JAVA ASSIGNMENT
ON
RANDOM CLASS

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Assignment

Java Random class:

Java Random class is used to generate a stream of pseudorandom numbers. The algorithms implemented by Random class use a protected utility method than can supply up to 32 pseudo randomly generated bits on each invocation.

Methods:

1.doubles() : Returns an unlimited stream of pseudorandom double values.

2.ints(): Returns an unlimited stream of pseudorandom int values.

3.longs(): Returns an unlimited stream of pseudorandom long values.

4.next(): Generates next Pseudorandom number.

5.nextInt(): Returns a uniformly distributed pseudorandom int value generated from this random number generator's sequence

6.nextFloat():Returns the next uniformly distributed pseudorandom Float value between 0.0 and 1.0 from this random number generator's sequence

7.nextDouble(): Returns the next pseudorandom Double value between 0.0 and 1.0 from the random number generator's sequence.

8.nextByte():Generates random bytes and puts them into a specified byte array.

9.nextBoolean():Returns the next uniformly distributed pseudorandom boolean value from the random number generator's sequence

10.nextLong():Returns the next uniformly distributed pseudorandom long value from the random number generator's sequence.

Example Program for Random Class:

```
import java.util.Random;
public class Randoms {
        public static void main(String[] args) {
            Random random = new Random();
            int randomInt = random.nextInt();
            System.out.println("Random Integer: " + randomInt);
            int randomInRange = random.nextInt(10);
            System.out.println("Random Integer in Range: " + randomInRange);
            double randomDouble = random.nextDouble();
            System.out.println("Random Double: " + randomDouble);
             boolean randomBoolean = random.nextBoolean();
            System.out.println("Random Boolean: " + randomBoolean);
            double randomFloat = random.nextFloat();
            System.out.println("Random Float: " + randomFloat);
            byte[] randomBytes = new byte[5];
            random.nextBytes(randomBytes);
            System.out.print("Random Bytes: ");
            for (byte b : randomBytes) {
                System.out.print(b + " ");
            }
        }
    }
```

Output:

Random Integer: 1165366697

Random Integer in Range: 0

Random Double: 0.4290127241088836

Random Boolean: true

Random Float: 0.6655928492546082

Random Bytes: -49 98 82 -81 -126