Conditionals Assignment Rubric

Scalable Data Infrastructures: MDV2330

Bare Minimum Requirements

These requirements must be satisfied before any points are awarded. Failing to meet these requirements will result in a zero (0) grade.

1. Working C# file with no major syntax errors and no runtime errors.
2. You must submit the whole project folder and not just the .cs file.

Topic	*%*	*Excellent (100%)*	*Good (75%)*	*Fair (30%)*	*Poor (0%)*
Technical					
Naming	5	The submitted files follow the correct naming convention of LastName_FirstName_Conditionals.			Files are not named properly.
Programming Fundamentals					
Prompts	15	The user is prompted for all of the required "User Inputs" with WriteLine and information is stored in a variable.	There are minor errors in prompting the user or you are missing 1 prompt.	There are major errors in prompting but it is at least attmepted or you are missing 2 prompts.	Missing 3 or more prompts. (Zero for the entire project.)
Casting & Validated	15	All user prompted variables are correctly validated and converted to the correct data type.	Validation and convertion are attempted but there are minor errors	No validation is attempted but variables are converted to the proper data types.	Code cotains no validation or casting of user input variables or there are major errors in both.
Problem #1	15	Problem #1 is solved correctly, contains a working conditional and has the required output.	Problem #1 has minor errors, but still gives the correct ouput.		Problem #1 contains major errors or the output is incorrect.
Problem #2	15	Problem #2 is solved correctly, contains a working conditional and has the required output.	Problem #2 has minor errors, but still gives the correct ouput.		Problem #2 contains major errors or the output is incorrect.
Problem #3	15	Problem #3 is solved correctly, contains a working conditional and has the required output.	Problem #3 has minor errors, but still gives the correct ouput.		Problem #3 contains major errors or the output is incorrect.
Problem #4	15	Problem #4 is solved correctly, contains a working conditional and has the required output.	Problem #4 has minor errors, but still gives the correct ouput.		Problem #4 contains major errors or the output is incorrect.
Test Values	5	Test values are present in a multi-lined comment at the end of each section, contain the required values to test and are all correct.			No test values are present

Activity: Conditionals

OVERVIEW:

For this assignment, you will be solving given problems using conditionals and relational operators.

LEVEL OF EFFORT:

This activity should take approximately 240m to complete. It will require:

- 0m Research
- 15m Prep & Delivery
- 225m Work

If you find that this activity takes you significantly less or more time than this estimate, please contact me for guidance.

READING & RESOURCES:

Conditionals Calculator - Rubric (necessary)
The rubric on the first page of this document outlines the points for the assignment.
Make sure you check off each one as done before submitting your assignment!

OBJECTIVES:

Successful completion of this activity will show that you can do the following:

- Determine when to use if, else, and else if conditional statements.
- Formulate conditional statements for dynamic decision-making.
- Employ relational operators to weigh conditions as true or false.
- Create logic to resolve a single solution from a selection of possible solutions.

INSTRUCTIONS:

1. Before you begin, you should read the rubric on page 1. This is extremely important, as it will tell you exactly how this assignment will be graded.

2. Create a project called **Lastname_Firstname_**Conditionals.

3. In this assignment you will be given (4) different problems to answer. For each one you must do the following:
    a. Label the section of code appropriately
    b. Prompt the user for each variable that is in the "User Input" Section of that problem.
    c. Validate each user prompt to insure that the user is typing in a valid response.
    d. Convert each user response to the **correct** data type, if needed.
    e. The result should be calculated using variables, not literal values when possible.
    f. Create code that will make decisions based on the value of the givens
    g. Print the result of the decision-making to the console using the format given in the "Results" section of that problem.
    h. After each section put in a multi-lined code for the Test Values.
4. Use only code and techniques learned in this class!
5. Place your name, date, and assignment at the top of your code in a multi-lined comment.
6. Make sure to comment every important line of code so that you are explaining exactly what you are trying to do.
7. Your code should give the user meaningful output. So, after your calculations are complete, your code should report back to the user the final values with a Console.WriteLine().
    a. This should contain the variables that you calculated and a concatenation text string that describes the value.
    b. e.g. Console.WriteLine ("The area of the rectangle is " +calcArea+ "!");
8. Zip your whole project folder and upload this file to FSO.

TURNING IT IN:

- Double-check that you've commented your code (You can't comment too much).
- Compress your **Lastname_Firstname_**Conditionals folder into one zipped file. It should be named **Lastname_Firstname_Conditionals.zip**
- Upload this zipped file to FSO. This is the file I will unzip and run to verify it works and review your code.
- You must zip the whole folder and not just the one individual C# file. If you only submit a .cs file you will get a **zero** for the whole project.

Don't Forget:

Make sure your project follows this list of criteria:

- The result should appear in the console and include an explanation of the result.
    - **Good example of console print out:** The volume of the sphere is 26 feet cubed.
    - **Bad example of console print out:** 26
- Final output should use string concatenation.
- Comment every line of code (describe what each line is doing in English). Do NOT just label sections of your code.