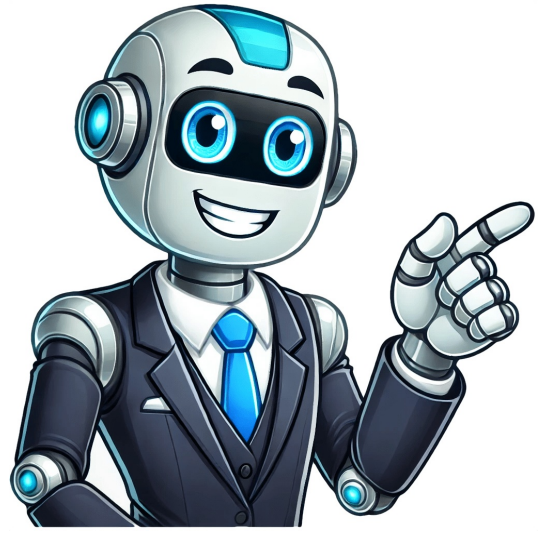


I'm not a robot



How to use math random in java

⚡ **Math Methods Definition and Usage** The random() method returns a random number between 0 and 1. This method never returns exactly 1, but it can return 0. Syntax public static double random() Technical Details Returns: A double value representing a randomly selected number between 0 and 1, excluding 1 itself. Java version: Any ⚡ **Math Methods** The random() method returns a random value that is greater than or equal to 0.0 and less than 1.0. Example class Main { public static void main(String[] args) { // generates a random number between 0 to 1 System.out.println(Math.random()); } } // Output: 0.30349668659965544 The syntax of the random() method is: Math.random() Note: The random() method is a static method. Hence, we can call the method directly using the class name Math. random() Parameters The Math.random() method does not take any parameters. random() Return Values returns a pseudorandom value between 0.0 and 1.0 Note: The values returned are not truly random. Instead values are generated by a definite computational process that satisfies some condition of randomness. Hence called pseudo random values. Example 1: Java Math.random() class Main { public static void main(String[] args) { // Math.random() // first random value System.out.println(Math.random()); // 0.45950063688194265 // second random value System.out.println(Math.random()); // 0.3388581014886102 // third random value System.out.println(Math.random()); // 0.8002849308960158 } } In the above example, we can see that the random() method returns three different values. Example 2: Generate Random Number Between 10 and 20 class Main { public static void main(String[] args) { int upperBound = 20; int lowerBound = 10; // upperBound 20 will also be included int range = (upperBound - lowerBound) + 1; System.out.println("Random Numbers between 10 and 20:"); for (int i = 0; i < 10; i++) { // generate random number // (int) convert double value to int // Math.random() generate value between 0.0 and 1.0 int random = (int)(Math.random() * range) + lowerBound; System.out.print(random + " "); } } } Output Random Numbers between 10 and 20: 15, 13, 11, 17, 20, 11, 17, 20, 14, 14, Example 3: Access Random Array Elements class Main { public static void main(String[] args) { // create an array int[] array = {34, 12, 44, 9, 67, 77, 98, 111}; int lowerBound = 0; int upperBound = array.length; // array.length will excluded int range = upperBound - lowerBound; System.out.println("Random Array Elements:"); // access 5 random array elements for (int i = 0; i