

② Develop a simple number guessing game

```
public class GFQ {  
    public static void guessingNumberGame() {  
        Scanner sc = new Scanner(System.in);  
        int number = 1 + (int)(100 * Math.random());  
        int k = 5;  
        int i, guess;  
        System.out.println("A number is chosen" + " between 1 to 100." +  
            " Guess the number within 5 trials.");  
        for (i = 0; i < k; i++) {  
            System.out.println("Guess the number:");  
            guess = sc.nextInt();  
            if (number == guess) {  
                System.out.println("Congratulation! you guessed the number.");  
                break;  
            }  
            else if (number > guess && i != k - 1) {  
                System.out.println("The number is greater than" + guess);  
            }  
            else if (number < guess && i != k - 1) {  
                System.out.println("The number is less than" + guess);  
            }  
        }  
    }  
}
```

```

        if (i == k) {
            System.out.println("you have exhausted k trails.");
        }
    }
    public static void main (String[] args) {
        GuessingNumberGame();
    }
}

```

Output:

A number is chosen between 1 to 100. Guess the number within 5 trails.

Guess the number:

45

the number is greater than 45

Guess the number:

55

The number is greater than 55

Guess the number:

99

The number is less than 99

Guess the number:

80

The number is less than 80

Guess the number:

60

you have exhausted k trails.

The number was 71.