LIT TRAINING

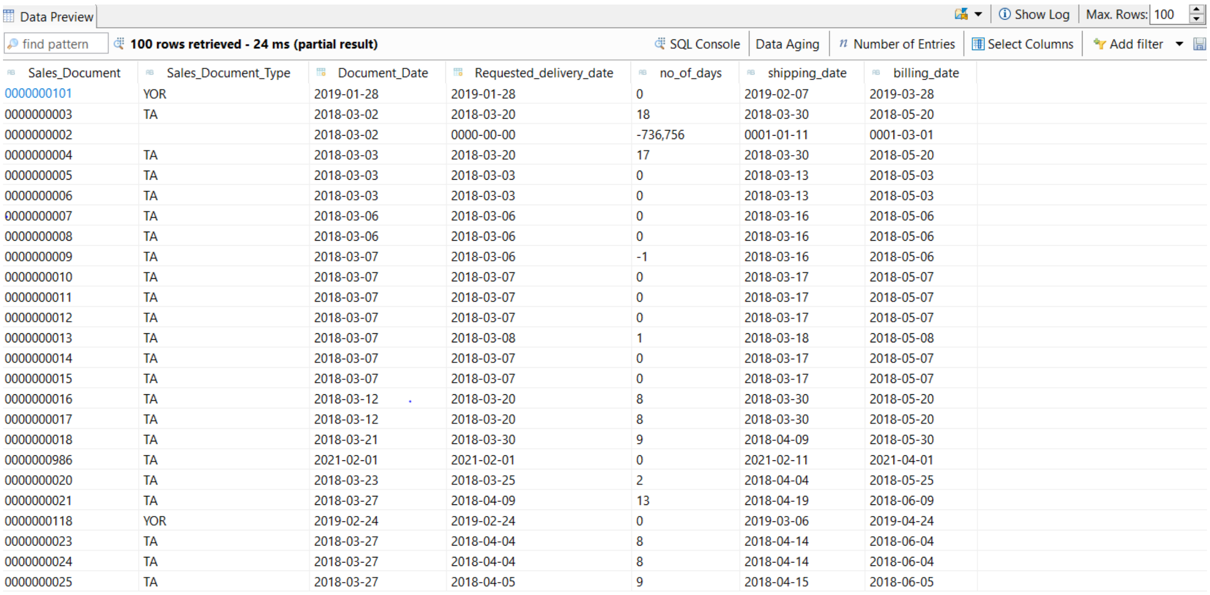
Batch Name - SAP ABAP - 25 **DAY 14 ASSIGNMENT**
EMPLOYEE ID – 46247689

CDS-Assignment 1 – Create a Simple CDS view with Date Functions in ABAP CDS Views

Tables involved – VBAK

```
@AbapCatalog.sqlViewName: 'ZYNY_SQL_VIEW'
@AbapCatalog.compiler.compareFilter: true
@AbapCatalog.preserveKey: true
@AccessControl.authorizationCheck: #NOT_REQUIRED
@EndUserText.label: 'CDS VIEW WITH DATE FUNCTIONS'
define view ZYNY_CDS_VIEW as select from vbak {
   vbeln  as Sales_Document,
   auart as  Sales_Document_Type,
   audat as Document_Date,
   vdatu as Requested_delivery_date,
   DATS_DAYS_BETWEEN(audat, vdatu) as no_of_days,
   DATS_ADD_DAYS(vdatu, 10, 'NULL') as  shipping_date,
   DATS_ADD_MONTHS(vdatu, 2, 'NULL') as billing_date
}
```

OUTPUT:



