVTN = '-' + '0' + str(XDVTN, 2)
    else
        NEGDVTN = '-' + str(XDVTN, 2)
    endif
    replace D_WEEK with NEGDVTN
endif
return
** DIFFWK.PRG
** Program to calculate the difference between the actual completion week
** and the week input

parameters STDWK, WEEKNO, LESS

** extracting the year and weeks from given and actual weeks

YRSTD = val(substr(STDWK, 1, 1))
YRWKNO = val(substr(WEEKNO, 1, 1))
WKSTD = val(substr(STDWK, 2, 2))
WKWEEK = val(substr(WEEKNO, 2, 2))

** put less = Y ie yes, for actual week less than given week

if (val(STDWK) <= val(WEEKNO) .and. val(STDWK) <> 0)
   LESS = 'Y'
else
   if YRSTD = 9 .and. YRWKNO = 0
      if WKSTD <= (WKWEEK + 53)
         LESS = 'Y'
      endif
   endif
endif

** put less = N ie no, for planned or revised week more than given week

if (val(STDWK) > val(WEEKNO) .and. val(STDWK) <> 0)
   LESS = 'N'
else
   if YRSTD = 0 .and. YRWKNO = 9
      if (WKSTD + 53) >= WKWEEK
         LESS = 'N'
      endif
   endif
endif

return
** DELAYWK.PRG
** Program to calculate the delay in an activity

parameters STDWK, ACTLWK, DELAY

VLSTDWK = val(substr(STDWK, 1, 1))
VLACTLWK = val(substr(ACTLWK, 1, 1))
WKSTD = val(substr(STDWK, 2, 2))
WKACTL = val(substr(ACTLWK, 2, 2))

if VLSTDWK = VLACTLWK
    if WKACTL > WKSTD
        DELAY = WKACTL - WKSTD
    endif
else
    if VLACTLWK > VLSTDWK or (VLACTLWK = 0 and VLSTDWK = 9)
        DELAY = WKACTL + (53 - WKSTD)
    endif
endif

return
** CHKWEEK.PRG
** Program to check for week no. to be <= 53

parameters WEEK, STATUS

STATUS = ' '
if val(substr(WEEK, 2, 2)) > 53
    STATUS = 'E'
endif
return
** CHKMONTH.PRG
** Program for checking the correctness of given year and month

    parameter DATE, OK
    OK = 1

** checking the year **

    if substr(DATE, 1, 2) < '88'
       OK = 0
    endif

** checking the month **

    if substr(DATE, 3, 2) < '01' .OR. substr(DATE, 3, 2) > '12'
       OK = 0
    endif

return
TIME RECORDING SYSTEM
** TIMEMENU.PRG
** Main menu for Time Recording System

    clear
    set talk off

** initialising variables

    CHOICE = ' '
    MTODAY = space(6)

** checking if today's date has been set

    do PRGDATE
    if MTODAY <= '880301'
        @ 23,0
        wait "Today's date has not been set on booting the system. :
            Please reboot ! Press <CR>..." to PRESS
        quit
    endif
    do while .T.

** Displaying the list of items in the Main Menu

    clear
    set color to /w
    @ 4,36 say 'TRS'
    @ 5,33 say 'MAIN MENU'
    set color to w
    @ 7,25 say '1. Add/Edit Personal Information'
    @ 9,25 say '2. Input Daily In/Out Times'
    @ 11,25 say '3. Edit Times Entered'
    @ 13,25 say '4. Month End Time Calculation'
    @ 15,25 say '5. Print Menu'
    @ 17,25 say '6. Checklist Menu'
    @ 19,25 say 'Q. Exit'
    CHOICE = ' '
    @ 21,25 say 'Enter your choice : ' get CHOICE picture '!
    read

** Case Statement

    do case
        case CHOICE = '1'
            do PERSEDIT
        case CHOICE = '2'
            do TIMEIP
        case CHOICE = '3'
            do EDITIME
        case CHOICE = '4'
            do TIMECALC
        case CHOICE = '5'
            do PRNTMENU
        case CHOICE = '6'
            do CKLSMENU
case CHOICE = 'Q'
clear all
return
endcase

enddo
** PRNTMENU.PRG
** Menu to choose an option available for printing reports

clear
set talk off

** initialising variables

CHOICE = 0
XDIV = ' '
XDAYS = 0
WDAYS = 0
XMONTH = space(4)

do while .T.

