**CS121 SI – Week 1 – Part Two**

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

if(a ==3)

if(a <= 4)

{

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

}

else

{

cout << "Your number is not 3";

}

1. What is an 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?* Also, if we were to print *3/4* with *cout*, what would the output be? Explain your reasonings.
3. What is the modulus operator, and in what situations is using it considerably useful?