**Lab 11 Pre-Lab**

**The following exercises must be completed before you come to lab. Your instructor will check your pre-lab exercises at the beginning of the lab period. Completion of the pre-lab is worth 10 points of the total 50 points for the lab.**

This week you will be writing an application that uses the random number generator to run a simulation.

A Random object has two constructors, one is the default constructor and another one accepts an integer which seeds the generator.

Why would you want to seed the generator?

* Setting the seed will force the random number generator to generate a repeated or predictable set of values.

Write the statement to create a Random object. Use the default constructor.

* Random rn = new Random();

Write the statement to use the generator to return a number from 1 through 6. Assign the value returned to a variable named spots.

* int spots = rn.nextInt(6) + 1;
* but its already written. The above statement with generate the values from 1-6 . because if I don’t add 1 then it will generate the values from 0 to 5.

The statements above will be used in the program you are writing in lab. Just for practice, write the statement to generate numbers with the following ranges:

1 – 2 (What you would use to simulate flipping a coin.)

* Random rn= new Random();
* int coin = rn.nextInt(2) + 1;

if it was just 2 inside then it will generate 0 and 1 but I would use the above statement because the coin has two faces. If its 1 I would say its heads and if its 2 then I would say it is tails. Everytime you execute it will have a different value depending on the probability.

0 – 100

* Random rn= new Random();
* int range = rn.nextInt(101);

he statement would generate the values from 0 to 100 . Everytime you execute it will have a different value.

1 – 12

* Random rn = new Random
* int firstTwelve = rn.nextInt(12) + 1;

the statement would generate the number from 1 – 12 as mentioned without 1 it will generate values from 0-11 but we add 1 to get the values we want. Everytime you execute it will have a different value.