** opening time and temporary department information databases

select A
use TIMEREQ index TIMEREQ

select B
use TEMPDEPT

** Displaying the list of items in the Print Menu

clear
set color to w+
@ 4,34 say 'TRS'
@ 5,30 say 'Print Menu'
set color to w
@ 7,25 say '1. Employee times summary report'
@ 9,25 say '2. Department summary report'
@ 12,25 say '0. Exit to previous menu'
CHOICE = 0
@ 21,25 say 'Enter your choice:' get CHOICE picture '9'
read

clear
@ 23,0 say 'Enter division for which you want the report';
get XDIV picture '1'
@ 24,0 say 'Enter month for which report is required';
get XMONT picture '9999'
read

** Case Statement

do case
  case CHOICE = 1
    select A
    @ 23,0 clear
    @ 23,0 say 'Set printer on .... and press a key'
    wait '' to KEY
    set print on
    ? space(20)+'EMPLOYEE TIMES SUMMARY REPORT'
    ?
    ? space(8)+'Division: '+XDIV+space(26)+'Month: '+XMONT
    ?
    report form PRIEMPTM for PERIOD = XMONT plain noeject to print
    set print off
case CHOICE = 2
select B
@ 23,0 clear
@ 23,0 say 'Enter number of days in this month: ' get XDAYS picture
@ 24,0 say 'Enter number of working days: ' get WDAYS picture
read
@ 23,0 clear
@ 23,0 say 'Set print on .... and press a key'
wait '' to key
set print on
? space(14)+'DEPARTMENTS SUMMARY REPORT'
?
? 'Division: '+XDIV+space(15)+'No. of days in this month: '+
   str(XDAYS, 2)
? 'Month : '+XMONT+space(12)+'No. of working days : '+
   str(WDAYS, 2)
?
report form PRIDEPTM for DIV = XDIV plain noreject to print
set print off

case CHOICE = 0
clear
close database
return
endcase
endo
** CKLSMENU.PRG
** Check listing menu to print dump of data entered in pers and
time register

clear
set talk off
** Initialising the variables
CHOICE = 0
do while .T.

** Opening personnel and time information databases

select A
  use PERS index PERS
select B
  use TIMEREG index TIMEREG

** Displaying the options available for check listing

clear
set color to w+
@ 4,36 say 'TRS'
@ 5,30 say 'Checklist Menu'
set color to w
@ 7,20 say '1. Personnel Information check list'
@ 9,20 say '2. Time register check list 1'
@ 11,20 say '3. Time register check list 2'
@ 13,20 say '0. Exit to previous Menu'
CHOICE = 0
@ 16,25 say 'Enter your Choice : ' get CHOICE picture '9'
read
do case

case CHOICE = 1
  select A
  report form PERSLIST for SHIFT = 'A'.or. SHIFT = 'B'
  plain noeject to print

case CHOICE = 2
  select B
  report form TIMELST1 plain noeject to print

case CHOICE = 3
  select B
  report form TIMELST2 plain noeject to print

case CHOICE = 0
  exit
endcas
endo
clear
close database
return
** PERSEDIT.PRG
** Screen for adding/editing the Personnel Information in PERS File

clear
set talk off

** Initialising the variables

XEMP_NO = ' ' 
XENAME = space(30)
XDIV = ' ' 
COMMAND = ' ' 
STATUS = ' ' 
XSHIFT = ' ' 
XDEPT = ' ' 
XCATEGORY = ' ' 

** Open PERS database

use PERS index PERS

do while .T.

** Printing the headings

@ 3,16 say 'Personnel Information - Adding/Editing Screen'
set color to /w 
@ 5,5 say 'N-Next  P-Previous  E-Edit  A-Add  S-Seek  X-Exit'
set color to w 
@ 8,5 say 'Emp. no: ' +EMP_NO 
@ 8,26 say 'Name______: ' +ENAME 
@ 10,5 say 'Category: ' +CATEGORY 
@ 10,26 say 'Shift____: ' +SHIFT 
@ 12,5 say 'Division: ' +DIV 
@ 12,26 say 'Dept_____: ' +DEPT 

do while .T.

