

ABAP Part I

Lesson 04: Selection Screen

Lesson Objectives

After completing this lesson, participants will be able to understand -

Learn to create a selection screen



Defining Selection Screens



There are three ABAP statements for defining selection screens:

- PARAMETERS for single fields
- SELECT-OPTIONS for complex selections
- SELECTION-SCREEN for formatting the selection screen and defining userspecific selection screens

The selection screen that is defined using PARAMETERS or SELECT-OPTIONS statements on their own, has a standard layout in which all parameters appear line by line.

This layout is not always sufficient.

For example, when you define a group of radio buttons, you should set off these buttons against other input fields so that the user can identify them as a group.

Selection Screen: Declaring Fields with Parameters

```
<f>[TYPE <type>] [DECIMALS <n>] [LIKE <f1>] [MEMORY #Bd*]
PARAMETERS:
                   [OBLIGATORY] [DEFAULT <value >] [LOWER CASE] [VALUE CHECK]
                   TAS CHECKBOX1
                   [RADIOBUTTON GROUP < grp>]
REPORT sapbc405 sscd_checkbox_radiobutton .
PARAMETERS: pa carr LIKE sflight -carrid .
             pa name AS CHECKBOX DEFAULT 'X'.
                                                        Airline
             pa curr AS CHECKBOX DEFAULT 'X'.
             pa lim 1 RADIOBUTTON GROUP

    Output name

             pa lim 2 RADIOBUTTON GROUP
                                           lim.
             pa lim 3 RADIOBUTTON GROUP
                                           11m .

    Output local currency

CONSTANTS mark VALUE
                        'X'
                                                        Price (local currency):
                                                                            up to 500
* Check, if any checkbox has been selected
IF pe name EO mark.
                                                                        500 to 1000
IF pa curr EQ mark. ... ENDDIF.
                                                                       1000 to 1500
* Check, which
              radiobutton has been selected
CASE mark.
 WHEN pa lim 1. ... .
 WHEN pe lim 2. ... .
  WHEN pa lim 3. ... .
ENDOARE
```

PARAMETERS Statement



A parameter is a special type of variable that is defined using the parameters statement.

Parameters is a lot like the data statement, but when you run the program, the system will display the parameters as input fields on a selection screen before the program actually begins to execute.

The rules for parameters names are the same as for variables names, except for the following:

- The maximum length is 8 characters instead of 30.
- You can assign the initial value of a parameter using the parameter default.

Syntax for PARAMETERS Statement



The following code is the syntax for defining a variable using the parameters statement.

```
parameters p1[ (l) ] [type t] [decimals d]

Or

parameters p1 like v1

[default `xxx'] [obligatory] [lower case] [as check box]

[radiobutton group g]
```

Example



parameters p1(2) type c.

parameters p2 like p1.

parameters max_value type i default 100.

parameters cur_date type d default '20030827' obligatory.

parameters cur_date Like sy-datum default sy-datum

obligatory.

Example



You declare parameters in the PARAMETERS statement analogous to report internal fields:

PARAMETERS: NAME(30) OBLIGATORY DEFAULT 'Renu',

AGE(2) TYPE P.

You assign the initial value of a parameter using the parameter DEFAULT. The parameters statement can not be used for type f .

Additions to Parameter statement



Addition	Use
Туре	Same as the data
decimals	Same as the data
Like	Same as the data
default	Same as the value addition on the data statement
obligatory	The user must enter a value into the field before the program will execute
lower case	Prevents values from being translated to uppercase
as checkbox	Displays the input field as check box
Radio button group g	Displays the input field as a radio button belonging to group

Additions to Parameter statement



Using the Addition: Lower Case

- All values entered into a parameter are translated into uppercase by default. To turn off this translation, use the addition *lower case*.
- This translation applies only to character fields.

Using the Addition: Check Box

- A checkbox has two states: ticked and clear.
- You use them when you want to present the user with an on/off or true or false type of choice.
- You can use more than one checkbox on a screen.

```
E.g. parameters: cb1 as checkbox default 'X', cb2 as checkbox,
```

Additions to Parameter statement



Using the Addition: radiobutton group

- Like check boxes, a radio button also has two states: selected and not selected.
- Unlike check boxes, radio buttons never operate alone; they operate in groups.
- You can have any number of radio buttons in a group (greater than 1), but only one can be selected at a time.
- They are used when you need to present the user with a list of alternatives in which only one option can be chosen

To display a parameter as a radio button, use the addition radiobutton group g.

E.g. parameters: rb1 radiobutton group g1 default 'X',

rb2 radiobutton group g1,

rb3 radiobutton group g1.

Parameter Fields



Parameter Input Field Labels

- On the selection screen to the left of each parameter's input field is a label.
- By default, the label is the same as the name of the parameter.
- You can set these labels manually.
- For parameters defined like Data Dictionary fields, you can retrieve the label automatically from the data element.

Changing Parameter Labels

- You can change the labels for the parameters appearing on the selection screen by using the text symbols.
- Follow this path to change the text symbols.
 - (Menu bar -GOTO->TEXT ELEMENTS ->SELECTION TEXTS)

Demo



Program on using Parameters and its options

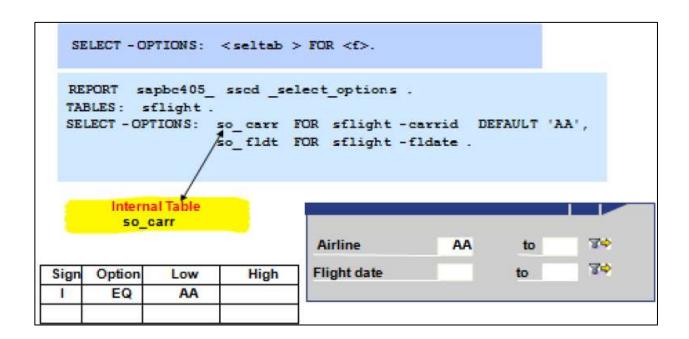
Selection Screen: Declaring Fields with Select-Options



OBLIGATORY generates a mandatory field.

NO-EXTENSION suppresses multiple single or multiple range selections.

NO INTERVALS suppresses the SELTAB-HIGH (upper interval limit) entry on the selection screen.



Demo

Program on using select-options



Summary

In this lesson, you have learnt:

How to create a selection screen



Review Question

1. Selection screen elements can be combined into cohesive units called _____.

2. The default selection screen has the number _____.

