

```

1  /**
2   * Class LeapYear determines if years entered by users are leap years.
3   * Them determines if five random years within a range are leap years.
4   *
5   * @author (Yaw Abaaho)
6   * @version (3/23/19)
7   */
8  import java.util.*;
9  public class LeapYear
10 {
11     public static void main(String[] args)
12     {
13         int input;
14         final int MAX=438;
15         final int MIN=1582;
16
17         Random rand = new Random();
18         Scanner scan = new Scanner(System.in);
19         for(int count=0;count<4;count++)
20         {
21             System.out.println("Enter a year ");
22             input = scan.nextInt();
23             if(isLeap(input)==true)
24             {
25                 System.out.println("This year is a leap year");
26             }
27             else
28             {
29                 System.out.println("This year is not a leap year");
30             }
31             System.out.println();
32         }
33
34         for(int count=0;count<5;count++)
35         {
36             input = rand.nextInt(MAX)+MIN;
37             if(isLeap(input)==true)
38             {
39                 System.out.println(input + ": This year is a leap year");
40                 System.out.println();
41             }
42             else
43             {
44                 System.out.println(input +": This year is not a leap year");
45                 System.out.println();
46             }
47         }
48     }
49
50     public static boolean isLeap (int year)
51     {
52         boolean answer = true;
53         if((year%400 == 0)||((year%4 == 0)&&(year%100 != 0)))
54         {answer =true;}
55         else
56         {answer =false;}
57         return answer;
58     }
59 }

```