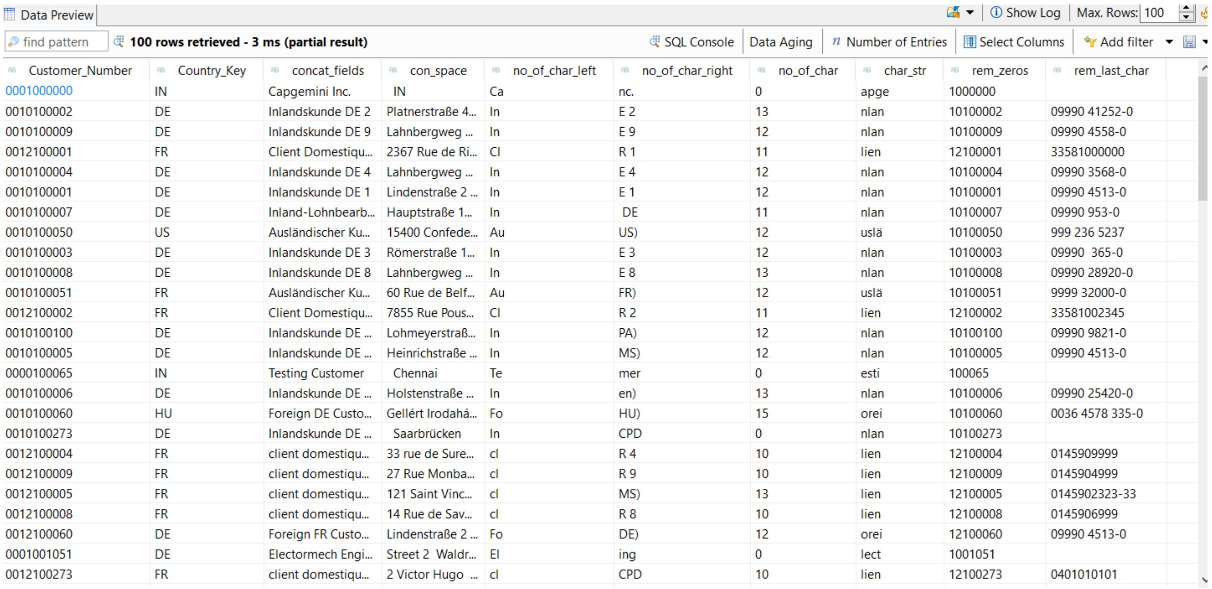
100 rows retrieved - 24 ms (partial result)

Sales_Document	Sales_Document_Type	Document_Date	Requested_delivery_date	no_of_days	shipping_date	billing_date
0000000101	YOR	2019-01-28	2019-01-28	0	2019-02-07	2019-03-28
0000000003	TA	2018-03-02	2018-03-20	18	2018-03-30	2018-05-20
0000000002		2018-03-02	0000-00-00	-736,756	0001-01-11	0001-03-01
0000000004	TA	2018-03-03	2018-03-20	17	2018-03-30	2018-05-20
0000000005	TA	2018-03-03	2018-03-03	0	2018-03-13	2018-05-03
0000000006	TA	2018-03-03	2018-03-03	0	2018-03-13	2018-05-03
0000000007	TA	2018-03-06	2018-03-06	0	2018-03-16	2018-05-06
0000000008	TA	2018-03-06	2018-03-06	0	2018-03-16	2018-05-06
0000000009	TA	2018-03-07	2018-03-06	-1	2018-03-16	2018-05-06
0000000010	TA	2018-03-07	2018-03-07	0	2018-03-17	2018-05-07
0000000011	TA	2018-03-07	2018-03-07	0	2018-03-17	2018-05-07
0000000012	TA	2018-03-07	2018-03-07	0	2018-03-17	2018-05-07
0000000013	TA	2018-03-07	2018-03-08	1	2018-03-18	2018-05-08
0000000014	TA	2018-03-07	2018-03-07	0	2018-03-17	2018-05-07
0000000015	TA	2018-03-07	2018-03-07	0	2018-03-17	2018-05-07
0000000016	TA	2018-03-12	2018-03-20	8	2018-03-30	2018-05-20
0000000017	TA	2018-03-12	2018-03-20	8	2018-03-30	2018-05-20
0000000018	TA	2018-03-21	2018-03-30	9	2018-04-09	2018-05-30
0000000986	TA	2021-02-01	2021-02-01	0	2021-02-11	2021-04-01
0000000020	TA	2018-03-23	2018-03-25	2	2018-04-04	2018-05-25
0000000021	TA	2018-03-27	2018-04-09	13	2018-04-19	2018-06-09
0000000118	YOR	2019-02-24	2019-02-24	0	2019-03-06	2019-04-24
0000000023	TA	2018-03-27	2018-04-04	8	2018-04-14	2018-06-04
0000000024	TA	2018-03-27	2018-04-04	8	2018-04-14	2018-06-04
0000000025	TA	2018-03-27	2018-04-05	9	2018-04-15	2018-06-05

