

# Quiz 01 — Operators and Writing to Console

## C# Programming

This is a timed test. You have thirty minutes to complete the test. When you finish the test, email me your `Program.cs` file as a text document, and let me know that you have finished. I will ask you to run your program so that I can see that it compiles and runs.

The test contains two parts. In part 1, you will print MSSA in big letters using the alphabetical character that is the same as the letter. See the sample output below. The challenge is determining the size of each individual letter, that is, the number of “rows” and “columns” you need for each letter. In part 2, you will calculate the value of phi ( $\phi$ ) given by the following formula. The only thing that you need that you do not already have is `Math.Sqrt()`, which returns the square root of a number.

If you examine this equation, you see that it consists of three parts: a left hand side which is simply a variable, and a right hand side which consists of a numerator and a denominator of a fraction. I would do this by putting the numerator into a variable, then performing the division. The denominator is easy, it's just the number 2. Then assign the result of that to another variable and write the value of that second variable to console, and you are done!

$$\phi = \frac{1 + \sqrt{5}}{2} \quad (1)$$

Here is the expected output using your name instead of mine.

### PART 1

```
MM      MM  SSSSSSSS  SSSSSSSS      AAAAAA
MMM     MMM  SSSSSSSS  SSSSSSSS      AA  AA
MMMM    MMMM SS      SS      AA      AA
MM MM   MM MM SS      SS      AA      AA
MM  MMMM MM  SSSSSSSS  SSSSSSSS  AAAAAAAAAA
MM   MM   MM  SSSSSSSS  SSSSSSSS  AAAAAAAAAA
MM      MM      SS      SS  AA      AA
MM      MM      SS      SS  AA      AA
MM      MM  SSSSSSSS  SSSSSSSS  AA      AA
MM      MM  SSSSSSSS  SSSSSSSS  AA      AA
```

### PART 2

```
phi is 1.61803398874989
Press any key to continue . . .
```