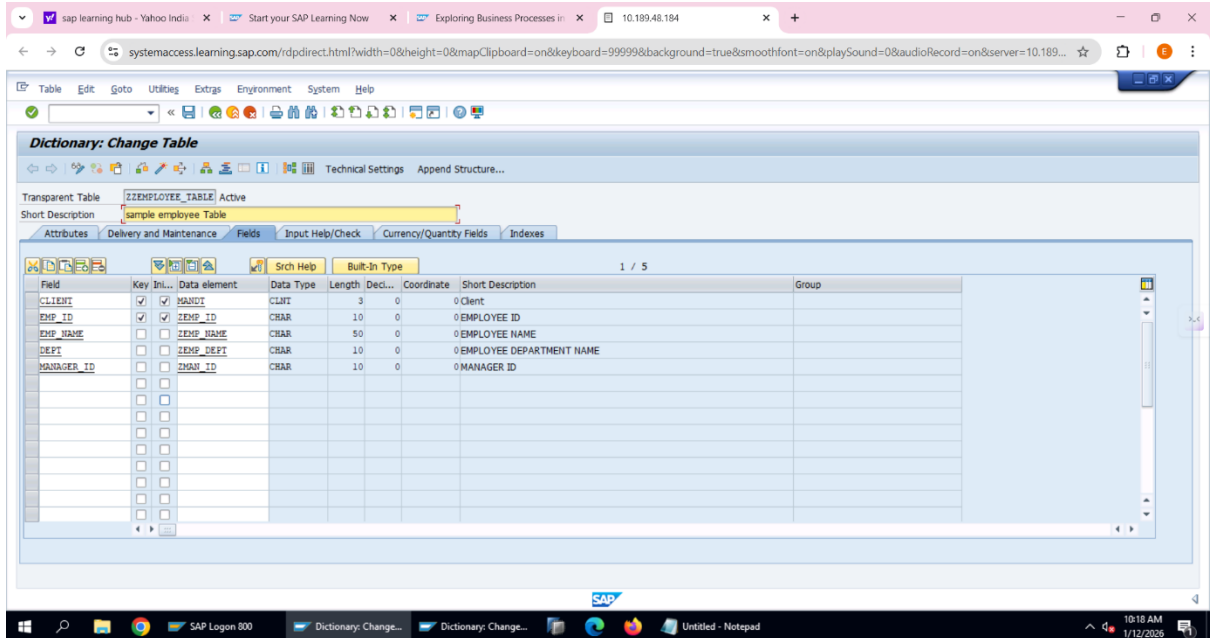


Employee Leave Management System.

