

Task 1 : Number Guess

Input :

A screenshot of an IDE window titled 'GuessNumberGame.java'. The code is for a Java program that plays a number guessing game. It imports java.util.Random and java.util.Scanner. The main method creates a Scanner for input, a Random object, and initializes min (1), max (100), maxAttempts (5), score (0), and a playAgain variable. A do-while loop generates a random number and allows the user to guess up to 5 times. It provides feedback on whether the guess is correct, too high, or too low. The code is as follows:

```
1  import java.util.Random;
2  import java.util.Scanner;
3
4  public class GuessNumberGame {
5
6      public static void main(String[] args) {
7
8          Scanner scanner = new Scanner(System.in);
9
10         Random random = new Random();
11         int min = 1;
12         int max = 100;
13         int maxAttempts = 5;
14         int score = 0;
15         char playAgain;
16
17         do {
18             int randomNumber = random.nextInt(max - min + 1) + min;
19             int attempts = 0;
20             boolean guessedCorrect = false;
21
22             System.out.println(x: "\nGuess the number between 1 and 100");
23             System.out.println("You have " + maxAttempts + " attempts.");
24
25             while (attempts < maxAttempts) {
26                 System.out.print(s: "Enter your guess: ");
27                 int userGuess = scanner.nextInt();
28                 attempts++;
29
30                 if (userGuess == randomNumber) {
31                     System.out.println(x: "Correct! You guessed the number.");
32                     score++;
33                     guessedCorrect = true;
34                     break;
35                 }
36                 else if (userGuess > randomNumber) {
37                     System.out.println(x: "Too high!");
38                 }
39                 else {
40                     System.out.println(x: "Too low!");
41                 }
42             }
43         } while (playAgain != 'n');
```

```

42     }
43
44     if (!guessedCorrect) {
45         System.out.println(x: "You have used all attempts.");
46         System.out.println("The correct number was: " + randomNumber);
47     }
48
49     System.out.print(s: "Do you want to play again? (y/n): ");
50     playAgain = scanner.next().charAt(index: 0);
51
52     } while (playAgain == 'y' || playAgain == 'Y');
53
54     System.out.println(x: "\nGame Over!");
55     System.out.println("Your score: " + score);
56
57     scanner.close();
58 }
59
60

```

Output :

```

OUTPUT  DEBUG CONSOLE  TERMINAL  PORTS

PS C:\Users\Asus\Desktop\java programming language> java GuessNumberGame.java

Guess the number between 1 and 100
You have 5 attempts.
Enter your guess: 4
Too low!
Enter your guess: 18
Too high!
Enter your guess: 44
Too high!
Enter your guess: 67
Too high!
Enter your guess: 98
Too high!
You have used all attempts.
The correct number was: 7
Do you want to play again? (y/n): n

Game Over!
Your score: 0
PS C:\Users\Asus\Desktop\java programming language>

```