LIT TRAINING

Batch Name - SAP ABAP - 25 **DAY 15 ASSIGNMENT**
EMPLOYEE ID – 46247689

Assignment 1 – Create a Simple program to fetch data and display ALV using Std. SAP class-methods.

Scenario –

- Create a Custom program using ECLIPSE. Select data from table SNWD_PD.
- The output should consist three columns – Category, Max price and Average price.
- The data should consist of all categories from SNWD_PD, with maximum price for each category and average price for each category.
- There should be only 1 select statement used to achieve this using In-line Declaration, CASE, Aggregate, HAVING and GROUP BY clauses as needed.
- Selection screen can contain CATEGORY
- Output should be in ALV Grid format.

Tables involved – SNWD_PD / Columns – CATEGORY & PRICE

REPORT:

```
REPORT zyny_alv_ida.

TABLES:SNWD_PD.

DATA: it_fieldcat  TYPE slis_t_fieldcat_alv,
      wa_fieldcat  TYPE slis_fieldcat_alv.


SELECT CATEGORY,
       MAX( PRICE ) AS MAX_PRICE,
       AVG( PRICE ) AS AVG_PRICE,
       CASE
       WHEN length( category ) <  6   then 'LOW LENGTH CATEGORY'
       WHEN length( category ) >  6   then   'LOW LENGTH CATEGORY'

       END as group
       FROM SNWD_PD AS A GROUP BY CATEGORY having length( category ) > 4 INTO
TABLE @DATA(IT_OUT).

  wa_fieldcat-fieldname  = 'CATEGORY'.
  wa_fieldcat-seltext_m  = 'CATEGORY'.
  APPEND wa_fieldcat TO it_fieldcat.

  wa_fieldcat-fieldname  = 'MAX_PRICE'.
  wa_fieldcat-seltext_m  = 'MAX_PRICE'.
  APPEND wa_fieldcat TO it_fieldcat.

  wa_fieldcat-fieldname  = 'AVG_PRICE'.
  wa_fieldcat-seltext_m  = 'AVG_PRICE'.
  APPEND wa_fieldcat TO it_fieldcat.
```

```
  wa_fieldcat-fieldname  = 'GROUP'.
  wa_fieldcat-seltext_m  = 'CAT_GROUP'.
  APPEND wa_fieldcat TO it_fieldcat.


  CALL FUNCTION 'REUSE_ALV_GRID_DISPLAY'
    EXPORTING
      it_fieldcat   = it_fieldcat
    TABLES
      t_outtab      = IT_OUT
    EXCEPTIONS
      program_error = 1
      OTHERS        = 2.
```

OUTPUT:

CATEGORY	MAX_PRICE	AVG_PRICE	CAT_GROUP
Notebooks	2.299,00	1,339416666666	LOW LENGTH C
PDAs & Organiz	1.679,00	5,882222222222	LOW LENGTH C
Flat Screen Monit	1.430,00	5,410000000000	LOW LENGTH C
Laser Printers	830,00	5,563333333333	LOW LENGTH C
Ink Jet Printers	170,00	1,360000000000	LOW LENGTH C
Multifunction Prin	1.499,00	5,723333333333	LOW LENGTH C
Keyboards	29,00	2,125000000000	LOW LENGTH C
Mousepads	12,99	9,656666666666	LOW LENGTH C
Computer Syste	79,00	2,500583333333	LOW LENGTH C
Graphic Cards	139,99	9,844750000000	LOW LENGTH C
Scanners	189,00	1,440000000000	LOW LENGTH C
Speakers	45,00	3,666666666666	LOW LENGTH C
Software	89,90	5,796249999999	LOW LENGTH C
Telecommunicati	69,00	5,900000000000	LOW LENGTH C

Assignment 2 – ALV with IDA

Scenario –

- Create one CDS view by selecting fields VBELN,POSNR, VKORG, MATNR, MENGE from VBAK and VBAP table
- Perform below operations using IDA framework
    1. Create select-options based on MATNR for selection screen
    2. Fetch records from CDS view in ABAP program
    3. Pass user input (select-option entries) to filter record accordingly
    4. Hide POSNR field from display
    5. Change label of VBELN as SOrder, VKORG as SOrganization, and MENGE as TotalQuantity
    6. Disable standard function SORT for MATNR field
    7. Hide standard toolbar FILTER

8. Set title as “ALV report with IDA, CDS consumption”
9. Enable ZEBRA pattern
10. Multiple row selection should be enabled

Tables involved – VBAP, VBAK

CDS VIEW:

```
@AbapCatalog.sqlViewName: 'ZYNY_ALV_CDS_VIEW'
@AbapCatalog.compiler.compareFilter: true
@AbapCatalog.preserveKey: true
@AccessControl.authorizationCheck: #NOT_REQUIRED
@EndUserText.label: 'CDS VIEW ALV IDA'
define view Zyny_CDSVIEW_ALVIDA2 as select from vbak as A
left outer join vbap as B
    on A.vbeln = B.vbeln {
    A.vbeln as Sorder,
    B.posnr  as Sales_Document_Item,
    A.vkorg  as Sales_Organization,
    B.matnr ,
    B.zmeng  as Target_Quantity

}
```

REPORT:

```
REPORT zyny_alvida_cds.

TABLES:VBAK,VBAP.

SELECT-OPTIONS:S_MATNR FOR VBAP-MATNR.

TRY.
CL_SALV_GUI_TABLE_IDA=>create_for_cds_view(
  EXPORTING
    iv_cds_view_name      = 'Zyny_CDSVIEW_ALVIDA2'
*    io_gui_container      =
*    io_calc_field_handler =
  RECEIVING
    ro_alv_gui_table_ida  = DATA(O_REF)
).
CATCH cx_salv_db_connection.
CATCH cx_salv_db_table_not_supported.
CATCH cx_salv_ida_contract_violation.
CATCH cx_salv_function_not_supported.
ENDTRY.

data(o_range) = NEW cl_salv_range_tab_collector(  ).


o_range->add_ranges_for_name(
 EXPORTING
   iv_name = 'MATNR'
   it_ranges = S_MATNR[]

  ).

  O_RANGE->get_collected_ranges(
```

```
  IMPORTING
    et_named_ranges = DATA(IT_RANGE)
).


TRY.
O_REF->set_select_options(
  EXPORTING
    it_ranges     = IT_RANGE
*    io_condition =
).
CATCH cx_salv_ida_associate_invalid.
CATCH cx_salv_db_connection.
CATCH cx_salv_ida_condition_invalid.
CATCH cx_salv_ida_unknown_name.
ENDTRY.

o_ref->display_options( )->enable_alternating_row_pattern( ).

o_ref->display_options( )->set_title( iv_title = 'ALV report with IDA, CDS
consumption' ).

o_ref->toolbar( )->hide_all_standard_functions( ).

O_REF->fullscreen( )->display( ).
```

OUTPUT:

Selection screen:

Sales Docume	Sales Org.	Material No	Target Qty
854	1010	000000000000000010	0,000
865	1010	000000000000000010	0,000
866	1010	000000000000000010	0,000
869	1010	000000000000000010	0,000
5632187	1010	000000000000000010	0,000
872	1010	000000000000000010	0,000
882	1010	000000000000000001	0,000
883	1010	000000000000000010	0,000
884	1010	000000000000000001	0,000
885	1010	000000000000000010	0,000
886	1010	000000000000000010	0,000
892	1010	000000000000000001	0,000
896	1010	000000000000000001	0,000