** Using the edit options

COMMAND = ''
@ 1,0 say 'Give Command: ' get COMMAND picture '!
read @20,0 clear

do case

case COMMAND = 'N'
  if .not. eof()
    skip
  endif
  if eof()
    @ 23,0 say 'End of file, no more records after this !'
  else
    @ 8,15 say EMP_NO 
    @ 8,36 say ENAME 
    @ 10,15 say CATEGORY 
    @ 10,36 say SHIFT 
    @ 12,15 say DIV 
    @ 12,36 say DEPT
  endif

case COMMAND = 'P'
    if .not. bof()
        skip -1
    endif
    if bof()
        @ 23,0 say 'You are already at the beginning of file !'
    else
        @ 8,15 say EMP_NO
        @ 8,36 say ENAME
        @ 10,15 say CATEGORY
        @ 10,36 say SHIFT
        @ 12,15 say DIV
        @ 12,36 say DEPT
    endif

    case COMMAND = 'S'
        do while .T.
            @ 1,20 say 'Give Emp. no: ' get XEMP_NO picture '!!999'
            read
            seek XEMP_NO
            if eof()
                @ 23,0 say '* Given Emp. no. not found *
                ANS = 'N'
                @ 24,0 say 'Do you want to give new Emp. no.? (Y/N): ';
                get ANS picture '!'.
            read
            if ANS <> 'Y'
                clear
                close database
                return
            else
                @ 23,0 clear
            loop
        endif
    @ 8,15 say EMP_NO
    @ 8,36 say ENAME
    @ 10,15 say CATEGORY
    @ 10,36 say SHIFT
    @ 12,15 say DIV
    @ 12,36 say DEPT
    exit
endo

case COMMAND = 'E'
    XEMP_NO  = EMP_NO
    XENAME   = ENAME
    XCATEGORY= CATEGORY
    XSHIFT   = SHIFT
    XDIV     = DIV
    XDEPT    = DEPT
    CLDEMP   = EMP_NO
    do while .T.
        @ 8,15 get XEMP_NO picture '!!999'
        @ 8,36 get XENAME picture '!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!'
        @ 10,15 get XCATEGORY picture '!!'
        @ 10,36 get XSHIFT picture '!''
        @ 12,15 get XDIV picture '!!'
        @ 12,36 get XDEPT picture '!!!!'
        read

if XEMP_NO <> OLDEMP
locate for EMP_NO = XEMP_NO
if .not. eof()
    @ 23,0 clear
    @ 23,0 say 'Given employee no. already present, enter new no.'
loop
endif
endif
@ 20,0 clear
do VLDTMPERS with XEMP_NO, XCATEGORY, XDIV, XDEPT, XSHIFT
if STATUS = 'L'
    loop
else
    exit
endif
enddo
replace EMP_NO with XEMP_NO, ENAME with XENAME
replace CATEGORY with XCATEGORY, SHIFT with XSHIFT
replace DIV with XDIV, DEPT with XDEPT
@ 23,0 say 'Record updated !'
case COMMAND = 'A'
    XEMP_NO = '
    XENAME = space(30)
    XDIV = '
    XSHIFT = '
    XDEPT = '
    XCATEGORY = '
    @ 8,15 get XEMP_NO picture '999'
    @ 8,36 get XENAME picture '!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!'
    @ 10,15 get XCATEGORY picture '!!'
    @ 10,36 get XSHIFT picture '!!'
    @ 12,15 get XDIV picture '!!'
    @ 12,36 get XDEPT picture '!!'
    read
locate for EMP_NO = XEMP_NO
if .not. eof()
    @ 23,0 clear
    @ 23,0 say 'Given employee no. already present, enter new no.'
loop
endif
@ 20,0 clear
do VLDTMPERS with XEMP_NO, XCATEGORY, XDIV, XDEPT, XSHIFT
if STATUS = 'L'
    loop
endif
append blank
replace EMP_NO with XEMP_NO, ENAME with XENAME
replace CATEGORY with XCATEGORY, SHIFT with XSHIFT
replace DIV with XDIV, DEPT with XDEPT
@ 23,0 say 'Record Added !'
case COMMAND = 'X'
    exit
endcase
 enddo
ANS = 'N'
@ 24,0 say 'Do you want to add or edit information of another employee? (Y/N): "get ANS picture '!' read
  if ANS <> 'Y'
    clear
    close database
    return
  endif
  @ 6,0 clear
enddo
** TIMEIP.FRG
** Displays screen for getting the in and out times for an employee **

    clear
    set talk off

** initialising the variables

    MONTH = space(4)
    XEMP_NO = '
    XTMIN = 0.00
    XTMOOUT = 0.00
    OK = 0
    DAYS = :
    STATUS = :
    XDATE = space(6)

do while .T.

** painting the screen and get month, employee no

    set color to w+
    @ 1,125 say "Time Record - Add Screen"
    set color to w
    @ 2,13 say "Period:
    set color to w
    @ 2,21 get MONTH picture '9999'
    read
    do CHKMONTH with MONTH, OK
    if OK = 0
      set color to w*
      @ 23,0 say 'Error in given period, correct the field'
    set color to w
    loop
    endif
    exit
endo
dndo
@ 23,0 clear

** opening personal and time information databases

    select A
    use PERS index PERS

    select B
    use TIMERE6 index TIMERE6

do while .T.

