

EvensAndOdds Mastery ReflectionLog

First rendition of EvensAndOdds.java:

```
package Mastery;

import java.util.ArrayList;
import java.util.Scanner;

public class EvensAndOdds2 {

    public static void main(String[] args) {

        //Preparing for user input
        Scanner userInput = new Scanner(System.in);

        //Declare arrays

        ArrayList oddNum = new ArrayList();
        ArrayList evenNum = new ArrayList();

        for (int i = 0; i < 25; i++) {
            int num = (int)((99 - 0 + 1) * Math.random() + 1);

            if (num % 2 == 0) {
                evenNum.add(num);
            } else {
                oddNum.add(num);
            }
        }

        System.out.println("ODD:\n" + oddNum);

        System.out.print("EVEN:\n" + evenNum);

    }
}
```

I started by declaring two ArrayLists, one to store the even numbers, and the other to store the odds. Then within a for-loop I would generate a random int from 0-99 and append it to its respective ArrayList by using an if-else statement that would check if the number was odd or even. Then I would print both ArrayLists with their respective titles.

The final rendition of EvensAndOdds.java:

```
package Mastery;

import java.util.ArrayList;

public class EvensAndOdds {
    public static void main(String[] args) {

        //Creates oddNum and evenNum ArrayList objects
        ArrayList<Integer> oddNum = new ArrayList<Integer>();
        ArrayList<Integer> evenNum = new ArrayList<Integer>();

        //Loops 25 times
        for (int i = 0; i < 25; i++) {
            //Generates number between 99 and 0
            int num = (int)((99 - 0 + 1) * Math.random() + 1);
            //Checks if number is odd or even
            if (num % 2 == 0) {
                //Adds even number to evenNum object
                evenNum.add(num);
            } else {
                //Adds odd number to oddNum object
                oddNum.add(num);
            }
        }

        //Prints oddNum object
        System.out.println("ODD:\n" + oddNum);
        //Prints evenNum object
        System.out.print("EVEN:\n" + evenNum);
    }
}
```

In the second, and final copy of EvensAndOdds I removed an unnecessary scanner class, and added comments to improve readability. Alongside this I declared the variable type for the ArrayList.

Example of the final product:

```
ODD:
[57, 1, 91, 3, 37, 81, 49, 67, 71, 19]
EVEN:
[80, 30, 94, 84, 72, 48, 30, 46, 36, 34, 52, 16, 58, 98, 62]
```