ReflectionLog EvensAndOdds

```
public static void main(String[] args) {

        //Generate 25 random numbers between 0 and 99
        int[] numbers = generateRandomNumbers(25, 0, 99);

        //Print all odd numbers
        System.out.println("ODD Numbers:");

        printNumbers(numbers, false);  //false flag indicates printing odd numbers

        //Print a new line before displaying even numbers
        System.out.println("\nEVEN Numbers:");

        //Print all even numbers
        printNumbers(numbers, true);   //true flag indicates printing even numbers
    }
```

This code generates an array of 25 random numbers between 0 and 99, and then prints all the odd and even numbers from the array. It calls the generateRandomNumbers() method to generate the random numbers and the printNumbers() method to display the numbers. The printNumbers() method is called twice: first with a false flag to print odd numbers, and then with a true flag to print even numbers. The output is organized with labels for "ODD Numbers" and "EVEN Numbers."

```
//Method to generate an array of random numbers
public static int[] generateRandomNumbers(int size, int min, int max) {

    // Create an array to hold the random numbers
    int[] numbers = new int[size];

    //Calculate the range of random numbers
    int range = max - min + 1;

    // Loop to populate the array with random numbers in the given range
    for (int i = 0; i < size; i++) {

        //Assign a random number between min and max to each element
        numbers[i] = (int) (Math.random() * range) + min;
    }

    //Return the populated array
    return numbers;
```

This method generates an array of random numbers within a specified range. It creates an array of the given size and populates it with random numbers between the specified min and max values using Math.random(). After filling the array, it returns the array of random numbers. This enables the generation of random values for further processing or display.

```java
//Method to print either even or odd numbers based on the flag
public static void printNumbers(int[] numbers, boolean printEven) {

    //Loop through each number in the array
    for (int num : numbers) {

        //If printEven is true, print only even numbers
        if (printEven && num % 2 == 0) {

            System.out.print(num + " ");

        //If printEven is false, print only odd numbers
        } else if (!printEven && num % 2 != 0) {

            System.out.print(num + " ");
```

This method prints either even or odd numbers from the provided array based on the printEven flag. If printEven is true, it prints only the even numbers by checking if a number is divisible by 2 (num % 2 == 0). If printEven is false, it prints only the odd numbers by checking if a number is not divisible by 2 (num % 2 != 0). The numbers are printed on the same line, separated by spaces.