    XEMP_NO = '
    set color to w+
    @ 2,49 say "Emp. no.:
    set color to w
    @ 2,59 get XEMP_NO picture '999'
    read
    select A
    seek XEMP_NO

    if .not. eof()
      set color to w+
3.13 say 'Name : ' + ENAME
3.49 say 'Shift : ' + SHIFT
set color to w

else
23.0 say '** Given Emp. no. not found **'
ANS = ' '
24.0 say 'Do you want to give new Emp. no.? (Y/N) : ' get ANS picture '!
read
if ANS <> 'Y'
clear
close database
return
else
23.0 clear
loop
endif
endif

select B
go top
locate for EMP_NO = XEMP_NO .and. PERIOD = MONTH
if .not. eof()
23.0 say 'Given Emp. no. already present, enter new no.'
loop
endif
23.0 clear
append blank
replace EMP_NO with XEMP_NO, PERIOD with MONTH
XDATE = MONTH + '01'
M = substr ( XDATE, 3, 2 )
Y = substr ( XDATE, 1, 2 )
do GETDAYS with Y, M, DAYS
ROW=6
COL=0
4,COL+10 say 'Time'
5,COL+1 say 'Date In Out'
do while .T.
ROW,COL+0 say XDATE
ROW,COL+7 get XTMIN picture '99.99'
ROW,COL+13 get XTMOUT picture '99.99'
read
do TIMECHK with XTMIN, XTMOUT, STATUS
if STATUS = 'E'
exit
endif
if STATUS = 'L'
loop
endif
D = substr ( XDATE, 5, 2 )
IN = 'IN' + D
OUT = 'OUT' + D
replace &IN with XTMIN, &OUT with XTMOUT
TODATE = MONTH + DAYS
if XDATE = TODATE

2
exit
endif

ROW = ROW + 2
if ROW > 21
    ROW = 6
    COL = COL + 20
    @ 4, COL+10 say "Time"
    @ 5, COL+1 say "Date In Cut"
endif

do TMNEXTDT with XDATE, DAYS
endo

@ 23,0 clear
ANS = 
@ 24,0 say 'Do you want to enter daily times for another person?(Y/N):', get ANS picture '!' read
if ANS>'Y'
    clear
close database
    return
endif

@ 3,0 clear
endo
** TIMECHK.PRG
** Program for validating the time entered in time register

parameters XTIMEIN, XTIMEOUT, STATUS
STATUS = ' '

INSTR = ' '
INMIN = ' '
OUTSTR = ' '
OUTMIN = ' '

INSTR = str(XTIMEIN, 5, 2)
INMIN = substr(INSTR, 4, 2)
OUTSTR = str(XTIMEOUT, 5, 2)
OUTMIN = substr(OUTSTR, 4, 2)

if .not. (XTIMEIN = 0.00 .and. XTIMEOUT = 0.00)
    if XTIMEIN > 24.0 .or. XTIMEOUT > 24.0 .or. XTIMEIN >= XTIMEOUT .or.
        INSTR >= 60 .or. OUTSTR >= 60
        ANS = ''
        @23,0 say 'Error in time. Do you want to continue? (Y/N): '
        get ANS picture ''
        read
        if ANS <> 'Y'
            STATUS = 'E'
        else
            @23,0 clear
            STATUS = 'L'
        endif
    endif
endif
return
** EDITIME.PRG
** Screen for editing the Daily Times entered in time register

clear
set talk off

** Initialising the variables

MONTH = space(4)
XDATE = space(6)
XTMIN = 0.00
XTMOUT = 0.00
DAYS = ''
STATUS = ''

select A
use TIMEREG index TIMEREG

set color to /w
@ 1,25 say 'Time Record Editing Screen'
@ 2,0 say 'N = Next    E = Edit    X = Exit'
set color to w

do while .T.

