Random class

Java.util.Random class

It is used to generate pseudo-random numbers (predictable random sequence).

Random sequences need an initial value, seed.

If two sequences start at the same seed, the resulting sequence is the same.

Different seeds => different sequences.

Math.random() method is pseudorandom (the user cannot specify the seed)

Random Class

It is used as a random number generator object which uses a seed.

If two instances of Random are created with the same seed, and the same sequence of method calls is made for each, they will generate and return identical sequences of numbers. (ORACLE)

https://docs.oracle.com/en/java/javase/17/docs/api/java.base/java/util/Random.html

Random Class

Constructors:

Random(): Creates a new random number generator. Java uses the system time in miliseconds as seed.

Random(long seed): Creates a new random number generator using a single long seed.

Methods:

int nextInt(): Returns the next pseudorandom, uniformly distributed int value from this random number generator's sequence.

int nextInt(int bound): Returns a pseudorandom, uniformly distributed int value between 0 (inclusive) and the specified value (exclusive), drawn from this random number generator's sequence.

double nextDouble(): Returns the next pseudorandom, uniformly distributed double value between 0.0 and 1.0 from this random number generator's sequence.