

## Task 1 : Number Guess

Input :



The screenshot shows a Java code editor with a dark theme. The title bar says "Welcome" and "J GuessNumberGame.java". The code is a Java program for a number guessing game. It imports Random and Scanner, defines a class GuessNumberGame with a main method, and uses a do-while loop to repeatedly ask for user input until they guess correctly or run out of attempts.

```
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("Guess the number between 1 and 100");
23            System.out.println("You have " + maxAttempts + " attempts.");
24
25            while (attempts < maxAttempts) {
26                System.out.print("Enter your guess: ");
27                int userGuess = scanner.nextInt();
28                attempts++;
29
30                if (userGuess == randomNumber) {
31                    System.out.println("Correct! You guessed the number.");
32                    score++;
33                    guessedCorrect = true;
34                    break;
35                }
36                else if (userGuess > randomNumber) {
37                    System.out.println("Too high!");
38                }
39                else {
40                    System.out.println("Too low!");
41                }
42            }
43
44            if (!guessedCorrect) {
45                System.out.println("You ran out of attempts. The number was " + randomNumber);
46            }
47
48            System.out.print("Do you want to play again? (y/n) ");
49            playAgain = scanner.next().charAt(0);
50
51            if (playAgain != 'y') {
52                System.out.println("Thanks for playing!");
53                break;
54            }
55        }
56    }
57}
```

```
42 }  
43  
44 }  
45     if (!guessedCorrect) {  
46         System.out.println(x: "You have used all attempts.");  
47         System.out.println("The correct number was: " + randomNumber);  
48     }  
49  
50     System.out.print(s: "Do you want to play again? (y/n): ");  
51     playAgain = scanner.next().charAt(index: 0);  
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>
```