

SumOfNumbers.java LetterCounter.java ESPGame.java

Compile Messages JGRASP Messages Run I/O Interactions

End
Clear
Help

```
----jGRASP exec: java ESPGame
>> Enter a color: Red
The correct color was: Orange
>> Enter a color: Red
The correct color was: Yellow
>> Enter a color: Red
The correct color was: Blue
>> Enter a color: Red
You guessed right!
>> Enter a color: Red
The correct color was: Orange
>> Enter a color: Red
You guessed right!
>> Enter a color: Red
You guessed right!
>> Enter a color: Red
The correct color was: Blue
>> Enter a color: Red
The correct color was: Green
>> Enter a color: Red
The correct color was: Blue
You guessed the color correct 3 times.
----jGRASP: operation complete.
>> [
```

```
1 import java.util.Scanner;
2 import java.util.Random;
3 // Michael Cohen
4 // Chapter 4: Programming Challenge 19
5
6 public class ESPGame
7 {
8     public static void main(String[] args)
9     {
10         Scanner keyboard = new Scanner(System.in);
11         Random rand = new Random();
12         String color = "";
13         String guess;
14         int number;
15         int count = 0;
16         int correct = 0;
17
18         for (count = 0; count < 10; count++)
19         {
20             number = rand.nextInt(5);
21
22             if (number == 0)
23                 color = "Red";
24             if (number == 1)
25                 color = "Green";
26             if (number == 2)
27                 color = "Blue";
28             if (number == 3)
29                 color = "Orange";
30             if (number == 4)
31                 color = "Yellow";
32
33
34             System.out.print("Enter a color: ");
35             guess = keyboard.nextLine();
36
37
38             if (guess.equals(color))
39             {
40                 correct++;
41                 System.out.println("You guessed right!");
42             }
43             else
44                 System.out.println("The correct color was: " + color);
45         }
46         System.out.println("You guessed the color correct " + correct + " times.");
47     }
48 }
49
```

```
1 import java.util.Scanner;
2
3 // Michael Cohen
4 // Chapter 4: Programming Challenge 1
5
6 public class SumOfNumbers
7 {
8     public static void main(String[] args)
9     {
10         Scanner keyboard = new Scanner(System.in);
11         int num;
12         do {
13             System.out.print("Enter a nonzero positive integer: ");
14             num = keyboard.nextInt();
15         } while(num < 1);
16
17         int count;
18         int sum = 0;
19         for (count = 0; count <= num; ++count)
20         {
21             sum += count;
22         }
23         System.out.println("The sum is equal to: " + sum);
24     }
25 }
```

Test.java SumOfNumbers.java

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```
[ ----jGRASP: operation complete.
>> [ ----jGRASP exec: java SumOfNumbers
>> [ Enter a nonzero positive integer: 3
>> [ The sum is equal to: 6
>> [ ----jGRASP: operation complete.
>> [ ----jGRASP exec: java SumOfNumbers
>> [ Enter a nonzero positive integer: 4
>> [ The sum is equal to: 10
>> [ ----jGRASP: operation complete.
>> [ ]
```

```

1 import java.util.Scanner;
2
3 // Michael Cohen
4 // Chapter 4: Programming Challenge 5
5
6 public class LetterCounter
7 {
8     public static void main(String[] args)
9     {
10         Scanner keyboard = new Scanner(System.in);
11         String str;
12         char character;
13         int count = 0;
14
15         System.out.print("Enter a string: ");
16         str = keyboard.nextLine();
17
18         System.out.print("Enter a character: ");
19         character = keyboard.nextLine().charAt(0);
20
21         for (int location = 0; location < str.length(); location++)
22         {
23             if (str.charAt(location) == character)
24                 count++;
25         }
26         System.out.println("'" + character + "' appears " + count + " times in the string.");
27     }
28 }
29

```

Test.java SumOfNumbers.java LetterCounter.java

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```

>>> ----jGRASP exec: java LetterCounter
>>> Enter a string: 123451
>>> Enter a character: 1
>>> '1' appears 2 times in the string.
>>> ----jGRASP: operation complete.

>>> ----jGRASP exec: java LetterCounter
>>> Enter a string: a1a1aa
>>> Enter a character: a
>>> 'a' appears 4 times in the string.
>>> ----jGRASP: operation complete.
>>>

```