

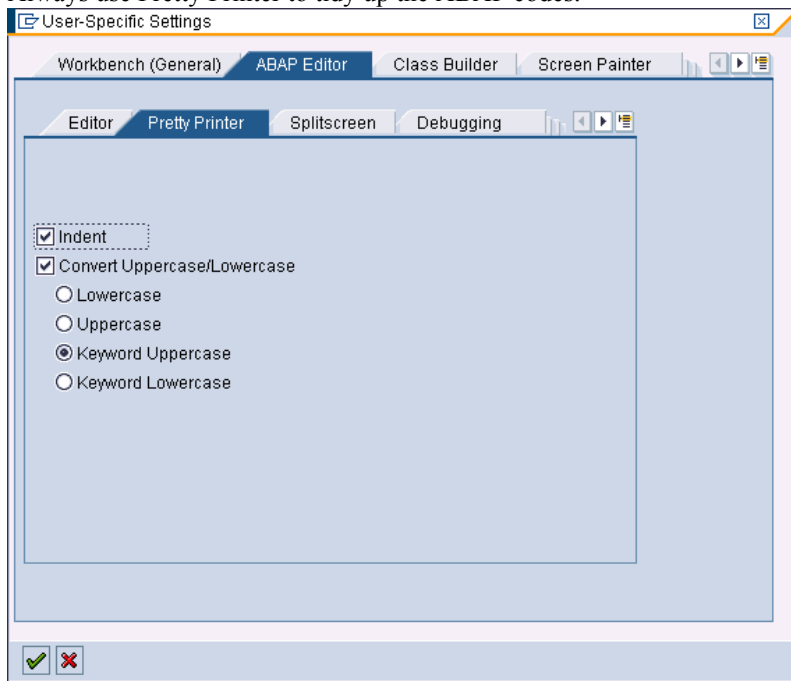
## ABAP SYNTAX – NAMING CONVENTION

### Introduction

To facilitate readability and easy maintenance across development team, developers should keep a consistent and standardized coding convention across every ABAP program. This document provides a suggested and proven convention practice across various SAP projects.

### Pretty Printer Settings

Always use Pretty Printer to tidy up the ABAP codes.



### Variable Prefix

<u>Item</u>	<u>Scope</u>	<u>Prefix</u>
Internal Table	Global	gt_
	Local	lt_
	FORM Parameter	pt_
	Function – Import	it_
	Function – Export	et_
Structure / Work Area	Global	gs_
	Local	ls_
	FORM Parameter	ps_
	Function – Import	is_
	Function – Export	es_



Single-value Variable	Global	gv_
	Local	lv_
	FORM Parameter	pv_
	Function – Import	iv_
	Function – Export	ev_
Selection Screen – Parameter	Global	pa_
Selection Screen – Select Option	Global	so_
Range	Global / Local	rg_
Type	Global / Local	ty_
Table Type	Global / Local	tt_
Event	Global / Local	e_

**Comments**

When using \* for comment, using (\*\* ) instead of (\*)

**Provide Change Information in Program Code Heading**

Copy the following block and update the fields accordingly to every program / function / class created

```
*****
* PROGRAM   : ZHRPYR0001                               *
* DESCRIPTION: This program is used to download infotype data field *
*             value as at report date from SAP to ABC system      *
*             to add a new department to the ABC system          *
*****
* Modification Log (from newest changes to oldest changes)      *
*                                                                 *
* Name      Date      Request ID Description              *
* ----- *
* Kenneth Lai  20/09/2008 GXDK901402 Display -ve as (XXXX) *
* ----- *
* Nick Tang  08/09/2008 GXDK901376 Program creation          *
*****
```

```
□ *****
* PROGRAM   : ZHRPYR0001                               *
* DESCRIPTION: This program is used to download infotype data field *
*             value as at report date from SAP to ABC system      *
*             to add a new department to the ABC system          *
*****
* Modification Log (from newest changes to oldest changes)      *
*****
* Changed/Created by Date      Request #  Description              *
* ----- *
* Kenneth Lai      08/09/2008  GXDK901376  Program creation          *
*****
```

REPORT ZHRPYR0001 NO STANDARD PAGE HEADING MESSAGE-ID zhr.



**Indentation (Good Examples)**

Always bear in mind for good indentation and self-explained documentation. This would help your team to maintain the program much much easier.

