```
public static void main(String[] args) {
                  //array
         int[] num = new int[25];
         //creating a range for number 0-100
         final int min = 0;
         final int max = 100;
         final int range = max - min + 1;
         //generating the 25 integers randomly using range and assigning them in the array made to store them
                            for( int i = 0; i < 25; i++) {
                                     num[i] = (int)(Math.random() * range);
                            }
                  // TO DISplay all odd numbers.
                            System.out.println("");
                            System.out.println("ODD: ");
                            for( int i = 0; i < 25; i++) {
                            if ((num[i] % 2) != 0) {
                                     System.out.println(num[i]);
         }
                            //Blank output to create space between the even and odd numbers
                            System.out.println("");
                            //displaying all even numbers
                            System.out.println("EVEN:");
                            //checking from every number in the array to see which ones are even
                            for( int i = 0; i < 25; i++) {
                                     if ((num[i] % 2) == 0) {
                                              System.out.print(num[i]);
                                               System.out.print(" ");
         }
}
         }
```

I first started by defining my array for 25 random digits then I followed up by a range of 0 and 100 so that the system only chooses numbers between that range. Next I generate 25 random integers which use the range sequence to assign each value in the array using simple math logic where it calculates the remainder when num[i] is divided by 2.

If the remainder <u>if number is not equal to zero</u> (! = 0), the number is odd then for even If the remainder when dividing by 2 is 0, the number is **even**.

I have the computer choose which numbers are odd and which numbers are even.