CDS-Assignment 2 – Create a Simple CDS view with String Functions in ABAP CDS Views

```
@AbapCatalog.sqlViewName: 'ZYNY_STR_FN_VIEW'
@AbapCatalog.compiler.compareFilter: true
@AbapCatalog.preserveKey: true
@AccessControl.authorizationCheck: #NOT_REQUIRED
@EndUserText.label: 'CDS view with String Functions'
define view ZYNY_CDSVIEW_STRING_FN as select from kna1 {
    kunnr as Customer_Number,
    land1 as Country_Key,
    concat(kna1.name1 , kna1.name2) as concat_fields,
    concat_with_space(stras,ort01,2) as con_space ,
    left(name1,2) as no_of_char_left,
    right(kna1.name1,3) as no_of_char_right,
    length(telf1) as no_of_char,
    substring(name1,2,4) as char_str,
    ltrim(kunnr, '0') as rem_zeros,
    rtrim(telf1,'4') as rem_last_char
}
```

OUTPUT:



100 rows retrieved - 3 ms (partial result)

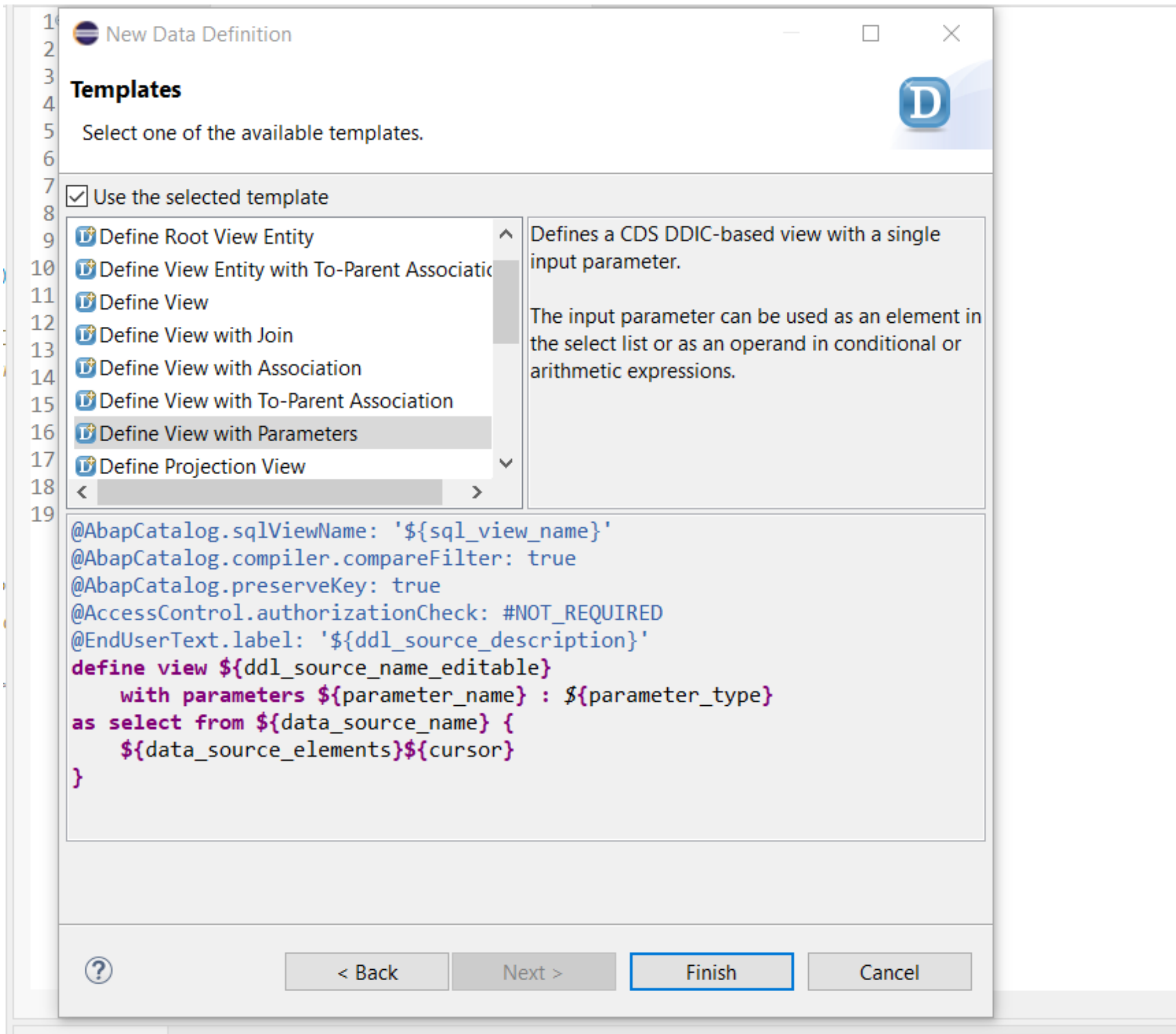
Customer_Number	Country_Key	concat_fields	con_space	no_of_char_left	no_of_char_right	no_of_char	char_str	rem_zeros	rem_last_char
0001000000	IN	Capgemini Inc.	IN	Ca	nc.	0	apge	1000000	
0010100002	DE	Inlandskunde DE 2	Platnerstraße 4...	In	E 2	13	nlan	10100002	09990 41252-0
0010100009	DE	Inlandskunde DE 9	Lahnbergweg ...	In	E 9	12	nlan	10100009	09990 4558-0
0012100001	FR	Client Domestiqu...	2367 Rue de Ri...	Cl	R 1	11	lien	12100001	33581000000
0010100004	DE	Inlandskunde DE 4	Lahnbergweg ...	In	E 4	12	nlan	10100004	09990 3568-0
0010100001	DE	Inlandskunde DE 1	Lindenstraße 2 ...	In	E 1	12	nlan	10100001	09990 4513-0
0010100007	DE	Inland-Lohnbearb...	Hauptstraße 1...	In	DE	11	nlan	10100007	09990 953-0