1st Step: Table Creation

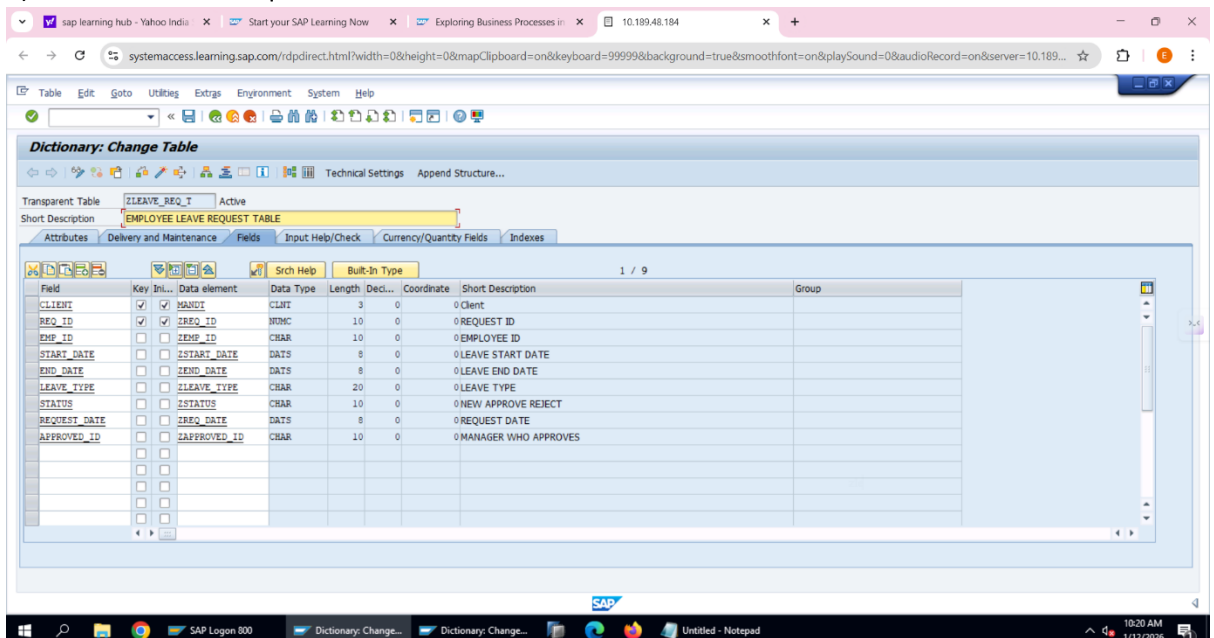
1) 1st Table : Employee Details Table



The screenshot shows the SAP Dictionary: Change Table interface for the table ZEMPLOYEE_TABLE. The table is transparent and active. The short description is "Sample employee Table". The Fields tab is selected, showing a list of fields with their attributes.

Field	Key	Ini...	Data element	Data Type	Length	Deci...	Coordinate	Short Description	Group
CLIENT	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	MANDT	CLINT	3	0		0 Client	
EMP_ID	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	ZEMP_ID	CHAR	10	0		0 EMPLOYEE ID	
EMP_NAME	<input type="checkbox"/>	<input type="checkbox"/>	ZEMP_NAME	CHAR	50	0		0 EMPLOYEE NAME	
DEPT	<input type="checkbox"/>	<input type="checkbox"/>	ZEMP_DEPT	CHAR	10	0		0 EMPLOYEE DEPARTMENT NAME	
MANAGER_ID	<input type="checkbox"/>	<input type="checkbox"/>	ZMAN_ID	CHAR	10	0		0 MANAGER ID	

