**CS121 SI – Week 1 – Pt. II**

Concept & Syntax Questions:

1. Give an example of declaring a variable and another of initializing a variable. Is it okay to use a variable that's initialized but not declared? Declared but not initialized?

1. What is the output of the following code and why? Assume that there is an integer called *a* that is equal to *4*.

*if(3 == a)*

*if(4 >= a)*

*{*

*cout << "Your number is either 3 or 4";*

*}*

*else*

*{*

*cout << "Your number is not 3";*

*}*

1. What is an [escape sequence](https://en.wikipedia.org/wiki/Escape_sequence)? Give three examples of them and what each of your examples do.

1. What is the output of the following code (in Visual Studio) and why is that?

*cout << sizeof(float) << endl;*

*cout << sizeof(short) << endl;*

*cout << sizeof(int) << endl;*

*cout << sizeof(double) << endl;*

1. Give an example of using camel case and using underscores for variable identifiers. Is one better than the other? Explain.
2. If we assign an integer *num* to *4.85*, what is the value of *num?* Explain. Also, if we wanted to print the (true) result of *3 divided by 4* with *cout*, how could we do so?
3. What is the modulus operator, and in what are two situations where using the modulus operator is considerably useful?