0010100050	US	Ausländischer Ku...	15400 Confede...	Au	US)	12	uslä	10100050	999 236 5237
0010100003	DE	Inlandskunde DE 3	Römerstraße 1...	In	E 3	12	nlan	10100003	09990 365-0
0010100008	DE	Inlandskunde DE 8	Lahnbergweg ...	In	E 8	13	nlan	10100008	09990 28920-0
0010100051	FR	Ausländischer Ku...	60 Rue de Belf...	Au	FR)	12	uslä	10100051	9999 32000-0
0012100002	FR	Client Domestiqu...	7855 Rue Pous...	Cl	R 2	11	lien	12100002	33581002345
0010100100	DE	Inlandskunde DE ...	Lohmeyerstraß...	In	PA)	12	nlan	10100100	09990 9821-0
0010100005	DE	Inlandskunde DE ...	Heinrichstraße ...	In	MS)	12	nlan	10100005	09990 4513-0
0000100065	IN	Testing Customer	Chennai	Te	mer	0	esti	100065	
0010100006	DE	Inlandskunde DE ...	Holstenstraße ...	In	en)	13	nlan	10100006	09990 25420-0
0010100060	HU	Foreign DE Custo...	Gellért Irodahá...	Fo	HU)	15	orei	10100060	0036 4578 335-0
0010100273	DE	Inlandskunde DE ...	Saarbrücken	In	CPD	0	nlan	10100273	
0012100004	FR	client domestiqu...	33 rue de Sure...	cl	R 4	10	lien	12100004	0145909999
0012100009	FR	client domestiqu...	27 Rue Monba...	cl	R 9	10	lien	12100009	0145904999
0012100005	FR	client domestiqu...	121 Saint Vinc...	cl	MS)	13	lien	12100005	0145902323-33
0012100008	FR	client domestiqu...	14 Rue de Sav...	cl	R 8	10	lien	12100008	0145906999
0012100060	DE	Foreign FR Custo...	Lindenstraße 2 ...	Fo	DE)	12	orei	12100060	09990 4513-0
0001001051	DE	Electormech Engi...	Street 2 Waldr...	El	ing	0	lect	1001051	
0012100273	FR	client domestiqu...	2 Victor Hugo ...	cl	CPD	10	lien	12100273	0401010101