2) 2nd Table : Leave Request Table

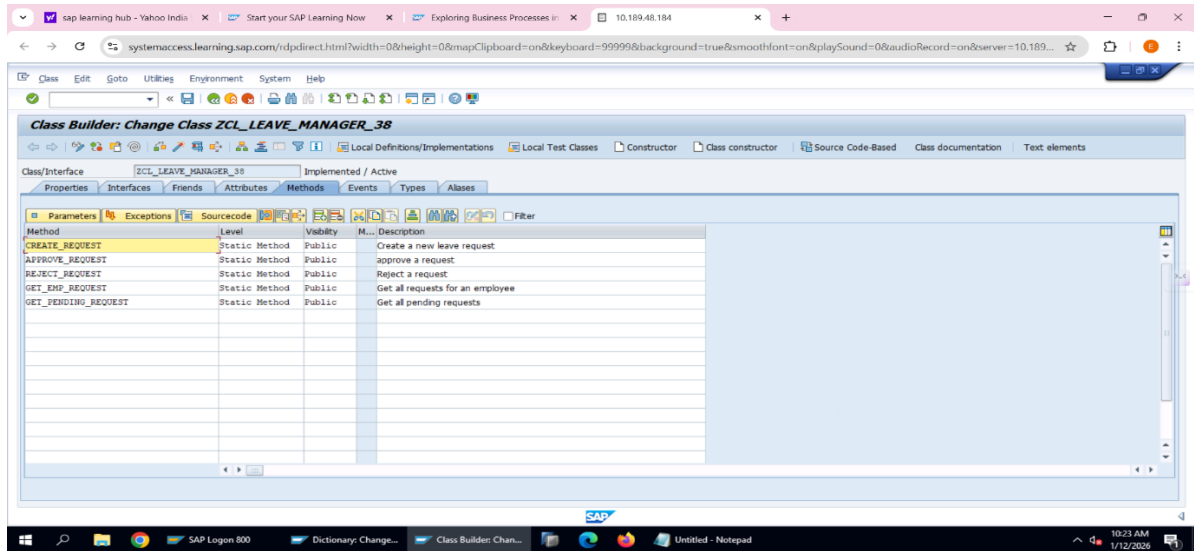


The screenshot shows the SAP Dictionary: Change Table interface for the table ZLEAVE_REQ_T. The table is transparent and active. The short description is "EMPLOYEE LEAVE REQUEST TABLE". The Fields tab is selected, showing a list of fields with their attributes.

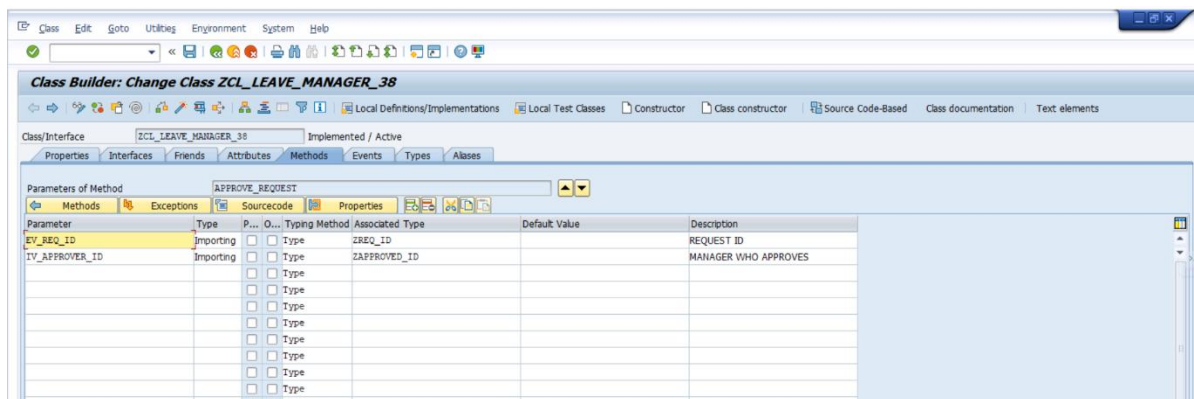
Field	Key	Ini...	Data element	Data Type	Length	Deci...	Coordinate	Short Description	Group
CLIENT	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	MANDT	CLINT	3	0		0 Client	
REQ_ID	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	ZREQ_ID	NUMC	10	0		0 REQUEST ID	
EMP_ID	<input type="checkbox"/>	<input type="checkbox"/>	ZEMP_ID	CHAR	10	0		0 EMPLOYEE ID	
START_DATE	<input type="checkbox"/>	<input type="checkbox"/>	ZSTART_DATE	DATS	8	0		0 LEAVE START DATE	
END_DATE	<input type="checkbox"/>	<input type="checkbox"/>	ZEND_DATE	DATS	8	0		0 LEAVE END DATE	
LEAVE_TYPE	<input type="checkbox"/>	<input type="checkbox"/>	ZLEAVE_TYPE	CHAR	20	0		0 LEAVE TYPE	
STATUS	<input type="checkbox"/>	<input type="checkbox"/>	ZSTATUS	CHAR	10	0		0 NEW APPROVE REJECT	
REQUEST_DATE	<input type="checkbox"/>	<input type="checkbox"/>	ZREQ_DATE	DATS	8	0		0 REQUEST DATE	
APPROVED_ID	<input type="checkbox"/>	<input type="checkbox"/>	ZAPPROVED_ID	CHAR	10	0		0 MANAGER WHO APPROVES	

