

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?
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(3 == a)
    if(4 >= a)
    {
        cout << "Your number is either 3 or 4";
    }
else
{
    cout << "Your number is not 3";
}
```

3. What is an [escape sequence](#)? Give three examples of them and what each of your examples do.
4. 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;
```

5. Give an example of using camel case and using underscores for variable identifiers. Is one better than the other? Explain.
6. 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?
7. What is the modulus operator, and in what are two situations where using the modulus operator is considerably useful?