CDS-Assignment 3 – Create a Simple CDS view with Parameters

Scenario –

- **Create a CDS view with GL currency (PSWSL) as parameter and get the entries form BSEG**

Tables involved – BSEG


New Data Definition
Define Root View Entity
Define View Entity with To-Parent Associatic
Define View
Define View with Join
Define View with Association
Define View with To-Parent Association
Define View with Parameters
Define Projection View
< Back
Next >
Finish
Cancel

Templates

Select one of the available templates.

☑ Use the selected template

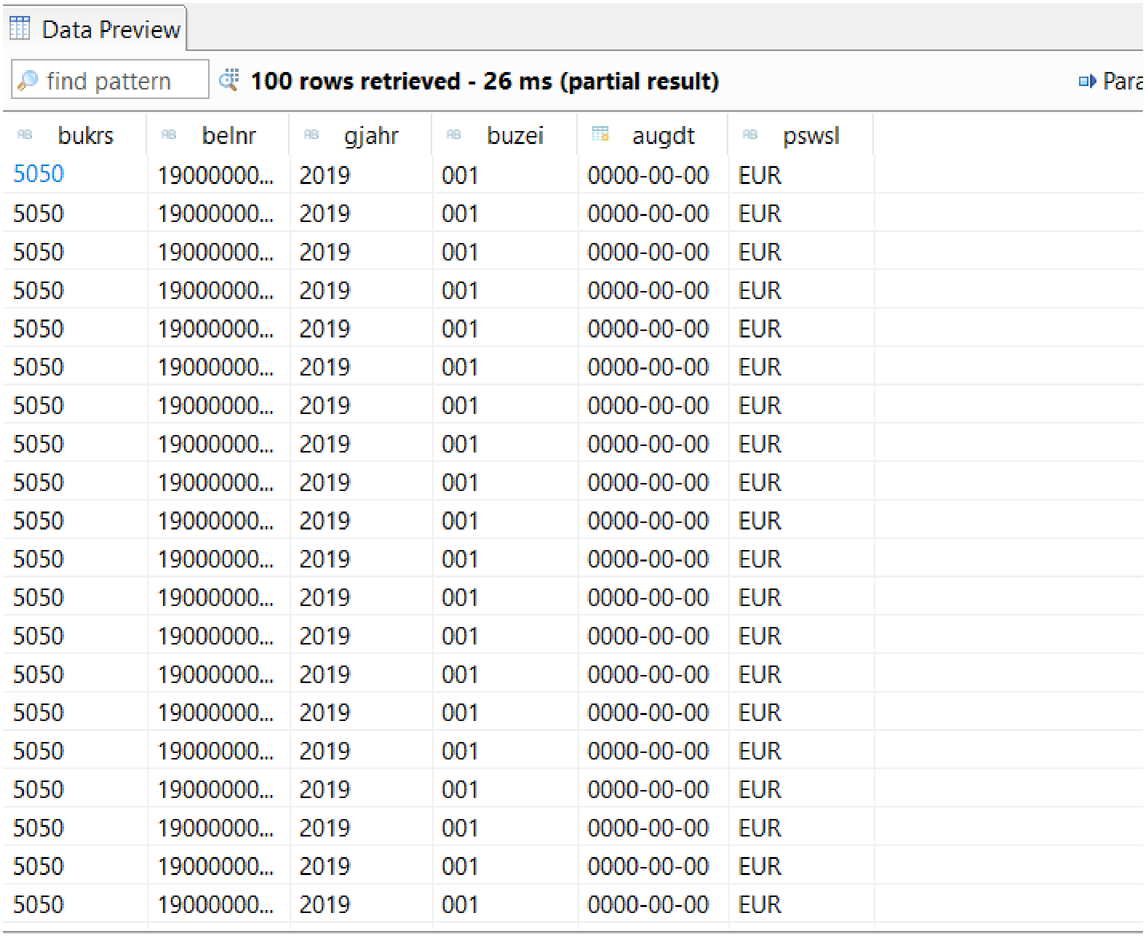
Defines a CDS DDIC-based view with a single input parameter.