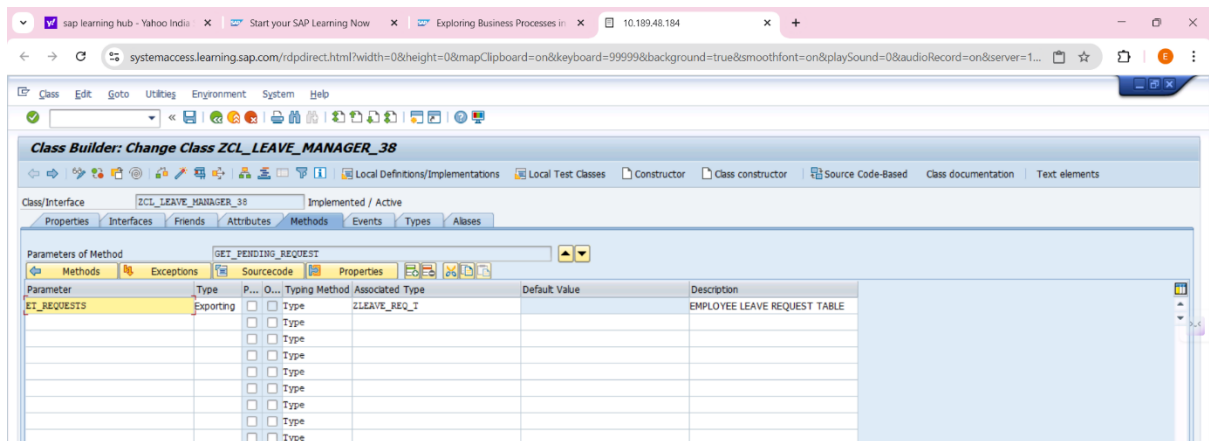
2nd Step : Create Class Entering Tcode SE24 at Command Field

Method Created:



Methods Parameters Created :





3rd Step Writing Code for Class Methods in Source code at se24 and Create Report for it at se38

1. Method : Create_Request

method CREATE_REQUEST.

IF iv_start_date > iv_end_date.

RAISE invalid_dates.

ENDIF.

DATA: lv_req_id TYPE zreq_id.

CALL FUNCTION 'NUMBER_GET_NEXT'

EXPORTING

nr_range_nr = '01'

object = 'ZLEAVE_REQ_T'

* QUANTITY = '1'

* SUBOBJECT = ''

* TOYEAR = '0000'

* IGNORE_BUFFER = ''

IMPORTING

NUMBER = lv_req_id

* QUANTITY =

* RETURNCODE =

EXCEPTIONS

* INTERVAL_NOT_FOUND = 1

* NUMBER_RANGE_NOT_INTERN = 2

* OBJECT_NOT_FOUND = 3

* QUANTITY_IS_0 = 4

* QUANTITY_IS_NOT_1 = 5

* INTERVAL_OVERFLOW = 6

* BUFFER_OVERFLOW = 7

OTHERS = 1.

IF sy-subrc <> 0.

* Implement suitable error handling here

ENDIF.

```
DATA(ls_request) = VALUE ZLEAVE_REQ_T(  
  req_id = lv_req_id  
  emp_id = iv_emp_id  
  start_date = iv_start_date  
  end_date = iv_end_date  
  leave_type = iv_type  
  status = 'PENDING').
```

```
INSERT ZLEAVE_REQ_T FROM ls_request.
```

```
IF sy-subrc <> 0.  
  RAISE save_failed.  
ENDIF.
```

```
ev_req_id = lv_req_id.  
endmethod.
```

2. Report : ZTest_Create_Request

```
*&-----*  
*& Report ZTEST_CREATE_REQUEST_38  
*&-----*  
*&  
*&-----*  
REPORT ZTEST_CREATE_REQUEST_38.
```

```
DATA : LV_REQ_ID TYPE ZREQ_ID.
```