XEMP_NO = '
COMMAND = '

** Creates editing screen

@ 3,16 say 'Emp. no:
@ 3,25 get XEMP_NO picture '999'

@ 3,39 say 'Period:
@ 3,47 get MONTH picture '9999'
read

select A
go top
locate for EMP_NO = XEMP_NO .and. PERIOD = MONTH

if eof()
    @ 23,0 say 'Given Emp. no. for the said period not found *'
    ANS = 'N'
    @ 24,0 say 'Do you want to give new Emp. no.? (Y/N):' get ANS picture '!''
    read
    if ANS <> 'Y'
        clear
        close database
        return
    else
        @ 23,0 clear
        loop
    endif
endif

XDATE = MONTH + '01'
M = substr(XDATE, 3, 2)
Y = substr(XDATE, 1, 2)
do GETDAYS with Y, M, DAYS
ROW = 6
COL = 0
@ 4, COL+10 say 'Time'
@ 5, COL+1 say 'Date In Out'
D = substr(XDATE, 5, 2)
IN = 'IN' + D
OUT = 'OUT' + D
@ ROW,COL say XDATE
@ ROW,COL+7 say &IN
@ ROW,COL+13 say &OUT

do while .T.
  COMMAND=
  do while COMMAND<> 'N' .and. COMMAND<> 'E' .and. COMMAND<> 'X'
    @ 1,0 say 'Give Command: ' get COMMAND picture '!' read
  enddo
@ 22,0 clear
do case
  case COMMAND = 'N'
    do TMNEXTDT with XDATE, DAYS
      D = substr(XDATE, 5, 2)
      IN = 'IN' + D
      OUT = 'OUT' + D
      ROW = ROW + 2
      if ROW > 22
        ROW = 6
        COL = COL + 20
      @ 4, COL+10 say 'Time'
      @ 5, COL+1 say 'Date In Out'
    else
      if ROW > 21
        ROW = 7
        COL = COL+20
      @ 4, COL+10 say 'Time'
      @ 5, COL+1 say 'Date In Out'
    endif
    endif
    TODATE = MONTH + DAYS
    if XDATE > TODATE
      exit
    endif
    @ ROW,COL+0 say XDATE
    @ ROW,COL+7 say &IN
    @ ROW,COL+13 say &OUT
  case COMMAND = 'E'
    do while .T.
      XTMIN = &IN
      XTMOUT = &OUT
      @ ROW,COL+0 say XDATE
      @ ROW,COL+7 get XTMIN picture '99.99'
      @ ROW,COL+13 get XTMOUT picture '99.99'
      read
      do TIMECHK with XTMIN, XTMOUT, STATUS
      if STATUS = 'L'
        loop
else
    exit
endif
enddo

D = substr(XDATE, 5, 2)
IN = 'IN' + D
OUT = 'OUT' + D
replace &IN with XTMIN, &OUT with XTMOUT
@ 22,0 say 'Record updated !'
case COMMAND = 'X'
    exit
endcase
enddo

ANS = 'N'
@ 24,0 say 'Do you want to edit daily time of another employee ?(Y/N):';
get ANS picture '!'
read
if ANS <> 'Y'
    clear
    close database
    return
endif
@ 6,0 clear
enddo
** TIMECALC.PRG  
** Program to do month end early / late time record calculations

clear
set talk off

** Initialising the variables

MONTH = space(4)
ANS = ' '
XDIV = ' '

** Opening the databases

select A
  use TIMEREG index TIMEREG
select B
  use PERS index PERS
select C
  use TEMPDEPT index TEMPDEPT
  zap

** Getting the period for which calculations are to be done

do while .T.

MONTH = space(4)
@ 21,10 say 'Enter the period for which you want to do time calculations'
@ 22,10 say 'Period: ' get MONTH picture '9999'
read

if MONTH = '
  ANS = 'N'
  @ 23,0 say 'Error in period. Do you want to continue?(Y/N):' get ANS picture
  read
  if ANS <> 'Y'
    clear
    close database
    return
  else
    @ 23,0 clear
  loop
endif
endif
exit

select A
  go top
  seek MONTH
if eof()
  @ 23,0 say 'No Time Details found for the given period'
  close database
  return
endif

** Calculate the extra/short time for the employees

DAYS = ' '
XTMIN = 0.00
XTMOUT = 0.00
IN = 0.00
OUT = 0.00
DIFF = 0.00

@23,0 clear
@ 23,0 say 'Wait, .... doing time calculations'
NOE = 1

** Total extra / short hours calculation

do while .T.