The input parameter can be used as an element in the select list or as an operand in conditional or arithmetic expressions.

```
@AbapCatalog.sqlViewName: '${sql_view_name}'
@AbapCatalog.compiler.compareFilter: true
@AbapCatalog.preserveKey: true
@AccessControl.authorizationCheck: #NOT_REQUIRED
@EndUserText.label: '${ddl_source_description}'
define view ${ddl_source_name_editable}
    with parameters ${parameter_name} : ${parameter_type}
as select from ${data_source_name} {
    ${data_source_elements}${cursor}
}
```

```
@AbapCatalog.sqlViewName: 'ZYNY_SQL_VIEW1'
@AbapCatalog.compiler.compareFilter: true
@AbapCatalog.preserveKey: true
@AccessControl.authorizationCheck: #NOT_REQUIRED
@EndUserText.label: 'CDS view with Parameters'
define view ZYNY_CDSVIEW_PARA
   with parameters in_curr : abap.cuky(5)
as select from bseg{
   bukrs,
   belnr,
   gjahr,
   buzei,
   augdt,
   pswsl
}where pswsl = $parameters.in_curr
```

output:



Data Preview

find pattern 100 rows retrieved - 26 ms (partial result) Para

bukrs	belnr	gjahr	buzei	augdt	pswsl
5050	19000000...	2019	001	0000-00-00	EUR
5050	19000000...	2019	001	0000-00-00	EUR
5050	19000000...	2019	001	0000-00-00	EUR
5050	19000000...	2019	001	0000-00-00	EUR
5050	19000000...	2019	001	0000-00-00	EUR
5050	19000000...	2019	001	0000-00-00	EUR
5050	19000000...	2019	001	0000-00-00	EUR
5050	19000000...	2019	001	0000-00-00	EUR
5050	19000000...	2019	001	0000-00-00	EUR
5050	19000000...	2019	001	0000-00-00	EUR
5050	19000000...	2019	001	0000-00-00	EUR
5050	19000000...	2019	001	0000-00-00	EUR
5050	19000000...	2019	001	0000-00-00	EUR
5050	19000000...	2019	001	0000-00-00	EUR
5050	19000000...	2019	001	0000-00-00	EUR
5050	19000000...	2019	001	0000-00-00	EUR
5050	19000000...	2019	001	0000-00-00	EUR
5050	19000000...	2019	001	0000-00-00	EUR
5050	19000000...	2019	001	0000-00-00	EUR
5050	19000000...	2019	001	0000-00-00	EUR

AMDP-Assignment 1 – Procedures - create a basic procedure to fetch data with scalar variable

Scenario –

- **Print Sales Order number, Material Number, Quantity from VBAP table using scaler variable**