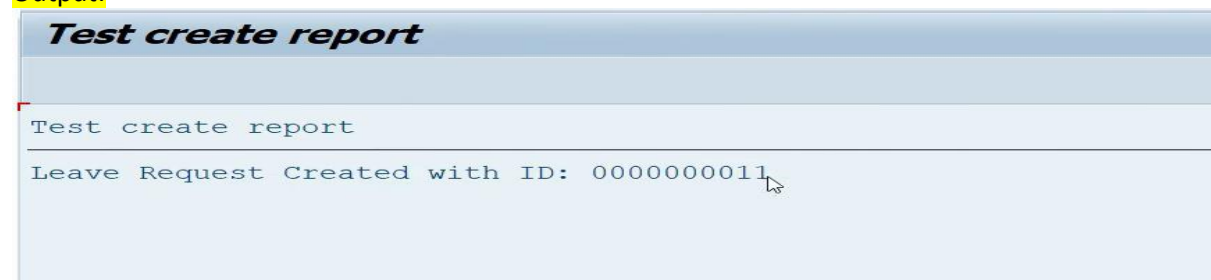
```
CALL METHOD ZCL_LEAVE_MANAGER_38=>CREATE_REQUEST  
EXPORTING
```

```
  iv_emp_id  ='E001'  
  iv_start_date = '20240610'  
  iv_end_date = '20240615'  
  iv_type    = 'ANNUAL'
```

```
IMPORTING  
  ev_req_id = lv_req_id.
```

```
WRITE: / 'Leave Request Created with ID:', lv_req_id.
```

Output:



4th Step : Writing Code for Class Methods in Source code at se24 and Create Report for it at se38

1. Method : Reject_Request

method REJECT_REQUEST.

DATA: ls_request TYPE ZLEAVE_REQ_T.

```
SELECT SINGLE * INTO ls_request FROM ZLEAVE_REQ_T
WHERE req_id = iv_req_id.
```

IF sy-subrc <> 0.

MESSAGE 'Leave request not found' TYPE 'E'.

ENDIF.

ls_request-status = 'REJECTED'.

UPDATE zleave_req_t from ls_request.

IF sy-subrc <> 0.

MESSAGE 'Failed to reject request' TYPE 'E'.

ENDIF.

endmethod.

2. Report : ZTest_Reject_Request

```
*&-----*
*& Report ZTEST_REJECT_REQUEST
*&-----*
*&
*&-----*
```

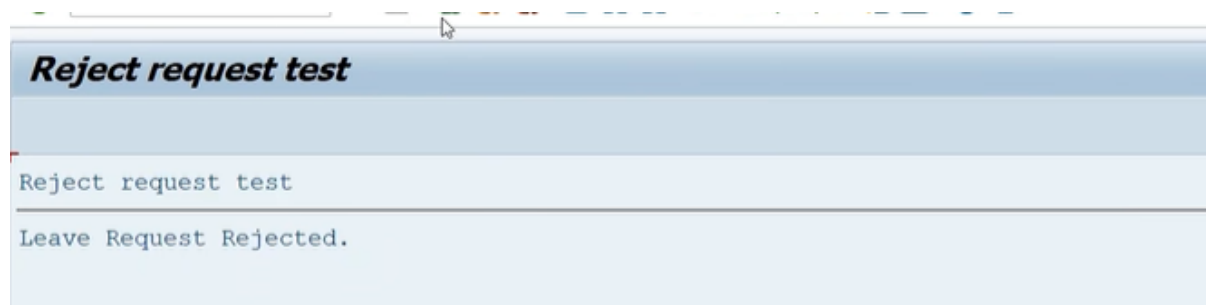
REPORT ZTEST_REJECT_REQUEST.

CALL METHOD ZCL_LEAVE_MANAGER_38=>REJECT_REQUEST
EXPORTING

iv_REQ_ID = '000000011'.

WRITE: / 'Leave Request Rejected.'.

