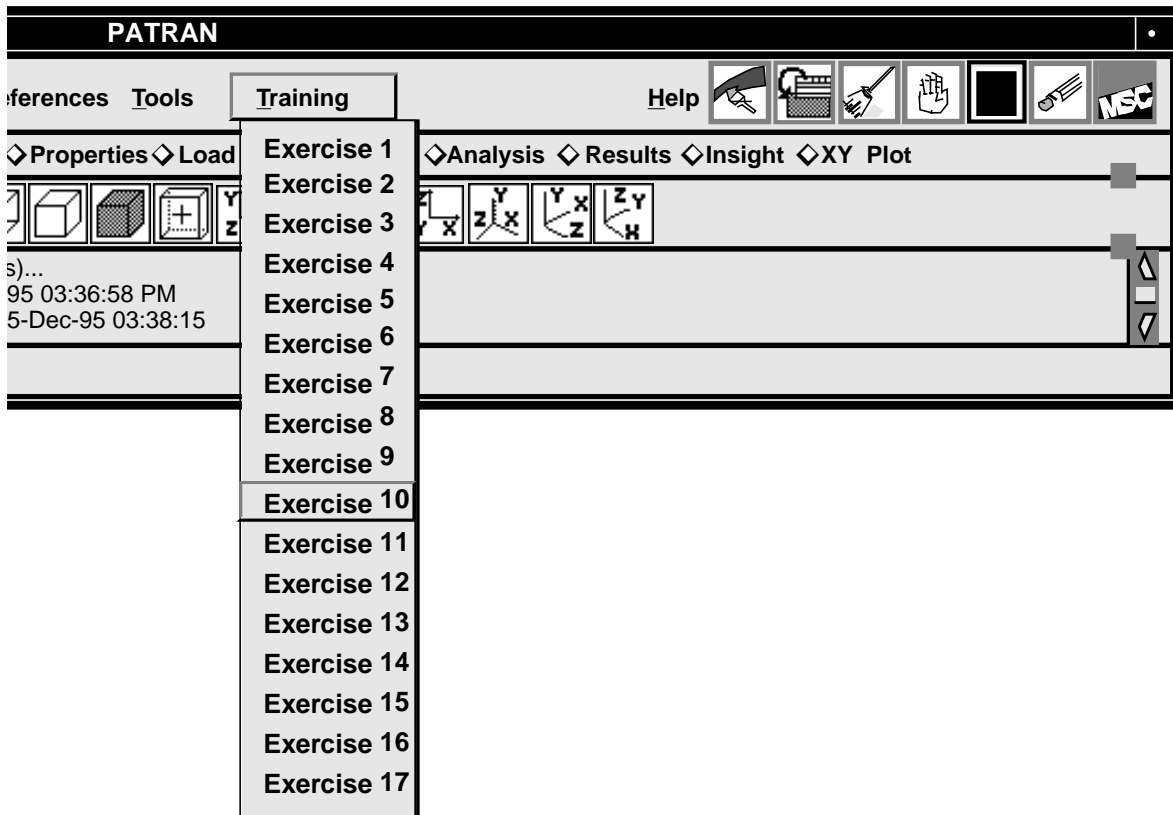# EXERCISE 10

Training Pull Down Menu

Objectives:

■ Write a function to create a pull down menu from the top menu bar in the main window.

■ The pull down menu will be used to call the rest of the exercises you will create in this training class.

Exercise Description:

This exercise, the training class, creates a pull down menu and displays it from the top menu bar. There should be a selection option for each exercise. The selection of exercise 1 through 10 should only print a verification message to the command window such as "you have selected exercise 10". The others should execute the functions created in those exercises.

Files:

All the files that used in this exercise are listed below. Each list includes the file, where it originated, and a summary of information of how it relates to the exercise.

File	Supplied/Created	Description
exercise_10.template	Supplied	This is a template file that should be edited with the correct PCL syntax.
training.pcl	Created	The file is created from the template file when all the blanks are filled and the file is renamed.

Exercise Procedure:

1. Edit the PCL function in the file *exercise_10.template*. Replace the blanks with the appropriate PCL expressions. Rename the file to *training.pcl* when you are done.

