

Assignment 2 – Fundamentals of C#

DNET 4200 – Hala Kaeid

A scientific researcher is performing a series of four experiments and each experiment has at least two, but not more than six test results. The researcher needs to know the average test result for each experiment as well as the overall average of all experiments. In this lab you will create a console C# program that will allow the researcher to enter the test results and display the required averages.

Getting User Input

Plan and implement a suitable input loop structure to handle the fact that each experiment has a different number of results. There are a number of ways to go about this and I am expecting to see individual variations in the class. However you do structure input, it should be reasonably smooth for the user. For example, asking the user to enter “Y” or “N” if they want to add another test result after every single entry might be too awkward an approach.

- Ensure that all four experiments have between two and six test results.
- The actual test results are extremely precise numbers between -1.0 and +1.0. Input validation is required.

Displaying the Required Output

Do not round the average test results. It is acceptable to calculate and display the average test result for an experiment immediately after the user enters the results for that experiment rather than wait until all the experiments have been entered.

Other Notes

- In this assignment, there is no explicit requirement to use an array or any other collection data structure, i.e. You can get the job done with the basic built-in data types. If you do decide to use arrays, justify why you decided to use them in your source code comments.
- There is also no explicit requirement to write any methods other than Main(), although you may do so if you feel it makes sense.

General Requirements

- Include an opening comment with your name, the name of the program, the date, and a short description.
- Include comments to explain the following:
 - Data types choices
 - The loop structure which handles the different number of result
 - The reason for choosing that specific loop
- Follow the style guide! Use descriptive names and sensible data-types for solutions, projects, variables, constants, arrays, methods, etc. that follow our naming conventions. Use good spacing and make sure braces ({}) are located where they are supposed to be.
- Attach your entire solution folder zipped to the assignment drop-box.
- Submit only *one* zipped folder and name it as follows: Lastname_firstname_assignment 2