   XDATE = MONTH + '01'
   M = substr(XDATE, 3, 2)
   Y = substr(XDATE, 1, 2)
   do GETDAYS with Y, M, DAYS
   @23,40 say 'No of emp :'+str(NOE,3)

   select B
   seek A->EMP_NO

   TOTXTRA = 0.00
   TOTSHRT = 0.00
   LATEHRS = 0.00
   LATECNT = 0
   CNT = 0

   ** calculate the daily extra/early/late times for A or B shift

   if SHIFT = 'A'

      do while .T.
      XTRAHR = 0.00
      SHRTHR = 0.00
      LATEIN = 0.00

      select A
      DT = substr(XDATE, 5, 2)
      XIN = 'IN' + DT
      XOUT = 'OUT' + DT
      IN = &XIN
      OUT = &XOUT

      if (IN>0.00 .and. OUT>0.00)
         do TIMEADIFF with IN, OUT, XTRAHR, SHRTHR, LATEIN
         if LATEIN > 0.00
            CNT = CNT + 1
         endif
      endif
      LATEHRS = LATEHRS + LATEIN
      if CNT > 3 .or. LATEHRS > 1.00
         LATECNT = LATECNT + 1
      endif

      TOTXTRA = TOTXTRA + XTRAHR
      TOTSHRT = TOTSHRT + SHRTHR

      if (DT > '09' .and. DT < '26')
         NEWD = str(val(DT)+1, 2)
      endif

   endif

   endif

enddo

else
    do TMNEXTDT with XDATE, DAYS
endif
    if substr(XDATE, 5, 2) > DAYS
      exit
    endif
enddo
endif

select B
if SHIFT = 'B'
  do while .T.
    XTRAHR = 0.00
    SHRTHR = 0.00
    LATEIN = 0.00
    
    select A
    DT = substr(XDATE, 5, 2)
    XIN = 'IN' + DT
    XOUT = 'OUT' + DT
    IN = &XIN
    OUT = &XOUT
    
    if (IN>0.00 .and. OUT>0.00)
      do TIMEBDIFF with IN, OUT, XTRAHR, SHRTHR, LATEIN
        if LATEIN > 0.00
          CNT = CNT + 1
        endif
      endif
    LATEHRS = LATEHRS + LATEIN
    if CNT > 3 .or. LATEHRS > 1.00
      LATECNT = LATECNT + 1
    endif
    
    TOTXTRA = TOTXTRA + XTRAHR
    TOTSHRT = TOTSHRT + SHRTHR
    
    if (DT > '09' .and. DT < '28')
      NEWD = str(val(DT)+1, 2)
      XDATE = substr(XDATE, 1, 4)+NEWD
    else
      do TMNEXTDT with XDATE, DAYS
    endif
    if substr(XDATE, 5, 2) > DAYS
      exit
    endif
  enddo
endif

** calculate nett and store in string form

select A
if TOTXTRA >= TOTSHRT
  NETTHR = TOTXTRA - TOTSHRT
  NETTSTR = substr(str(NETTHR,6,2),5,2)
  NETTMIN = val(NETTSTR) * 60
  NETTIME = '+'+substr(str(NETTHR,6,2),1,3)+':'+substr(str(NETTMIN,4),1,2)
  replace NETT with NETTIME
else
  NETTHR = TOTSHRT - TOTXTRA
endif
NETTSTR = substr(str(NETTHR, 6, 2), 5, 2)
NETTMIN = val(NETTSTR) * 60
NETTIME = ' ' + substr(str(NETTHR, 6, 2), 1, 3) + ' ' + substr(str(NETTMIN, 4), 1, 2)
replace NETT with NETTIME
endif

** convert time into string form and store in time register

TOTXTST = substr(str(TOTXTRA, 6, 2), 5, 2)
TOTXTMIN = val(TOTXTST) * 60
TOTXTHRS = substr(str(TOTXTRA, 6, 2), 1, 3) + ' ' + substr(str(TOTXTMIN, 4), 1, 2)
TOTSHST = substr(str(TOTSHRT, 6, 2), 5, 2)
TOTSHMIN = val(TOTSHST) * 60
TOTSHHRS = substr(str(TOTSHRT, 6, 2), 1, 3) + ' ' + substr(str(TOTSHMIN, 4), 1, 2)
TOTLTST = substr(str(LATEHRS, 6, 2), 5, 2)
TOTLTMIN = val(TOTLTST) * 60
TOTLTHRS = substr(str(LATEHRS, 6, 2), 1, 3) + ' ' + substr(str(TOTLTMIN, 4), 1, 2)
replace TOT_XTRAHR with TOTXTHRS, TOT_SHRTHR with TOTSHHRS
replace LATE_HRS with TOTLTHRS, LATE_OCCNS with LATECNT

** store extra/short hours in temporary file for department

select C
locate for DEPT = B->DEPT
if eof()
append blank
replace DIV with B->DIV, DEPT with B->DEPT
replace TOT_XTRAHR with TOTXTHRS, TOT_SHRTHR with TOTSHHRS
replace NETT with NETTIME
else

