

Quiz #1, on Thursday, January 17, will consist of questions taken or inspired from the Part I of this homework and from the lab.

## Part I — Questions

1. List five softwares, and three hardware components of a computer.
2. List four programming languages.
3. What is a GUI?
4. What is a CLI?
5. What, if any, is the difference between a compiler and an assembler?
6. A machine code (or machine language program) is made of circuits, binary numbers, classes, or compilers?
7. Give a specificity of C# compared to other programming languages.
8. What happen when the source code you're giving to the compiler has syntax error?
9. Is the C# compiler case-sensitive?
10. Suppose I replace every white space in your source code with two white spaces. Will you program still compile? Why, or why not?
11. What is the limitation, if any, to the number of methods you can have per classes? Why is the method called Main special?
12. What is the difference between a "rule" and a "convention" in programming language?
13. What is a namespace?
14. In a C# program, comments start with `\\` (double backslash) or with `//` (double (forward) slash)? Do they have to end with a `;` (semicolon)?
15. Which of the followings, if any, are keywords?  
`Welcome1`      `public`      `91.3`      `apples`      `int`      `"I'm a string"`
16. Which of the following are programmer-defined names (or identifiers)?  
`BankAccount`      `class`      `91.3`      `apples`      `int`      `itemPerCapita`      `statement`
17. Why are variables called "variables"?
18. What is string interpolation?
19. What is the difference, if any, between `3`, and `"3"`?

20. What is the difference, if any, between the `WriteLine` and `Write` methods?

21. Write a statement that would display the following at the screen:

```
Hi_Mom!↵
How_are_you_doing?
```

22. Assume we have a variable whose name is `myVariable`, whose type is `string`, and whose value is `"My message"`. What would be displayed at the screen by the following statement?

```
Console.WriteLine($"Here is my variable: {myVariable}");
```

23. Which of the following are correct identifier names?

`$myHome3` `class` `my%variable` `91.3` `ANewHope` `9_train` `_ThisIsAVariable` `statement`  
Is the name `myVariable` the same as `myvariable`? If not, why?

24. Which one(s) of the following, if any, is a correct assignment (assuming that `variable`, `x` and `apples` have been declared as `int` variables)?

```
5 => variable;
x=5;
apples= 23
x <= 23;
variable =1,890;
```

## Part II – Problems

### Problem 1

There are 4 errors in the following code that will prevent it from compiling. Can you spot them all?

```
// My first attempt.
using System

class Wel
{
    static void Main();
    {
        Console.WriteLine("Welcome \n to the lab!");
    }
}
```