Output:



4th Step: Writing Code for Class Methods in Source code at se24 and Create Report for it at se38

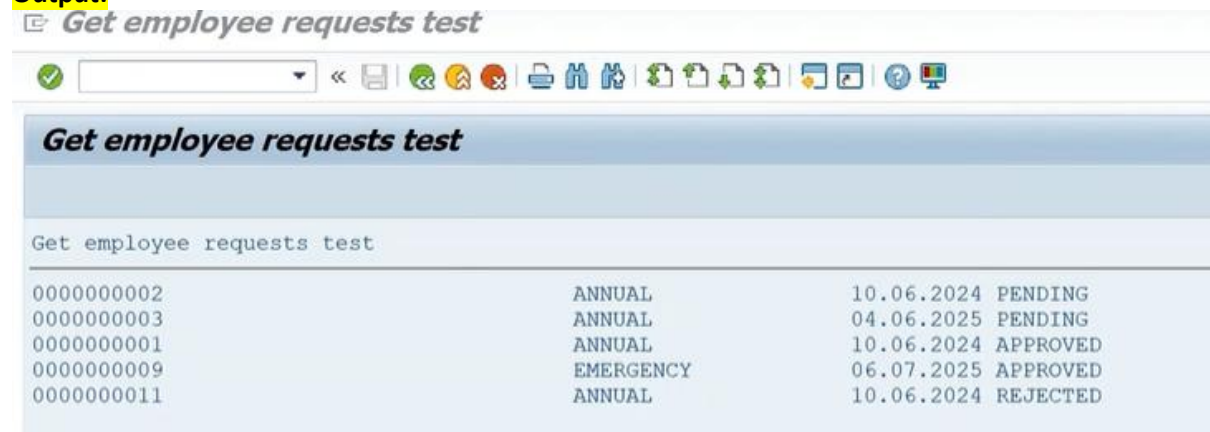
1. Method : Get_emp_request

```
method GET_EMP_REQUEST.  
* Select all leave request for this Employee  
  SELECT * FROM ZLEAVE_REQ_T  
  INTO TABLE ZET_REQUESTS  
  WHERE EMP_ID = IV_EMP_ID.  
endmethod.
```

2. Report : ZTest_Emp_Get_Request

```
*&-----*  
*& Report ZTEST_GET_EMP_REQUEST  
*&-----*  
*&  
*&-----*  
REPORT ZTEST_GET_EMP_REQUEST.  
  
DATA: IT_REQUESTS TYPE ZLEAVE_REQ_T,  
      LV_EMP_ID TYPE ZEMP_ID VALUE 'E001'.  
  
CALL METHOD ZCL_LEAVE_MANAGER_38=>GET_EMP_REQUEST  
EXPORTING  
  IV_EMP_ID = LV_EMP_ID  
IMPORTING  
  ET_REQUESTS = IT_REQUESTS.  
  
LOOP AT IT_REQUEST INTO DATA(LS_REQUEST).  
  WRITE: / LS_REQUEST-REQ_ID, LS_REQUEST-LEAVE_TYPE, LS_REQUEST-START_DATE, LS_REQUEST-  
STATUS.  
ENDLOOP.
```

Output:



The screenshot shows the SAP ABAP report output for the report 'Get employee requests test'. The output is displayed in a table with four columns: Request ID, Leave Type, Start Date, and Status. The data is as follows:

Request ID	Leave Type	Start Date	Status
0000000002	ANNUAL	10.06.2024	PENDING
0000000003	ANNUAL	04.06.2025	PENDING
0000000001	ANNUAL	10.06.2024	APPROVED
0000000009	EMERGENCY	06.07.2025	APPROVED
0000000011	ANNUAL	10.06.2024	REJECTED

5th Step : Writing Code for Class Methods in Source code at se24 and Create Report for it at se38

1. Method : Get_Pending_Request

```
method GET_PENDING_REQUEST.  
  " sSELECT ALL LEAVE REQUESTS WITH STATUS PENDING  
  SELECT * FROM ZLEAVE_REQ_T  
  INTO TABLE ET_REQUESTS  
  WHERE STATUS = 'PENDING'.  
endmethod.
```

6th Step : Create a Report For Submitting Leave Request

```
*&-----*  
*& Report ZLEAVE_CREATE_38  
*&-----*  
*&  
*&-----*  
REPORT ZLEAVE_CREATE_38.
```

```
PARAMETERS: p_empid TYPE zemp_id OBLIGATORY,  
             p_start TYPE d OBLIGATORY,  
             p_end TYPE d OBLIGATORY,  
             p_type TYPE zleave_type OBLIGATORY.
```

