Credit Name: CSE 2120 Data Structures 1

Assignment Name: Chapter 9 EvensAndOdds

How has your program changed from planning to coding to now? Please explain?

Initiialize and create an int array numbers with 25 elements - used to store 25 random numbers

```
//Initialize and create an int array with 25 elements (25 random numbers).
int[] numbers = new int[25];
```

Starting at index 0, for the length of the numbers array, incrementing by 1, (for every element in the array)

set correspondent elemen at the index i to a random number from 1 - 99 using math.random.

```
//starting at index 0, for every element in numbers array,
for (int i = 0; i < numbers.length; i ++) {

    //Set correspondent element i to a random number 1 - 99.
    numbers[i] = (int)((100)* Math.random());
}
```

Display "ODD:" header to user.

```
//section header
System.out.println("ODD:");
```

Starting at index 0, for the length of the numbers array, incrementing by 1, (for every element in the array)

```
//starting at index 0, for every element in numbers array,
for (int i = 0; i < numbers.length; i ++) {
```

Using an if statement, check if the element at index i is NOT divisible by 2 (produces a remainder if divided by 2)

if the element is not divisible by 2, output element to the screen followed by a blank space (to allow for a space in the between the elements)

```
//if element i is not divisible by 2 (produces a remainder),
if ((numbers[i] % 2) != 0) {

    //Output number to user
    System.out.print(numbers[i] + " ");
}
```

Display "EVEN:" header to user.

```
//section header
System.out.println(" ");
System.out.println("EVEN:");
```

Starting at index 0, for the length of the numbers array, incrementing by 1, (for every element in the array)

```
//starting at index 0, for every element in numbers array,
for (int i = 0; i < numbers.length; i ++) {
```

Using an if statement, check if the element at index i is divisible by 2 (does not produce a remainder if divided by 2)

```
//if element i is divisible by 2 (no remainders)
if ((numbers[i] % 2) == 0) {
```

if the element is divisible by 2, output element to the screen followed by a blank space (to allow for a space in the between the elements)

```
//Output number to user
System.out.print(numbers[i] + " ");
```