Tables involved – VBAP

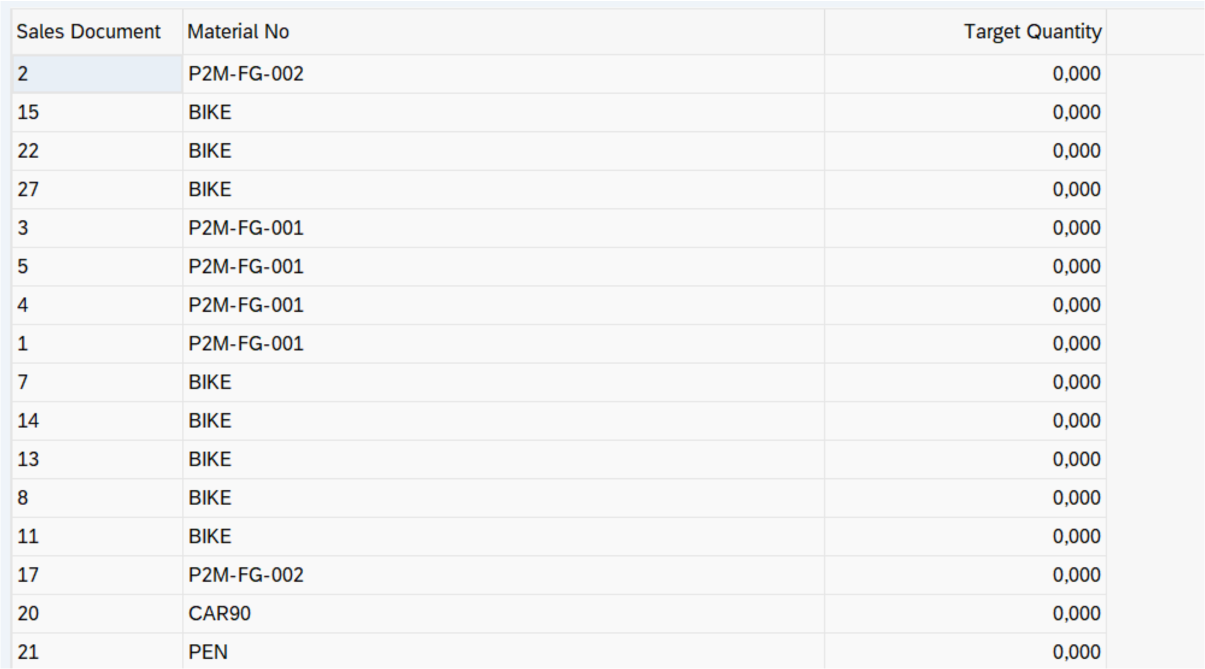
```
CLASS zYNY_amdp_scal DEFINITION
  PUBLIC
  FINAL
  CREATE PUBLIC .
  PUBLIC SECTION.
   INTERFACES :IF_AMDP_MARKER_HDB.
      METHODS: get_vbap_data
      EXPORTING VALUE(lt_VBAP) TYPE ZYNYTTSTU_VBAP.

  PROTECTED SECTION.
  PRIVATE SECTION.
ENDCLASS.



CLASS zYNY_amdp_scal IMPLEMENTATION.
```

```
METHOD get_vbap_data BY DATABASE PROCEDURE FOR HDB LANGUAGE
              SQLSCRIPT OPTIONS READ-ONLY
              USING VBAP.

 lt_vbap = select vbeln,matnr,ZMENG from vbap;
 endmethod.

ENDCLASS.
```

REPORT:

```
REPORT zYNY_amdp.

zYNY_amdp_scal=>get_vbap_data( IMPORTING lt_vbap = DATA(ex_data) ).

TRY.
CALL METHOD cl_salv_table=>factory
       IMPORTING
       r_salv_table = DATA(lr_salv)
       changing
       t_table = ex_data.

CATCH cx_salv_msg.
ENDTRY.
lr_salv->display(  ).
```

OUTPUT:



Sales Document	Material No	Target Quantity
2	P2M-FG-002	0,000
15	BIKE	0,000
22	BIKE	0,000
27	BIKE	0,000
3	P2M-FG-001	0,000
5	P2M-FG-001	0,000
4	P2M-FG-001	0,000
1	P2M-FG-001	0,000
7	BIKE	0,000
14	BIKE	0,000
13	BIKE	0,000
8	BIKE	0,000
11	BIKE	0,000
17	P2M-FG-002	0,000
20	CAR90	0,000
21	PEN	0,000

AMDP-Assignment 2 – Procedures - create a basic procedure with Table

Scenario –

- **Select VBELN, VKORG, MATNR, MENGE from VBAK and VBAP and display the data using table based on material (MATNR).**
- **MATNR will be input field**
- **Do inner join**

