src\BirthdayParadox.java

```java
import java.util.Arrays;

public class BirthdayParadox {
    public static void main(String[] args) {
        //Submit your code and a screenshot of the results for both n=23 and n=60
        int n = 23;
        System.out.println(Arrays.toString(birthday(n)));
        int[] birthday = birthday(n);
        int[] hist = hist(birthday);

        System.out.println(isTwoBday(hist));
        System.out.println(percentTwoBday(isTwoBday(hist), birthday, n));
    }
    public static int[] birthday(int n) {
        final int NUM_DAYS = 365;
        int[] randomBday = new int[n];
        for (int i = 0; i < randomBday.length; i++) {
            randomBday[i] = (int) (Math.random() * NUM_DAYS);
        }
        return randomBday;
    }
    public static int[] hist( int[] birthday){
        final int NUM_DAYS = 365;
        int [] bins = new int[NUM_DAYS];
        for (int i = 0; i < birthday.length; i++) {
            int index = birthday[i];
            bins[index]++;
        }
        return bins;
}
    public static boolean isTwoBday(int [] hist) {

        for (int i = 0; i < hist.length; i++) {
            if (hist[i] >1){
                return true;
            }
        }
        return false;
    }
    public static double percentTwoBday(boolean isTwoBday, int[] birthday, int n) {
        //fix
        double range = 100000;
        double trueCount = 0;
        double percent = 0;

        for (int i = 0; i < range; i++) {
            if(isTwoBday(birthday)){
                trueCount++;
                percent = (trueCount / range);
            }
        }
        System.out.println(trueCount);

```

```
54          return percent;
55      }
56  }
57
```