

Project 03 Branching

Purpose: This project was designed to reinforce the knowledge of Chapter 3. This project tries to ensure that the students know the **if-else** statement and **switch** statement.

Project Objectives: The students should learn the follows after the lab:

1. The structures of *if-else* branching
2. The structures of *switch* branching
3. Know that all switch branching can be covert to if-else branching.

Description of the Problem

Write a game program. The computer will ask the user to input a score. The program will first check if the score is valid (between 0 and 100, inclusive). If the score is not valid, print out the error message and exit the program. Otherwise, display the corresponding letter grade. .

Requirements:

1. You need first use if statement to decide whether the input is valid. If not, print out the error message and exit the program.
2. You need use if-else structure to display the letter grade.
3. Comment away the code (do NOT delete it) and rewrite it by using switch structure (please notice that in general, you may not be able to rewrite an if-else statement to switch statement. However, in this particular case, there is a trick to do so easily)
4. In this program, we don't validate user's input. We assume that user will enter a score between 0 and 100 inclusive. After we study loop (Chapter 4), we can validate the input. As long as the user's input is out of the legal range, the program will keep to prompt the user to enter a legal score

Sample Runs:

The user input is in Bold and Italic

Sample Run One:

Enter your score (0 -- 100): ***86***

Your grade is: B

Sample Run Two:

Enter your score (0 -- 100): ***91***

Your grade is: A