

Ass1: 6

IT-24027

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Package iet.customizing;

public class MyRandom {

private static long seed = System.currentTimeMillis();

private static final long A = 1103515245L;

private static final long C = 12345L;

private static final long M = (long) Math.pow(2, 31);

private static long next() {

seed = (A * seed + C) % M;

return seed;

}

public static int randomInt() {

return (int) next();

}

public static int randomInt(int max) {

return (int) (next() / max);

}

public static int randomInt(int min, int max) {

return min + (int) (next() / (max - min + 1));

}

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public static long randomLong() {  
    return next(); }  
}  
  
public static float randomFloat() {  
    return next() / (float) M; }  
}  
  
public static double randomDouble() {  
    return next() / (double) M; }  
}  
  
public static String randomMixed() {  
    int num = randomInt(10);  
    char eh = (char) ('A' + randomInt(26));  
    return num + " " + eh;  
}
```

Package. ict.customizing;

public class TestRNG {

 public static void main (String [] args) {

 System.out.println (MyRandom.randomInt ());

 System.out.println (MyRandom.randomInt (10));

 System.out.println (MyRandom.randomInt (10,50));

 System.out.println (MyRandom.randomUUID ());

 System.out.println (MyRandom.randomFloat ());

 System.out.println (MyRandom.randomDouble ());

 System.out.println (MyRandom.randomMined ());

 }

}