**IMPORTANT:** Always provide comments for user-exits / BTEs / BAdIs / other enhancements used in ABAP program. This would help simplified the maintenance and traceability.

```
*&-----*
*&      Form  get_pay_period
*&-----*
*      text
*-----*
*      -->P_PABRJ   text
*      -->P_PABRP   text
*-----*
FORM get_pay_period.

  CASE pnpntimed.
    WHEN '1'. "Current Period
      SELECT SINGLE begda endda
      INTO      (pnpbegda,pnpendedda)
      FROM      t549q
      WHERE     permo = '99'
              AND pabrj = pnpdispj
              AND pabrp = pnpdispp.

      MOVE pnpdispj TO gv_pabrj.
      MOVE pnpdispp TO gv_pabrp.

    WHEN '2'. "Other Period
      SELECT SINGLE begda endda
      INTO      (pnpbegda,pnpendedda)
      FROM      t549q
      WHERE     permo = '99'
              AND pabrj = pnppabrj
              AND pabrp = pnppabrp.

      MOVE pnppabrj TO gv_pabrj.
      MOVE pnppabrp TO gv_pabrp.
  ENDCASE.

ENDFORM.                    "get_pay_period
```



```
CASE 'X'.
  WHEN p_ad. "ALSL Details
    PERFORM read_data_ad      TABLES  lt_data_ad_ext.
    PERFORM validate_data_ad TABLES  lt_data_ad_ext.
                                     lt_data_ad_int.
    PERFORM transform_data_ad TABLES  lt_data_ad_int.
                                     lt_data_stg.

  WHEN p_ar. "ALSL Roster
    PERFORM read_data_ar      TABLES  lt_data_ar_ext.
    PERFORM validate_data_ar  TABLES  lt_data_ar_ext.
                                     lt_data_ar_int.
    PERFORM transform_data_ar TABLES  lt_data_ar_int.
                                     lt_data_stg.

  WHEN p_sd. "STL Details
    PERFORM read_data_sd      TABLES  lt_data_sd_ext.
    PERFORM validate_data_sd  TABLES  lt_data_sd_ext.
                                     lt_data_sd_int.
    PERFORM transform_data_sd TABLES  lt_data_sd_int.
                                     lt_data_stg.

  WHEN p_ot. "Overtime
    PERFORM read_data_ot      TABLES  lt_data_ot_ext.
    PERFORM validate_data_ot  TABLES  lt_data_ot_ext.
                                     lt_data_ot_int.
    PERFORM transform_data_ot TABLES  lt_data_ot_int.
                                     lt_data_stg.
```

```
*-----*
*  INITIALIZATION
*-----*
INITIALIZATION.

** Field mapping for for HR Interfaces
SELECT *
INTO   CORRESPONDING FIELDS OF TABLE gt_fieldmap
FROM   zhr_py_fieldmap.

** Permissibility of Wage Types per Infotype
SELECT *
INTO   CORRESPONDING FIELDS OF TABLE gt_t512z
FROM   t512z
WHERE  molga EQ c_molga_hk
       AND infty NE c_infty_0014.

** Infotype
SELECT *
INTO   CORRESPONDING FIELDS OF TABLE gt_t582a
FROM   t582a.

** Cost Centre
SELECT *
INTO   CORRESPONDING FIELDS OF TABLE gt_csks
FROM   csks.
```



```
*-----*
* GLOBAL DATA
*-----*
DATA: gt_fieldmap TYPE TABLE OF zhr_py_fieldmap,
      gt_t512z   TYPE TABLE OF t512z,
      gt_t582a   TYPE TABLE OF t582a,
      gt_csks    TYPE TABLE OF csks,
      g_filename TYPE rlgrap-filename.

*-----*
* SELECTION-SCREEN
*-----*
SELECTION-SCREEN BEGIN OF BLOCK bk1 WITH FRAME TITLE text-t06.
SELECTION-SCREEN COMMENT /1(50) text-t01.
PARAMETERS: p_ad   TYPE c RADIOBUTTON GROUP rg1.
PARAMETERS: p_ar   TYPE c RADIOBUTTON GROUP rg1.
PARAMETERS: p_sd   TYPE c RADIOBUTTON GROUP rg1.
PARAMETERS: p_ot   TYPE c RADIOBUTTON GROUP rg1.
PARAMETERS: p_gn   TYPE c RADIOBUTTON GROUP rg1.
*PARAMETERS: p_sb   TYPE c RADIOBUTTON GROUP rg1.
SELECTION-SCREEN SKIP.

PARAMETERS: p_pabrj TYPE pabrj.
PARAMETERS: p_pabrp TYPE pabrp.
SELECTION-SCREEN SKIP.

PARAMETERS: p_file TYPE rlgrap-filename.
SELECTION-SCREEN END OF BLOCK bk1.

SELECTION-SCREEN BEGIN OF BLOCK bk2 WITH FRAME TITLE text-t07.
PARAMETERS: p_immed TYPE c RADIOBUTTON GROUP rg2.
PARAMETERS: p_schel TYPE c RADIOBUTTON GROUP rg2.
PARAMETERS: p_jobdt TYPE tbtctjob-sdlstrtdt.
PARAMETERS: p_jobtm TYPE tbtctjob-sdlstrttm.
SELECTION-SCREEN END OF BLOCK bk2.
```



