```
*& Report ZHRLEAVEREPORT
                         _____*
REPORT ZHRLEAVEREPORT.
TYPE-POOLS: SLIS.
INFOTYPES: 2001.
DATA: BEGIN OF I PA0001 OCCURS 100 ,
       WERKS TYPE PERSA,
      END OF I PA0001.
DATA: BEGIN OF I2 PA0001 OCCURS 100,
       PERSA TYPE PERSA,
       NAME1 TYPE PBTXT,
      END OF 12 PA0001.
DATA: BEGIN OF I3 PA0001 OCCURS 100,
       BTRTL TYPE BTRTL 001P,
        BTEXT TYPE BTRTX,
       END OF 13 PA0001.
DATA: IT PA0001 TYPE STANDARD TABLE OF PA0001,
       WA PA0001 LIKE LINE OF IT PA0001.
TYPES: BEGIN OF TY FINAL,
         ENAME TYPE PA0001-ENAME,
         PERNR TYPE PA0001-PERNR,
         SUBTY TYPE SUBTY,
         PERSK TYPE PA0001-PERSK,
         LEAVET TYPE STRING,
         ENDDA TYPE PA2006-ENDDA,
         BEGDA TYPE PA2006-BEGDA,
         OUOTA TYPE PA2001-ABWTG,
       END OF TY FINAL.
DATA: IT FIELDCAT TYPE SLIS T FIELDCAT ALV,
       WA FIELDCAT TYPE SLIS FIELDCAT ALV,
      L_LAYOUT TYPE SLIS_LAYOUT_ALV,
L_PRINT TYPE SLIS_PRINT_ALV,
GT_SORT TYPE SLIS_T_SORTINFO_ALV,
WA_SORT TYPE SLIS_SORTINFO_ALV,
IT_FILTER TYPE SLIS_T_FILTER_ALV,
       WA_FILTER TYPE SLIS_FILTER_ALV,
       L REPID LIKE SY-REPID.
DATA: T_HEADER TYPE SLIS_T_LISTHEADER,
    W_HEADER TYPE SLIS_LISTHEADER.

DATA: IT_FINAL TYPE TABLE OF TY_FINAL,
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```
WA_FINAL LIKE LINE OF IT_FINAL.

DATA: IT_HEADER TYPE TABLE OF TY_FINAL,
      WA HEADER LIKE LINE OF IT HEADER.
DATA: V_DATA TYPE STRING,
V_ENAME TYPE PA0001-ENAME,
V_PERSK TYPE PA0001-PERSK,
      LV LINES TYPE I,
      PERNR TYPE PA0001-PERNR.
SELECTION-SCREEN BEGIN OF BLOCK BLOCK WITH FRAME TITLE TEXT-100.
PARAMETER: S PERSA TYPE T500P-PERSA,
                 S BTRTL TYPE PA0001-BTRTL,
                 S BEGDA TYPE PA2001-BEGDA OBLIGATORY,
                 S ENDDA TYPE PA2001-ENDDA OBLIGATORY.
SELECT-OPTIONS : S PERNR FOR PERNR.
SELECTION-SCREEN END OF BLOCK BLOCK.
AT SELECTION-SCREEN ON S PERSA.
 PERFORM CHECK WERKS.
AT SELECTION-SCREEN ON S BTRTL.
 PERFORM CHECK BTRTL.
*AT SELECTION-SCREEN ON S PERNR.
* PERFORM CHECK PERNR.
AT SELECTION-SCREEN ON VALUE-REQUEST FOR S PERSA.
 PERFORM SHOW F4 HELP.
AT SELECTION-SCREEN ON VALUE-REQUEST FOR S BTRTL.
 PERFORM SHOW F4 HELP1.
*AT SELECTION-SCREEN ON VALUE-REQUEST FOR S PERNR-LOW.
* PERFORM SHOW F4 HELP3.
*AT SELECTION-SCREEN ON VALUE-REQUEST FOR S PERNR-HIGH.
* PERFORM SHOW F4 HELP4.
*& Form CHECK WERKS
       text
FORM CHECK WERKS .
  SELECT DISTINCT WERKS FROM PA0001 INTO TABLE I PA0001 ORDER BY WERKS.
 SELECT DISTINCT PERSA NAME1 FROM T500P INTO TABLE 12 PA0001 FOR ALL ENTRIES
 IN I PA0001 WHERE PERSA = I PA0001-WERKS.