TOTXTST = substr(TOT_XTRAHR, 6, 2)
TOTXTMIN = val(TOTXTST) * 60
TOTXTAHR = val(substr(TOT_XTRAHR, 1, 4)) + TOTXTMIN + TOTXTA
TOTHRSTR = substr(str(TOTXTAHR, 7, 2), 6, 2)
TOTHRMIN = val(TOTHRSTR) * 60
TOTHRXTA = substr(str(TOTXTAHR, 7, 2), 1, 4) + ' ' + substr(str(TOTHRMIN, 4), 1, 2)

TOTSHST = substr(TOT_SHRTHR, 6, 2)
TOTSHMIN = val(TOTSHST) * 60
TOTSRTHR = val(substr(TOT_SHRTHR, 1, 4)) + TOTSHMIN + TOTSRH
TOTSRHRS = substr(str(TOTSRTHR, 7, 2), 6, 2)
TOTSRHSN = val(TOTSRHRS) * 60
TOTSRHT = substr(str(TOTSRTHR, 7, 2), 1, 4) + ' ' + substr(str(TOTSRHSN, 4), 1, 2)
replace TOT_XTRAHR with TOTHRXTA, TOT_SHRTHR with TOTSRHT
if TOTXTAHR >= TOTSRTHR

NETTHR = TOTXTAHR - TOTSRTHR
NETTSTR = substr(str(NETTHR, 6, 2), 5, 2)
NETTMIN = (NETTSTR) * 60
NETTIME = ' ' + substr(str(NETTHR, 6, 2), 1, 3) + ' ' + substr(str(NETTMIN, 4), 1, 2)
replace NETT with NETTIME
else

NETTHR = TOTSRTHR - TOTXTAHR
NETTSTR = substr(str(NETTHR, 6, 2), 5, 2)
NETTMIN = val(NETTSTR) * 60
NETTIME = ' ' + substr(str(NETTHR, 6, 2), 1, 3) + ' ' + substr(str(NETTMIN, 4), 1, 2)
replace NETT with NETTIME
endif
endif
select A
skip
if PERIOD <> MONTH .or. eof()
exit
endif
NOE=NOE+1
enddo

@24,0
@24,0 say 'Daily Time calculation complete.'
close database
return
** CHKDATE.PRG **
** Program for checking the correctness of given date **

 parameter DATE, OK
 OK = 1

 ** checking the year **

 if substr( DATE, 1, 2 ) < '00'
   OK = 0
 endif

 ** checking the month **

 if substr( DATE, 3, 2 ) < '01'.OR. substr( DATE, 3, 2 ) > '12'
   OK = 0
 endif

 ** checking the date **

 DAYS =
 do GETDAYS with substr(DATE, 1, 2), substr(DATE, 3, 2), DAYS
 if substr(DATE, 5, 2 ) < '01'.OR. substr(DATE, 5, 2 ) > DAYS
   OK = 0
 endif
* VALIDPERS.PRG
* Program to validate various parameters in persinfo file
parameters XEMP_NO, XCATEGORY, XDIV, XDEPT, XSHIFT

STATUS = 'X'

* EMP_NO starts with 'Y', 'R' and greater than 300
if (substr(XEMP_NO, 1, 1) <> 'R' .and. substr(XEMP_NO, 1, 1) <> 'Y') .or. substr(XEMP_NO, 2, 3) < '300' .or. XEMP_NO = ' ' .or. XEMP_NO = 'X'
@ 20,0 say 'Error in Emp. no., give >= R300 or Y300'
STATUS = 'L'
endif

* CATEGORY's first character is 'G', 'W', 'T', 'M' or 'N'
XCATG = substr(XCATEGORY, 1, 1)
if (XCATG <> 'G' .and. XCATG <> 'M' .and. XCATG <> 'T' .and. XCATG <> 'W' .and. XCATG <> 'N'
@ 21,0 say 'Error in Category type, give first figure only as 'G' , 'W', 'T', 'M' or 'N'
STATUS = 'L'
endif

* DIV is 'R', 'Y' and DIV= 1st character in EMP_NO
if (XDIV <> 'R' .and. XDIV <> 'Y') .or. XDIV = ' ' .or. XDIV = substr(XEMP_NO, 1, 1)
@ 22,0 say 'Error in Division type, give only 'R' or 'Y' and same as in Emp. no.'
STATUS = 'L'
endif

* DEPT starts with 'R' or 'Y' only
if substr(XDEPT, 1, 1) <> substr(XEMP_NO, 1, 1) .or. XDEPT = ' ' .or. XDEPT = substr(XEMP_NO, 1, 1)
@ 23,0 say 'Error in Dept. type, give first letter same as in Emp. no.'
STATUS = 'L'
endif