### Indentation (Bad Examples)

```
* Grand total
  AT LAST.
  SUM. SKIP.
  PERFORM put_sign_in_front USING list_data-betrg CHANGING v_amt.
  WRITE: / 'Grand Total:' UNDER 'Total:' RIGHT-JUSTIFIED,
         v_amt UNDER 'Total(HK$)' RIGHT-JUSTIFIED.
  ENDAT.
```

```
* If cost is assigned with C1 split, charge to the cost centre assigned.
* Else, split the cost according to IT0027. i.e. C0 split.
)   IF NOT lv_rt-c1znr IS INITIAL.
)   LOOP AT lv_payhk_results-inter-c1 INTO lv_c1 WHERE c1znr EQ lv_rt-c1znr.
)     list_data-kost1 = lv_c1-kost1.
)     COLLECT list_data.
)   ENDLOOP.
)   ELSE.
)     CLEAR lv_kprnn.
)     lv_total = list_data-betrg.
)
)     LOOP AT lv_payhk_results-inter-wppb INTO lv_wppb WHERE apznr EQ lv_rt-apznr.
)       CLEAR lv_betrg.
)       LOOP AT lv_payhk_results-inter-c0 INTO lv_c0 WHERE apznr EQ lv_wppb-apznr.
)         list_data-betrg = lv_total * lv_c0-kprnn / 100.
)         lv_betrg = lv_betrg + list_data-betrg.
)         lv_kprnn = lv_kprnn + lv_c0-kprnn.
)         list_data-kost1 = lv_c0-kstnn.
)         COLLECT list_data.
)       ENDLOOP.
)
)       IF lv_kprnn LT 100.
)         list_data-kost1 = lv_wppb-kost1.
)         list_data-betrg = lv_total - lv_betrg.
)         COLLECT list_data.
)       ENDIF.
)     ENDLOOP.
)   ENDIF.
```

```
IF NOT p_normal IS INITIAL AND p_first IS INITIAL AND p_final IS INITIAL.
  fill_range: 'E' 'EQ' 'Z003' space,
             'E' 'EQ' 'Z002' space.
ELSEIF p_normal IS INITIAL AND NOT p_first IS INITIAL AND p_final IS INITIAL.
  fill_range: 'I' 'EQ' 'Z003' space.
ELSEIF p_normal IS INITIAL AND p_first IS INITIAL AND NOT p_final IS INITIAL.
  fill_range: 'I' 'EQ' 'Z002' space.
ELSEIF NOT p_normal IS INITIAL AND NOT p_first IS INITIAL AND p_final IS INITIAL.
  fill_range: 'E' 'EQ' 'Z002' space.
ELSEIF NOT p_normal IS INITIAL AND p_first IS INITIAL AND NOT p_final IS INITIAL.
  fill_range: 'E' 'EQ' 'Z003' space.
ELSEIF p_normal IS INITIAL AND NOT p_first IS INITIAL AND NOT p_final IS INITIAL.
  fill_range: 'I' 'EQ' 'Z003' space,
             'I' 'EQ' 'Z002' space.
ELSEIF NOT p_normal IS INITIAL AND NOT p_first IS INITIAL AND p_final IS INITIAL.
  REFRESH r_ocrsn.
ENDIF.
```



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