LAB 5,

C# – MORE CONDITIONALS FUNDAMENTALS

# Exercise 5, C# – More conditionals

## Objective

In this exercise you'll practice using the logical AND (&&) and OR (||) in an if statement.

### Step by step.

1. Create a new Console application called Lab05.

Please refer to Lab01's instructions if you need help.

1. Add a class called **Lab5** to this project
2. Transfer the code for **GetInt()** method which you wrote in Lab03 to the *Lab5* class.
3. Create a method in Lab5 called grades as:   
   **public** **void** Grades() {

}

1. Create an instance of Lab5 in main() and call grades() to get ready for the rest of this exercise.

**Lab5** lab5 **=** **new** **Lab5**();  
lab5.Grades();

1. From now, all your code will go in the Grades() method.
2. Use the GetInt() method to input an exam mark.
3. Display the mark as either "Fail", "Pass", "Merit" or "Distinction".
4. The rules for calculating a grade is as follows:

If the mark is less than 1 or greater than 100, display:   
*"Error: marks must be between 1..100"*  
  
Less than **50** **Fail**  
between **50..60** (inclusive) **Pass**  
between **61..70** (inclusive) **Merit**  
between **71..100** (inclusive) **Distinction**

## Part 2 – Evening Behaviors (Optional)

In this part you'll display different recommendation depending on if it is Summer time and/or early evening

1. Create another method called **Part2().**

**public** **void** **Part2**() {

}

1. In the Part2() method, ask the user if it is Summer time. If they answer "yes" then set a Boolean variable to true.

**Tip:** use the GetString() method to get a String.

1. You will then ask the user to indicate if it is early evening and record this fact in another Boolean variable.

**Tip**: create a bool variable that takes the value of **true** if the user says "**yes**" and will be **false** otherwise.

1. Using **if, else** statement/s. produce the following logic table in code to produce the output indicated.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Season:** Summer Time | **True** | **True** | **False** | **False** |
| **Condition:** Early evening | **True** | **False** | **True** | **False** |
| Action: Take a shower | **✓** | **✓** | **✓** | **✓** |
| Action: Eat outside | **✓** |  |  |  |
| Action: Eat inside |  | **✓** | **✓** | **✓** |
| Action: Do outdoors hobby | **✓** | **✓** |  |  |
| Action: Take a walk |  |  | **✓** |  |
| Action: Contact friends | **✓** | **✓** | **✓** | **✓** |

\*\* End