Tables involved – VBAK, VBAP

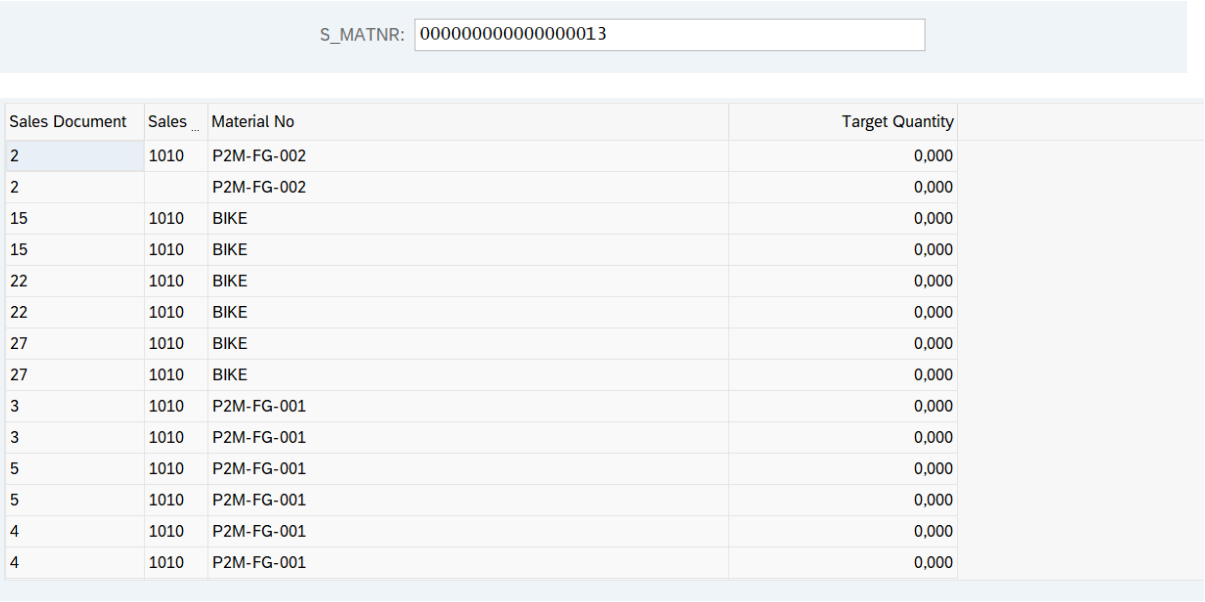
```
CLASS zYNY_amdp_join DEFINITION
  PUBLIC
  FINAL
  CREATE PUBLIC .

  PUBLIC SECTION.
  INTERFACES : IF_AMDP_MARKER_HDB.


  CLASS-METHODS:GET_DATA
                IMPORTING VALUE(IM_MATNR) TYPE VBAP-MATNR
                EXPORTING VALUE(ET_RES) TYPE  ZYNYTTSRU_IN.

  PROTECTED SECTION.
  PRIVATE SECTION.
ENDCLASS.



CLASS zYNY_amdp_join IMPLEMENTATION.
METHOD get_data BY DATABASE PROCEDURE FOR HDB LANGUAGE
                  SQLSCRIPT OPTIONS READ-ONLY
                  USING VBAP VBAK.

ET_RES = SELECT A.VBELN,
                A.VKORG,
                B.MATNR,
                 B.ZMENG
                FROM VBAK AS A
                INNER JOIN VBAP AS B
                ON A.VBELN = B.VBELN;
ENDMETHOD.
ENDCLASS.
```

REPORT:

```
REPORT zYNY_amdp_join.


PARAMETERS: S_MATNR TYPE VBAP-MATNR.
```

```
zYNY_amdp_join=>get_data(  EXPORTING IM_MATNR = S_MATNR
                        IMPORTING ET_RES = DATA(EX_RES) ).


TRY.
CALL METHOD cl_salv_table=>factory
        IMPORTING
        r_salv_table = DATA(lr_salv)
        changing
        t_table = ex_res.

CATCH cx_salv_msg.
ENDTRY.
lr_salv->display(  ).
```

OUTPUT:



S_MATNR: 000000000000000013

Sales Document	Sales ...	Material No	Target Quantity
2	1010	P2M-FG-002	0,000
2		P2M-FG-002	0,000
15	1010	BIKE	0,000
15	1010	BIKE	0,000
22	1010	BIKE	0,000
22	1010	BIKE	0,000
27	1010	BIKE	0,000
27	1010	BIKE	0,000
3	1010	P2M-FG-001	0,000
3	1010	P2M-FG-001	0,000
5	1010	P2M-FG-001	0,000
5	1010	P2M-FG-001	0,000
4	1010	P2M-FG-001	0,000
4	1010	P2M-FG-001	0,000