**CS 1302 – Test 1 Expectations**

**Information about the test**

1. This test covers Ch. 1
2. There is plenty of time to take the test. The class period is 75 minutes, so a typical test will take me 20-25 minutes (and that is reading every problem carefully, and writing everything done).
3. Even though there is plenty of time, you can begin the test roughly 10 minutes before class time (9:20am for section A, 3:20pm for section B).
4. When you enter the room, leave all books, phones, *etc* at the front of the room.

**Expectations**

**Ch. 1**

1. Given a description of a problem (and possibly a class diagram), write a class and be able to use it (informal test code) using best practices.
2. Given a class, write a utility class (or more likely, methods that would reside in that class) that manipulates one or more arrays of objects from that class using best practices.
3. Know how use *String.format* to format integers, doubles, and strings.
4. Know how to use the methods below. I will provide the two bulleted items below on the test itself in case you need help remembering the correct method:

* Character Class – Know these static methods: *isDigit(ch), isLetter(ch), isLetterOrDigit(ch), isLowerCase(ch), isUpperCase(ch), toLowerCase(ch), toUpperCase(ch)*
* String Class – Know how to use these methods: *length, charAt(pos), equals(string), substring(i,j), substring(i), indexOf(ch/str), indexOf(ch/str,i), lastIndexOf(ch/str), lastIndexOf(ch/str,i)*

**Test Taking Tips**

1. When writing code:
2. Braces and semicolons are not necessary, but it is fine to use them
3. Code must be indented properly.
4. You may abbreviate: System.out.println with SOP, String with Str, double with dbl, and any other obvious ones. Similarly, you may abbreviate the name of a class. For example, if I ask you to write a *BasketballPlayer* class, you abbreviate that *BP*.
5. When asked to write a *snippet* of code this mean to simply write code to answer the question. In other words, no class, method, nor *main* is needed (nor desired as it is harder to grade). I will frequently give you the name of variables (in italics) as you will see in the two examples below – you should use those variables, and they don’t need to be declared.

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| Problem: | Suppose you have two doubles, *x* and *y,* write a snippet of code to print their sum with 2 decimals. |
| Answer: | String s = String.format(“%.2f”, (x+y))  SOP(s) |

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| Problem: | Suppose you have an array of doubles, *vals*, write a snippet of code to display the number of values that are larger than 10.0. |
| Answer: | int count=0  for(double x : vals)  if(x>10.0)  count++  SOP(count) |
| Note: | If you need additional variables, *e.g count* above, then you must declare them. |