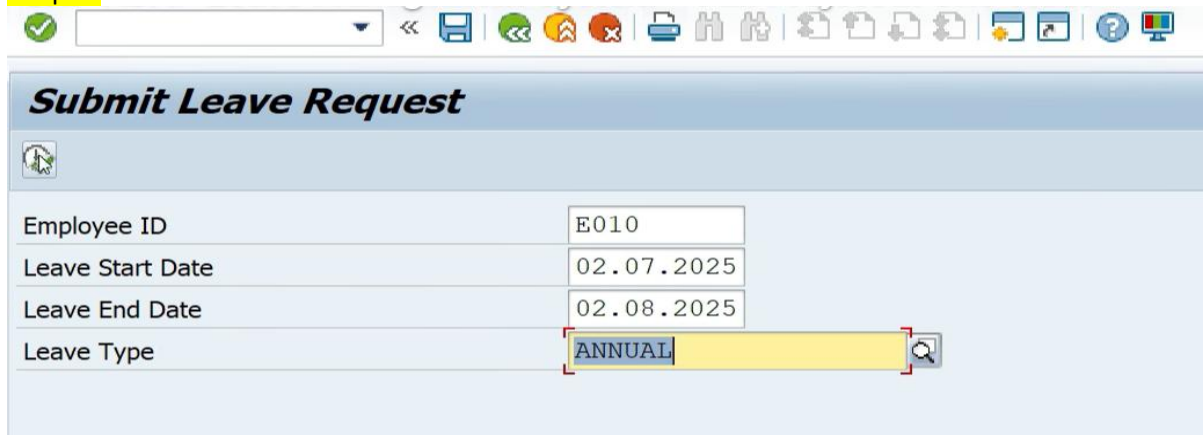
```
DATA: lv_req_id TYPE zreq_id.
```

```
START-OF-SELECTION.
```

```
CALL METHOD zcl_leave_manager_38=>create_request  
EXPORTING  
  iv_emp_id = p_empid  
  iv_start_date = p_start  
  iv_end_date = p_end  
  iv_type = p_type  
IMPORTING  
  ev_req_id = lv_req_id.
```

```
WRITE: / 'Leave request created Successfully.',  
       / 'Request id :', lv_req_id.
```

Output:



Employee ID	E010
Leave Start Date	02.07.2025
Leave End Date	02.08.2025
Leave Type	ANNUAL



Submit Leave Request

Submit Leave Request

Leave request created successfully!
Request ID: 0000000021

7th Step : Create Report For Approve Request

```
*&-----*  
*& Report ZLEAVE_APPROVE_38  
*&-----*  
*&  
*&-----*
```

REPORT ZLEAVE_APPROVE_38.

PARAMETER: p_mgr_id TYPE ZMAN_ID OBLIGATORY,
 P_REQ_ID TYPE ZREQ_ID OBLIGATORY,
 P_DEC TYPE C LENGTH 1 OBLIGATORY. " A= Approve R= Reject

START-OF-SELECTION.

CASE p_dec.
WHEN 'A'.

```
CALL METHOD zcl_leave_manager_38=>approve_request
EXPORTING
    Ev_req_id    = p_req_id
    iv_approver_id = p_mGR_id.
WRITE: / 'REQUEST APPROVED'.
```

```
WHEN 'R'.
CALL METHOD zcl_leave_manager_38=>reject_request
EXPORTING
    iv_req_id = p_req_id.
write: / 'Request Rejeceted.'.
```

```
WHEN OTHERS.
    WRITE: / 'Invalid decision entered. Use A - Approve or R = Reject.'.
ENDCASE.
```

Output:

The screenshot displays the SAP 'Approve or Reject Leave Requests' interface. At the top, there is a title bar with the text 'Approve or Reject Leave Requests'. Below this, a table contains the following data:

Manager ID	MG021
required ID	0000000021
Decision	R

Below the table, the text 'Approve or Reject Leave Requests' is displayed. At the bottom, the message 'Request Rejected.' is shown.