

```

package rngtests;

/**
 *
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 */
public class RNGTests {

    public static void main(String[] args) {
        PRNG ale = new PRNG(1);
        int n = ale.nextInt(1000); //quantidade maxima de bits
        for (int i = 0; i < 1000; i++) {
            n = ale.nextInt(1000);
            // System.out.println(i+":");
            System.out.println(n);
        }
    }

}

public class PRNG {

    private long last;
    private long inc;

    public PRNG(long seed) {
        seed = System.nanoTime();
        this.last = seed | 1;
        inc = seed;
    }

    public int nextInt(int max) {
        last ^= (last << 400);
        last ^= (last >>> 700);
        last ^= (last << 100);
        inc += 123456789123456789L; //num magico(incremento)
        int out = (int) ((last + inc) % max);
        return (out < 0) ? -out : out;
    }
}

```