 LOOP AT I2 PA0001 INTO I2 PA0001.
   MODIFY I2 PA0001 FROM I2 PA0001 TRANSPORTING PERSA.
  READ TABLE I2 PA0001 INTO I2 PA0001 WITH KEY PERSA = S PERSA.
                             "CHECK WERKS
ENDFORM.
```

```
*& Form SHOW F4 HELP
*&-----*
      text
FORM SHOW F4 HELP.
 DATA:GT RETURN VALUE TYPE TABLE OF DDSHRETVAL WITH HEADER LINE.
 SELECT DISTINCT WERKS FROM PA0001 INTO TABLE I_PA0001 ORDER BY WERKS.
 SELECT DISTINCT PERSA NAME1 FROM T500P INTO TABLE I2 PA0001 FOR ALL ENTRIES
IN I PA0001 WHERE PERSA = I PA0001-WERKS.
 CALL FUNCTION 'F4IF INT TABLE VALUE REQUEST'
   EXPORTING
    RETFIELD = 'PERSA'
     DYNPROFIELD = 'S PERSA'
    VALUE ORG = 'S'
   TABLES
     VALUE TAB = I2 PA0001
     RETURN TAB = GT RETURN VALUE.
 IF SY-SUBRC = 0.
   READ TABLE GT_RETURN_VALUE INDEX 1.
   12 PA0001-PERSA = GT RETURN VALUE-FIELDVAL.
   S PERSA = GT RETURN VALUE-FIELDVAL.
 ENDIF.
ENDFORM.
                        "SHOW F4 HELP
*& Form CHECK BTRTL
      text
FORM CHECK BTRTL .
 IF S PERSA NE ' '.
   SELECT DISTINCT BTRTL BTEXT FROM T001P INTO CORRESPONDING FIELDS OF TABLE
I3 PA0001
               WHERE WERKS = S PERSA
               ORDER BY BTRTL.
   LOOP AT I3 PA0001 INTO I3 PA0001.
     MODIFY I3 PA0001 FROM I3 PA0001 TRANSPORTING BTRTL.
   ENDLOOP.
   READ TABLE I3 PA0001 INTO I3 PA0001 WITH KEY BTRTL = S BTRTL.
   MESSAGE I001(ZBD).
 ENDIF.
                         "CHECK BTRTL
ENDFORM.
*& Form SHOW F4 HELP1
*&-----*
      text
FORM SHOW F4 HELP1.
 DATA:GT RETURN VALUE1 TYPE TABLE OF DDSHRETVAL WITH HEADER LINE.
```

```
IF S PERSA NE ' '.
   SELECT DISTINCT BTRTL BTEXT FROM T001P INTO CORRESPONDING FIELDS OF TAB
LE I3 PA0001
             WHERE WERKS = S PERSA
              ORDER BY BTRTL.
   CALL FUNCTION 'F4IF INT TABLE VALUE REQUEST'
     EXPORTING
       RETFIELD = 'BTRTL'
       DYNPROFIELD = 'S BTRTL'
       VALUE ORG = 'S'
     TABLES
       VALUE TAB = I3 PA0001
       RETURN TAB = GT RETURN VALUE1.
   IF SY-SUBRC = 0.
     READ TABLE GT RETURN VALUE1 INDEX 1.
     I3 PA0001-BTRTL = GT RETURN VALUE1-FIELDVAL.
     S BTRTL = I3 PA0001-BTRTL.
   ENDIF.
 ELSE.
   MESSAGE I001(ZBD).
 ENDIF.
                         " SHOW F4 HEL
ENDFORM.
*& Form CHECK PERNR
   text
FORM CHECK PERNR.
* IF S PERSA = ' ' AND S BTRTL = ' ' .
   SELECT DISTINCT PERNR ENAME FROM PA0001 INTO CORRESPONDING FIELDS OF TAB
LE I5 PA0001
* WHERE ENDDA = '99991231' ORDER BY PERNR.
* ELSEIF S PERSA NE ' ' AND S BTRTL = ' '.
* SELECT DISTINCT PERNR ENAME FROM PA0001 INTO CORRESPONDING FIELDS OF TAB
LE I5 PA0001
* WHERE WERKS = S PERSA AND ENDDA = '99991231' ORDER BY PERNR.
