# Chapter 11

## True or False

1. You cannot use nested If-Then-Else statements to perform the action selected by the user from a menu.

False

2. It is not usually necessary to validate the user’s menu selection.

False

3. In most cases, a menu-driven program should be modularized.

True

4. If a menu-driven program does not use a loop to redisplay the menu after each operation, the user will have to rerun the program to select another operation from the menu.

True

5. In a single-level menu, the user might see a submenu appear when an item from the main menu is selected.

False

## Short Answer

1. What type of structure do you use in a program to perform the action that the user has selected from a menu?

Typically a switch is used but if-then-else is also an option.

2. What ways for validating a user’s menu selection did we discuss in this chapter?

Use a default case in a switch statement, else clause in if-then-else, or pre-validate before processing the selection.

3. How can you design a menu-driven program so that the menu is redisplayed after the selected operation has been performed?

Use a loop to continue displaying the menu unless the user selected a specific value to quit.

4. What is the difference between a program that uses a single-level menu and a program that uses a multiple-level menu?

A selection on single-level menu items begings a process. A selection on multi-level menu items can display another menu with further items to select.

5. When a program has a lot of items for the user to select from, why should you avoid displaying all of the items on one menu?

It’s bad UX, can be confusing to the user.

## Algorithm Workbench #2

Design a case structure that can be used with the algorithm you designed for question 1. The case structure should call a module named openDocument if the user selected item 1, should call a module named closeDocument if the user selected item 2, and should call a module named printDocument if the user selected item 3.

// Declare a selection var  
Declare Integer menuSelection  
  
// Display the menu.  
Display "1. Open a new document"  
Display "2. Close current document"  
Display "3. Print current document"  
Display "4. Exit"  
  
// Case Structure  
Input menuSelection  
Select menuSelection  
 Case 1:  
 call openDocument();  
 break;  
 Case 2:  
 call closeDocument();  
 break;  
 Case 3:  
 call printDocument();  
 break;  
 Case 4:  
 exit;  
 Default:  
 Display "Ivalid selection";  
End Select