* SHIFT is 'A' or 'B' only
if (XSHIFT <> 'A' .and. XSHIFT <> 'B') .or. XSHIFT = ' ' .or. XSHIFT = substr(XEMP_NO, 1, 1)
@ 24,0 say 'Error in Shift type, give only as 'A' or 'B''
STATUS = 'L'
endif

return
** GETNXTDT.PROG
** Program for changing the date according to the calendar

parameters XDATE, DAYS

D = substr(XDATE, 5, 2)
M = substr(XDATE, 3, 2)
Y = substr(XDATE, 1, 2)
VAL_D = val(D)+1
Y_DAYS = val(DAYS)
if VAL_D > Y_DAYS
   VAL_D = 1
   if VAL_M = 13
      VAL_M = 1
   endif
   Y = str(VAL_Y, 2)
endif

if VAL_M<10
   M = '0'+str(VAL_M, 1)
else
   M = str(VAL_M, 2)
endif

if VAL_D<10
   D = '0'+str(VAL_D, 1)
else
   D = str(VAL_D, 2)
endif

XDATE = Y+M+D
return
** TIMEADIFF.PRG  
** Program to calculate the difference in time with standard time 
parameters IN, OUT, HRXTRA, HRSHRT, HRSLATE  
** initialising the variables  

HRXTRA = 0.00  
HRSHRT = 0.00  
HRSLATE = 0.00  
XTRAHR = 0.00  
ERLYIN = 0.00  
ERLYOUT = 0.00  

STRIN = str(IN, 5, 2)  
MININ = val(substr(STRIN, 4, 2))  
HRSIN = val(substr(STRIN, 1, 2))  
VLMIN = MININ/60.0  
TIMEIN = HRSIN + VLMIN  

if TIMEIN <= 7.75  
   ERLYIN = 7.75 - TIMEIN  
else  
   if TIMEIN > 7.92  
      HRSLATE = TIMEIN - 7.75  
   endif  
endif  

OUTSTR = str(OUT, 5, 2)  
OUTMIN = val(substr(OUTSTR, 4, 2))  
OUTHHR = val(substr(OUTSTR, 1, 2))  
VALMIN = OUTMIN/60.0  
TIMEOUT = OUTHHR + VALMIN  

if TIMEOUT >= 16.25  
   XTRAHR = TIMEOUT - 16.25  
else  
   ERLYOUT = 16.25 - TIMEOUT  
endif  
HRXTRA = ERLYIN+XTRAHR  
HRSHRT = HRSLATE+ERLYOUT  
return
** TIMEBDIFF.PRG
** Program to calculate the difference in time with standard time
** for shift B employees

parameters IN, OUT, HRXTRA, HRSHRT, HRSLATE

** initialising the variables

HRXTRA = 0.00
HRSHRT = 0.00
HRSLATE = 0.00
XTRAHR = 0.00
ERLYIN = 0.00
ERLYOUT = 0.00

** taking the value and checking with standard time

STRIN = str(IN, 5, 2)
MININ = val(substr(STRIN, 4, 2))
HRSIN = val(substr(STRIN, 1, 2))
VLMIN = MININ/60.0
TIMEIN = HRSIN + VLMIN

if TIMEIN < 9.00
   ERLYN = 9.00 - TIMEIN
else
   if TIMEIN > 9.17
      LATEIN = TIMEIN - 9.00
      HRSLATE = LATEIN
   endif
endif

OUTSTR = str(OUT, 5, 2)
OUTMIN = val(substr(OUTSTR, 4, 2))
OUTHHR = val(substr(OUTSTR, 1, 2))
VALMIN = OUTMIN/60.0
TIMEOUT = OUTHHR + VALMIN

if TIMEOUT >= 17.50
   XTRAHR = TIMEOUT - 17.50
else
   ERLYOUT = 17.50 - TIMEOUT
endif

HRXTRA = ERLYN + XTRAHR
HRSHRT = HRSLATE + ERLYOUT
return
** TMNEXTDT.PRG

** Program for changing the date according to the calendar

parameters XDATE, DAYS

D = substr(XDATE, 5, 2)
M = substr(XDATE, 3, 2)
Y = substr(XDATE, 1, 2)

VAL_D = val(D) + 1
V_DAYS = val(DAYS)

if VAL_D < 10
  D = '0' + str(VAL_D, 1)
else
  D = str(VAL_D, 2)
endif

VAL_M = val(M)
if VAL_M < 10
  M = '0' + str(VAL_M, 1)
else
  M = str(VAL_M, 2)
endif

XDATE = Y + M + D

return