* ELSEIF S PERSA NE ' ' AND S BTRTL NE ' ' .
* SELECT DISTINCT PERNR ENAME FROM PA0001 INTO CORRESPONDING FIELDS OF TAB
LE I5 PA0001
     WHERE WERKS = S PERSA AND BTRTL = S BTRTL AND ENDDA = '99991231' ORD
ER BY PERNR.
* ENDIF.
* LOOP AT I5 PA0001 INTO I5 PA0001.
* MODIFY I5 PA0001 FROM I5 PA0001 TRANSPORTING PERNR.
* ENDLOOP.
* READ TABLE I5 PA0001 INTO I5 PA0001 WITH KEY PERNR = S PERNR.
ENDFORM.
                         "CHECK PERNR
*& Form SHOW F4 HELP3
                          _____*
* text
```

```
*FORM SHOW F4 HELP3.
* DATA:GT RETURN VALUE3 TYPE TABLE OF DDSHRETVAL WITH HEADER LINE.
* IF S PERSA = ' ' AND S BTRTL = ' '.
   SELECT DISTINCT PERNR ENAME FROM PA0001 INTO CORRESPONDING FIELDS OF TAB
LE I5 PA0001
* WHERE ENDDA = '99991231' ORDER BY PERNR.
* ELSEIF S PERSA NE ' ' AND S BTRTL = ' '.
   SELECT DISTINCT PERNR ENAME FROM PA0001 INTO CORRESPONDING FIELDS OF TAB
LE I5 PA0001
  WHERE WERKS = S PERSA AND ENDDA = '99991231' ORDER BY PERNR.
* ELSEIF S PERSA NE ' ' AND S BTRTL NE ' ' .
* SELECT DISTINCT PERNR ENAME FROM PA0001 INTO CORRESPONDING FIELDS OF TAB
LE I5 PA0001
       WHERE WERKS = S PERSA AND BTRTL = S BTRTL AND ENDDA = '99991231' ORD
ER BY PERNR.
* ENDIF.
* CALL FUNCTION 'F4IF_INT_TABLE_VALUE_REQUEST'
   EXPORTING
     RETFIELD = 'PERNR'
     DYNPROFIELD = 'S PERNR'
     VALUE ORG = 'S'
   TABLES
     VALUE TAB = I5 PA0001
      RETURN TAB = GT RETURN VALUE3.
* IF SY-SUBRC = 0.
   READ TABLE GT RETURN VALUE3 INDEX 1.
   I5 PA0001-PERNR = GT RETURN VALUE3-FIELDVAL.
   S PERNR-LOW = I5 PA0001-PERNR.
* ENDIF.
                           " SHOW F4 HEL
*ENDFORM.
*& Form SHOW F4_HELP4
* & _ _ _ _ _ _
      text
*FORM SHOW F4 HELP4.
* DATA:GT RETURN VALUE4 TYPE TABLE OF DDSHRETVAL WITH HEADER LINE.
* IF S PERSA = ' ' AND S BTRTL = ' ' .
* SELECT DISTINCT PERNR ENAME FROM PA0001 INTO CORRESPONDING FIELDS OF TAB
LE I5 PA0001
* WHERE ENDDA = '99991231' ORDER BY PERNR.
* ELSEIF S PERSA NE ' ' AND S BTRTL = ' '.
* SELECT DISTINCT PERNR ENAME FROM PA0001 INTO CORRESPONDING FIELDS OF TAB
LE I5 PA0001
* WHERE WERKS = S PERSA AND ENDDA = '99991231' ORDER BY PERNR.
* ELSEIF S PERSA NE ' ' AND S BTRTL NE ' ' .
   SELECT DISTINCT PERNR ENAME FROM PA0001 INTO CORRESPONDING FIELDS OF TAB
* WHERE WERKS = S PERSA AND BTRTL = S BTRTL AND ENDDA = '99991231' ORD
ER BY PERNR.
```

```
* ENDIF.
* CALL FUNCTION 'F4IF INT TABLE VALUE REQUEST'
   EXPORTING
     RETFIELD = 'PERNR'
     DYNPROFIELD = 'S PERNR'
     VALUE ORG = 'S'
   TABLES
     VALUE TAB = I5 PA0001
      RETURN TAB = GT RETURN VALUE4.
* IF SY-SUBRC = 0.
   READ TABLE GT RETURN VALUE4 INDEX 1.
