

CSCI212 Spring 2018

Lab-3

Goals

- To create an array and populate it with random numbers.
- To use loop statements
- To write static methods

Problem 1

```
import java.util.Random;

public class Arrays1 {
    public static void main(String[] args){
        Random r = new Random();
        int[] a = new int[10];
        for(int i = 0; i < 10; i++){
            a[i] = r.nextInt(100);
        }

        for(int x : a)
            System.out.print(x + " ");
        System.out.println();
    }
}
```

Problem 2 This next program shows how to use arrays in static methods.

```
import java.util.Random;

public class ArrayFunction {
    public static void main(String[] args){
        int[] arr;
        arr = createArray( );
        double average = findAverage(arr);
        for(int x: arr)
            System.out.print(x + " ");
        System.out.println();
        System.out.println("Average of array entries: "
                           + average);
    }

    public static int[] createArray(){
        Random r = new Random();
        int[] temp = new int[10];
        for(int i= 0; i < 10; i++)
            temp[i] = r.nextInt(100);
        return temp;
    }

    public static double findAverage(int[] array){
        int sum = 0;
        for(int x : array)
            sum += x;
        return (double)(sum)/array.length;
    }
}
```