2. Compile the function.

    Start MSC/PATRAN complier by typing p3pclcomp in your xterm window.

    Enter the command:

    ```
    !!input training.pcl
    ```

    into the command line.

    All the error messages and diagnostics will be written to the xterm window.
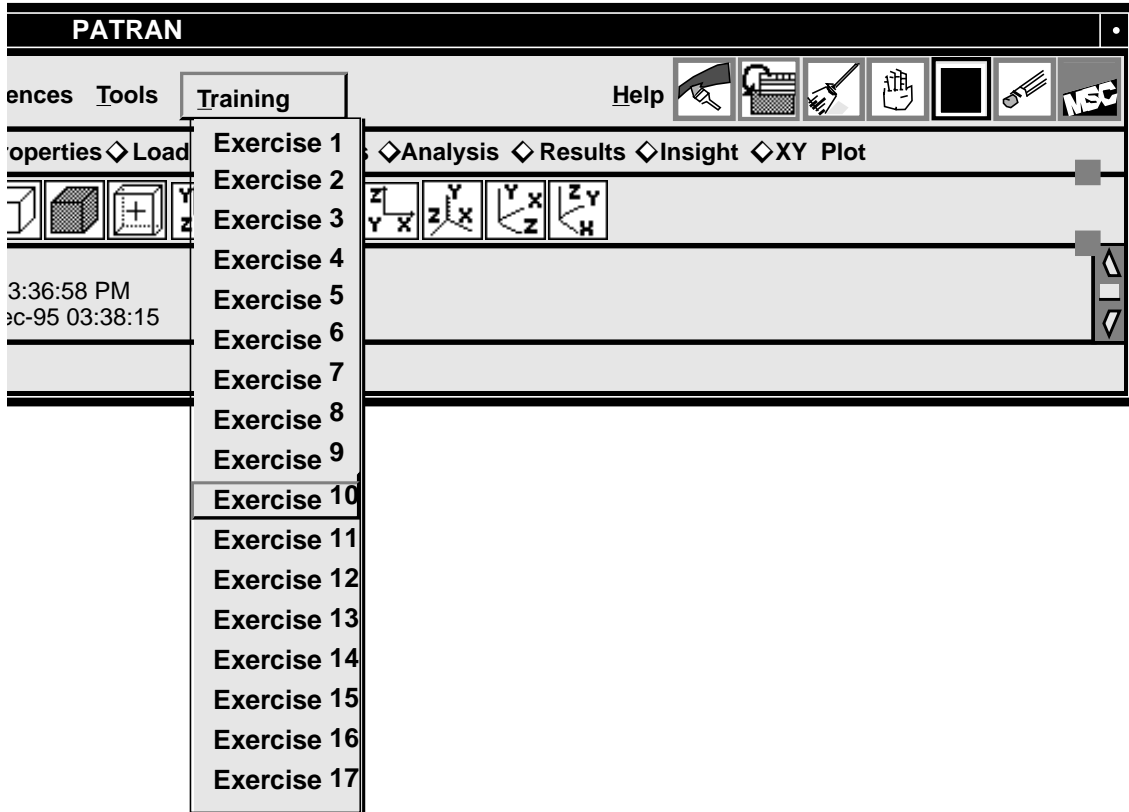
3. Start MSC/PATRAN by typing p3 in your xterm window.

4. Test the function by typing

    training.init ()

    at the command line.

    Select item 1-10 from the menu.

    Your menu should appear as shown.