   15 PA0001-PERNR = GT RETURN VALUE4-FIELDVAL.
   S PERNR-HIGH = I5 PA0001-PERNR.
* ENDIF.
*ENDFORM.
                            " SHOW F4 HEL
START-OF-SELECTION.
 PERFORM CREATE FIELD CATALOG.
 PERFORM DATA RETRIEVAL.
 PERFORM TOP OF PAGE.
 PERFORM DISPLAY ALV.
***& Form data retrieval
FORM DATA RETRIEVAL.
*BREAK-POINT.
 IF S PERNR-LOW NE SPACE AND S PERNR-HIGH IS INITIAL.
   SELECT * FROM PA0001 INTO TABLE IT PA0001
   WHERE PERNR EQ S PERNR-
LOW. " Commented sks 20.05.2016 as on importing from text file only first per
nr was processed and rest left
                               " corrected for above issue
     WHERE PERNR IN S PERNR.
 ELSEIF S PERNR-LOW IS INITIAL AND S PERNR-HIGH IS INITIAL.
   SELECT * FROM PA0001 INTO TABLE IT PA0001 WHERE PERNR <> ' '.
 ELSEIF S PERNR-LOW IS NOT INITIAL AND S PERNR-HIGH IS NOT INITIAL.
   SELECT * FROM PA0001 INTO TABLE IT PA0001 WHERE PERNR IN S PERNR.
 ENDIF.
 SORT IT PA0001 BY PERNR BEGDA DESCENDING.
 DELETE ADJACENT DUPLICATES FROM IT PA0001 COMPARING PERNR.
 IF S PERSA IS NOT INITIAL AND S BTRTL IS NOT INITIAL.
   DELETE IT PA0001 WHERE WERKS NE S PERSA.
   DELETE IT PA0001 WHERE BTRTL NE S BTRTL.
 ELSEIF S PERSA IS NOT INITIAL AND S BTRTL IS INITIAL.
   DELETE IT PA0001 WHERE WERKS NE S PERSA.
```

```
ELSEIF S PERSA IS INITIAL AND S BTRTL IS NOT INITIAL.
MESSAGE E001(ZBD).

* DELETE IT_PA0001 WHERE BTRTL NE S_BTRTL.
 ENDIF.
 LOOP AT IT PA0001 INTO WA PA0001.
   PERFORM READ INFOTYPE.
 ENDLOOP.
ENDFORM.
                         "data retrieval
*& Form TOP OF PAGE
*&-----*
   text
FORM TOP OF PAGE .
 V DATA = 'Leave report'.
 W HEADER-TYP = 'H'.
 W HEADER-INFO = V DATA.
 APPEND W HEADER TO T HEADER.
 CLEAR W HEADER.
 CALL FUNCTION 'REUSE ALV COMMENTARY WRITE'
     IT LIST COMMENTARY = T HEADER.
 REFRESH T HEADER.
                         "TOP OF PAGE
ENDFORM.
*& Form DISPLAY_ALV
FORM DISPLAY ALV .
 L REPID = SY-REPID.
 CALL FUNCTION 'REUSE ALV GRID DISPLAY'
   EXPORTING
    l repid = sy-repid
      I CALLBACK PROGRAM = L REPID
        i callback user command = 'USER COMMAND'
```

```
I CALLBACK TOP OF PAGE = 'TOP OF PAGE'
       IS_LAYOUT = L_LAYOUT
      is_print
                           = l_print
= gt_sort
       it sort
     it_filter
                          = it_filter
     IT_FIELDCAT = IT_FIELDCAT[]

it_events = gt_event
    IT_EXCLUDING = IT_MENU
     TABLES
      T OUTTAB
                           = IT HEADER
     EXCEPTIONS
      PROGRAM\_ERROR = 1
       OTHERS
                           = 2.
 IF SY-SUBRC <> 0.
* MESSAGE ID SY-MSGID TYPE SY-MSGTY NUMBER SY-MSGNO
* WITH SY-MSGV1 SY-MSGV2 SY-MSGV3 SY-MSGV4.
 ENDIF.
ENDFORM.
                          "display alv
*ENDFORM.
                           "DISPLAY ALV
*& Form create field catalog
*&-----*
     text
FORM CREATE FIELD CATALOG .
 REFRESH IT FIELDCAT.
 CLEAR: WA FIELDCAT.
