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/**
 * Statistiques sur des nombres aléatoires.
 *
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 * Classe:    3GIG
 */
public class RandomStatistics
{
    private long min, max;

    private long count;
    private long lowest;
    private long highest;
    private long sum;

    public RandomStatistics(long pMin, long pMax)
    {
        min = Math.min(pMin, pMax);
        max = Math.max(pMin, pMax);

        count = 0;
        sum = 0;
        lowest = max;
        highest = min;
    }

    public long calcNextRandom()
    {
        long n = (long) (Math.random() * (max-min+1))+min;

        // Calcul des statistiques
        count++;
        sum = sum + n;
        if (n < lowest)
        {
            lowest = n;
        }

        if (n > highest)
        {
            highest = n;
        }

        return n;
    }

    public void printSeries(long pN)
    {
        long i;

        i = 1;
        while(i <= pN)
        {
            System.out.print(calcNextRandom()+" ");
            if (i % 20 == 0)
            {
                System.out.println();
            }
            i++;
        }
        System.out.println();
    }

    public void printStatistics()
    {
        System.out.println("Range:  ["+min+".."+max+"]");
        if (count == 0)
        {
            System.out.println("No numbers generated yet!");
        }
        else
        {
            System.out.println("Count:  "+count);
            System.out.println("Lowest: "+lowest);
            System.out.println("Highest: "+highest);
            System.out.println("Sum:    "+sum);
            System.out.println("Average: "+(double)sum/count);
        }
    }
}
```