Sample Solution:

```
CLASS training

    FUNCTION init()

    WIDGET       menubar, menu, item12, @
                 item13, item14, item 15, item16, item 17

    /* get the widget id of the top menu bar
     * from the uil_primary class in the main program
     * This will be used to hang the trainig menu from
     * the top menu bar, i.e. the same level as the file
     * selection menu.
     */

    menubar= uil_primary.get_menubar_id()

    menu= ui_menu_create (menubar, "training_menu", "Training")

    ui_item_create (menu, "EX_1", "Exercise 1", FALSE )
    ui_item_create (menu, "EX_2", "Exercise 2", FALSE )
    ui_item_create (menu, "EX_3", "Exercise 3", FALSE )
    ui_item_create (menu, "EX_4", "Exercise 4", FALSE )
    ui_item_create (menu, "EX_5", "Exercise 5", FALSE )
    ui_item_create (menu, "EX_6", "Exercise 6", FALSE )
    ui_item_create (menu, "EX_7", "Exercise 7", FALSE )
    ui_item_create (menu, "EX_8", "Exercise 8", FALSE )
    ui_item_create (menu, "EX_9", "Exercise 9", FALSE )
    ui_item_create (menu, "EX_10", "Exercise 10", FALSE )
    ui_item_create (menu, "EX_11", "Exercise 11", FALSE )

    item12= ui_item_create (menu, "EX_12", "Exercise 12", FALSE )
    item13= ui_item_create (menu, "EX_13", "Exercise 13", FALSE )
    item14= ui_item_create (menu, "EX_14", "Exercise 14", FALSE )
    item15= ui_item_create (menu, "EX_15", "Exercise 15", FALSE )
    item16= ui_item_create (menu, "EX_16", "Exercise 16", FALSE )
    item17= ui_item_create (menu, "EX_17", "Exercise 17", FALSE )


     /* disable the last six picks to be used in the future
      * extension to the menu.
      */

    ui_wid_set (**********1*********) Give the parameters for these functions
    ui_wid_set (**********2*********)
    ui_wid_set (**********3*********)
    ui_wid_set (**********4*********)
    ui_wid_set (**********5*********)
    ui_wid_set (**********6*********)

     END FUNCTION /* init */
    FUNCTION training_menu ( item_name )

     STRING item_name[]

     ! the value for the item is 'item_name'
```

```
SWITCH (item_name)
CASE ("EX_1")
        WRITE (" you have selected Exercise 1 ")
CASE ("EX_2")
        WRITE (" you have selected Exercise 2 ")
CASE ("EX_3")
        WRITE (" you have selected Exercise 3 ")
CASE ("EX_4")
        WRITE (" you have selected Exercise 4 ")
CASE ("EX_5")
        WRITE (" you have selected Exercise 5 ")
CASE ("EX_6")
        WRITE (" you have selected Exercise 6 ")
CASE ("EX_7")
        WRITE (" you have selected Exercise 7 ")
CASE ("EX_8")
        WRITE (" you have selected Exercise 8 ")
CASE ("EX_9")
        WRITE (" you have selected Exercise 9 ")
CASE ("EX_10")
        WRITE (" you have selected Exercise 10")
CASE ("EX_11")
        WRITE (" you have selected Exercise 11")
        UI_EXEC_FUNCTION (************7*************)
CASE ("EX_12")
        WRITE (" you have selected Exercise 12 ")
        UI_EXEC_FUNCTION (************8*************)
CASE ("EX_13")
        WRITE (" you have selected Exercise 13 ")
        UI_EXEC_FUNCTION (************9*************)
CASE ("EX_14")
        WRITE (" you have selected Exercise 14 ")
        UI_EXEC_FUNCTION (***********10*************)
CASE ("EX_15")
        WRITE (" you have selected Exercise 15 ")
        UI_EXEC_FUNCTION (***********11*************)
CASE ("EX_16")
        WRITE (" you have selected Exercise 16 ")
        UI_EXEC_FUNCTION (***********12*************)
CASE ("EX_17")
        WRITE (" you have selected Exercise 17 ")
        UI_EXEC_FUNCTION (***********13*************)
END SWITCH

 END FUNCTION /* training_menu */

END CLASS /* training */
```

```
*1* item12, "ENABLE", FALSE
*2* item13, "ENABLE", FALSE
*3* item14, "ENABLE", FALSE
*4* item15, "ENABLE", FALSE
*5* item16, "ENABLE", FALSE
*6* item17, "ENABLE", FALSE
*7* "push_me", "display"
*8* "group_elements", "display"
*9* "load_form", "display"
*10* "properties_form", "display"
*11* "clevis_ui", "display"
*12* "clevis_ui", "display"
*13* "select_file", "display"
```