

GAME2341 - Assignment 01

General Points

- Use the course material located at:
 - o C# 101
 - C# Tutorial (W3Schools)
- Assignment 01 can be completed using content from the following:
 - C# 101: Videos 1 11 (also recommend Video 15)
 - C# Tutorial (W3Schools): C# Home C# For Loop
- Review the Common Program Requirements document
- Install Visual Studio Community (Professional/Enterprise are also fine)
- Create a <u>project</u> named Program01
- Requirements (remember to identify the requirements by <u>number</u>):

Requirements

Requirements to be numbered in Program 01 (see example image):

- 1. Output a header in the console:
 - "Welcome to Assignment 01 <yournamehere>"
- 2. Demonstrate string interpolation with at least five parts of an English sentence (a.k.a. parts of speech) as variables. For example:
 - string subject = "Bob";
 - string adjective = "funny";
- 3. Ask the user to enter a sentence (dayDescription) describing their day and return the following information:
 - length of the sentence
 - the number of vowels in the sentence
 - the number of numeric characters in the sentence (hint: .lsDigit())
- 4. Determine if the following exists in dayDescription:
 - contains the words excellent, fabulous, fantastic, or superb
 - starts with the word "My"





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- ends with an "!"
- 5. Ask the user to enter three numbers for a, b, and c and use those numbers to find the value x in a quadratic formula.
- 6. Demonstrate the results/differences between integer division and floating point division.
- 7. Display the min and max values of all numeric data types in C#.
- 8. Ask the user for relevant measurements and then calculate the area and volume of the following: cube, sphere, and cylinder.
- 9. Ask the user to enter information (you choose what type) and use if statements with compound conditions (&& and ||) to make decisions based on the user information.
- 10. Include an output statement explaining your experiences with Assignment 01. Make this authentic (minimum of 2-3 sentences).

```
Requirement 1
Welcome to Assignment 01 - Dr. Martinez
Requirement 2
This is the output for Requirement 2...
Requirement 3
This is the output for Requirement 3...
....
Requirement ∞
This is the output for Requirement ∞...
C:\repos\game1343\RequirementDemo\RequirementDemo\bin\Debug\netcoreapp3.1\RequirementDemo.exe (process 8352) exited with code 0.
Press any key to close this window . . .
```

TEST – TEST your application to ensure the specific program requirements are met.

- Use the list above and the Common Program Requirements as a confirmation checklist.
- Not meeting all requirements = 0 points for the assignment.