**Homework 4 - The Math Quiz**

This is the fourth homework assignment for OPIM 3220. You must take the provided math\_quiz.txt file and write a program that tests the user's math skills. You should write a .NET 6 C# Console Application. You may use either a Mac or Windows to complete this assignment.

**Requirements**

1. The program tests the user on a series of provided math questions

2. The program loads and uses the questions from the included math\_quiz.txt file. The program will need to calculate the correct answer, based on the values in the file (they are not included in the file).

3. The program should work with any file that adheres to the format of the example math\_quiz.txt file. Meaning, you should be able to change, add, or remove problems from the file, and the program should still function properly.

4. The program keeps track of how many problems the user answers correctly/incorrectly.

5. The program writes a report at the end with how many questions were answered correctly/incorrectly and their overall grade out of 100%. That's it! This homework is meant to challenge your ability to translate a vague process into functional code. There are many smaller "steps" in each part, so remember to take it slow and work on one piece of the program at a time!

**Grading**

This assignment will primarily be graded based on if the submitted program satisfies all of the above requirements. Some smaller items that will be worth a few points each are:

(40%) Execution - Your file should do 1-5 above flawlessly

(20%) User friendliness - Make sure the user can figure out how to take the test! Your program should have clear instructions and be "easy" to use

(20%) Code quality - Avoid having highly repetitive code or inefficient processes.

(20%) Stability - Try to make it so the program does not crash unexpectedly, even if the user does something wrong, such as enter a bad value, input a bad file, etc.