

Introduction

The **java.util.Random** class instance is used to generate a stream of pseudorandom numbers. Following are the important points about Random:

- The class uses a 48-bit seed, which is modified using a linear congruential formula.
- The algorithms implemented by class Random use a protected utility method that on each invocation can supply up to 32 pseudorandomly generated bits.

Class declaration

Following is the declaration for **java.util.Random** class:

```
public class Random
  extends Object
  implements Serializable
```

Class constructors

S.N. Constructor & Description

1

Random

This creates a new random number generator.

2

Random long seed

This creates a new random number generator using a single long seed.

Class methods

S.N. Method & Description

1

protected int nextintbits

This method generates the next pseudorandom number.

2

boolean nextBoolean

This method returns the next pseudorandom, uniformly distributed boolean value from this random number generator's sequence.

3

void nextBytes byte[] bytes

This method generates random bytes and places them into a user-supplied byte array.

4

[double nextDouble](#)

This method returns the next pseudorandom, uniformly distributed double value between 0.0 and 1.0 from this random number generator's sequence.

5

[float nextFloat](#)

This method returns the next pseudorandom, uniformly distributed float value between 0.0 and 1.0 from this random number generator's sequence.

6

[double nextGaussian](#)

This method returns the next pseudorandom, Gaussian " *normally* " distributed double value with mean 0.0 and standard deviation 1.0 from this random number generator's sequence.

7

[int nextInt](#)

This method returns the next pseudorandom, uniformly distributed int value from this random number generator's sequence.

8

[int nextInt\(int n\)](#)

This method returns a pseudorandom, uniformly distributed int value between 0 *inclusive* and the specified value *exclusive*, drawn from this random number generator's sequence.

9

[long nextLong](#)

This method returns the next pseudorandom, uniformly distributed long value from this random number generator's sequence.

10

[void setSeed\(long seed\)](#)

This method sets the seed of this random number generator using a single long seed.

Methods inherited

This class inherits methods from the following classes:

↳ [java.util.Object](#)

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