 WA FIELDCAT-COL POS = 1.
 WA FIELDCAT-FIELDNAME = 'ENAME'.
 WA FIELDCAT-TABNAME = 'IT HEADER'.
 WA FIELDCAT-SELTEXT M = 'Employee Name '.
 APPEND WA FIELDCAT TO IT FIELDCAT.
 CLEAR WA FIELDCAT.
 WA FIELDCAT-COL POS = 2.
 WA_FIELDCAT-FIELDNAME = 'PERNR'.
 WA FIELDCAT-TABNAME = 'IT HEADER'.
 WA FIELDCAT-SELTEXT M = 'Personnel number'.
 APPEND WA FIELDCAT TO IT FIELDCAT.
 CLEAR WA FIELDCAT.
 WA FIELDCAT-COL POS = 3.
 WA FIELDCAT-FIELDNAME = 'PERSK'.
 WA FIELDCAT-TABNAME = 'IT HEADER'.
 WA FIELDCAT-SELTEXT M = 'Employee Subgroup'.
 APPEND WA FIELDCAT TO IT FIELDCAT.
 CLEAR WA FIELDCAT.
 WA FIELDCAT-COL POS = 4.
 WA FIELDCAT-FIELDNAME = 'LEAVET'.
```

```
WA FIELDCAT-TABNAME = 'IT HEADER'.
 WA FIELDCAT-SELTEXT M = 'leave Type'.
 APPEND WA FIELDCAT TO IT FIELDCAT.
 CLEAR WA FIELDCAT.
 WA FIELDCAT-COL POS = 5.
 WA FIELDCAT-FIELDNAME = 'BEGDA'.
 WA FIELDCAT-TABNAME = 'IT HEADER'.
 WA_FIELDCAT-SELTEXT M = 'From'.
 APPEND WA FIELDCAT TO IT FIELDCAT.
 CLEAR WA FIELDCAT.
 WA FIELDCAT-COL POS = 6.
 WA FIELDCAT-FIELDNAME = 'ENDDA'.
 WA FIELDCAT-TABNAME = 'IT HEADER'.
 WA FIELDCAT-SELTEXT M = ' To'.
 APPEND WA FIELDCAT TO IT FIELDCAT.
 CLEAR WA FIELDCAT.
 WA FIELDCAT-COL POS = 7.
 WA FIELDCAT-FIELDNAME = 'QUOTA'.
 WA FIELDCAT-TABNAME = 'IT HEADER'.
 WA FIELDCAT-SELTEXT M = 'Total Leaves'.
 APPEND WA FIELDCAT TO IT FIELDCAT.
 CLEAR WA FIELDCAT.
                         " CREATE FIELD CATALOG
*& Form READ INFOTYPE
*.-----
      text
   -->P P2001 text
     -->P 0714 text
                   _____*
FORM READ INFOTYPE.
 DATA: P2001 TYPE STANDARD TABLE OF P2001,
      WA2001 LIKE LINE OF P2001.
 REFRESH P2001.
 CALL FUNCTION 'HR READ INFOTYPE'
   EXPORTING
                        = 'A'
    TCLAS
                        = WA PA0001-PERNR
    PERNR
    INFTY
                        = '2001'
                        = S BEGDA
    BEGDA
    ENDDA
                        = S ENDDA
   TABLES
    INFTY TAB
                   = P2001
* EXCEPTIONS
```

```
* INFTY_NOT_FOUND = 1
* OTHERS = 2
 IF P2001[] IS NOT INITIAL.
   LOOP AT P2001 INTO WA2001.
     MOVE-CORRESPONDING WA2001 TO WA HEADER.
     SELECT SINGLE ATEXT FROM T554T INTO WA HEADER-
LEAVET WHERE SPRSL = 'EN' AND MOABW = '01' AND AWART = WA2001-SUBTY.
     WA_HEADER-QUOTA = WA2001-KALTG.
      IF WA HEADER-QUOTA IS INITIAL.
      WA HEADER-QUOTA = '1'.
     ENDIF.
      WA HEADER-ENAME = WA PA0001-ENAME.
      WA HEADER-PERSK = WA PA0001-PERSK.
     APPEND WA HEADER TO IT HEADER.
      CLEAR: WA HEADER, WA2001, WA PA0001.
   ENDLOOP.
  ENDIF.
```

ENDFORM.

" READ INFOTYPE