

Source Code:

```
import java.util.Scanner;

public class CallMethod {
    public static void main(String[] args) {
        Scanner input = new Scanner(System.in);

        System.out.print("Enter your name: ");
        String name = input.nextLine();

        // Call a method with a return value
        int length = calculateLength(name);
        System.out.println("Length of the name is: " + length);

        // Call a method with parameters
        String greeting = sayHello(name);
        System.out.println(greeting);

        // Call a method with default parameter
        String defaultGreeting = sayHello();
        System.out.println(defaultGreeting);

        // Call a method with variable number of arguments
        System.out.print("Enter three numbers separated by space: ");
        int a = input.nextInt();
        int b = input.nextInt();
        int c = input.nextInt();
        int sum = calculateSum(a, b, c);
        System.out.println("Sum is: " + sum);

        // Call a static method
        String message = displayMessage();
        System.out.println(message);

        input.close();
    }

    // Method with a return value
    public static int calculateLength(String str) {
        return str.length();
    }

    // Method with parameters
```

```
public static String sayHello(String name) {
    return "Hello " + name + "!";
}

// Method with default parameter
public static String sayHello(String name, String greeting) {
    return greeting + " " + name + "!";
}

public static String sayHello() {
    return "Hello there!";
}

// Method with variable number of arguments
public static int calculateSum(int... numbers) {
    int sum = 0;
    for (int number : numbers) {
        sum += number;
    }
    return sum;
}

// Static method
public static String displayMessage() {
    return "This is a static method.";
}
}
```

Outputs:

```
SearchSort.java AvgSumMinMax... Inner.java Display.java StringConve... EmailValida... CallMethod.java x "1 Console x
7 public static void main(String[] args) {
8     Scanner input = new Scanner(System.in);
9
10    System.out.print("Enter your name: ");
11    String name = input.nextLine();
12
13    // Call a method with a return value
14    int length = calculateLength(name);
15    System.out.println("Length of the name is: " + length);
16
17    // Call a method with parameters
18    String greeting = sayHello(name);
19    System.out.println(greeting);
20
21    // Call a method with default parameter
22    String defaultGreeting = sayHello();
23    System.out.println(defaultGreeting);
24
25    // Call a method with variable number of arguments
26    System.out.print("Enter three numbers separated by space: ");
27    int a = input.nextInt();
28    int b = input.nextInt();
29    int c = input.nextInt();
30    int sum = calculateSum(a, b, c);
31    System.out.println("Sum is: " + sum);
32
33    // Call a static method
34    String message = displayMessage();
35    System.out.println(message);
36
37    input.close();
38 }
39
40 // Method with a return value
41 public static int calculateLength(String str) {
42     return str.length();
43 }
44
45 // Method with parameters
46 public static String sayHello(String name) {
47     return "Hello " + name + "!";
48 }
49
```

```
<terminated> CallMethod [Java Application] C:\Users\Administrator\p2\pool
Enter your name: Adam
Length of the name is: 4
Hello Adam!
Hello there!
Enter three numbers separated by space: 5 8 69
Sum is: 82
This is a static method.
```

```
1 package demo;
2
3
4 import java.util.Scanner;
5
6 public class CallMethod {
7     public static void main(String[] args) {
8         Scanner input = new Scanner(System.in);
9
10        System.out.print("Enter your name: ");
11        String name = input.nextLine();
12
13        // Call a method with a return value
14        int length = calculateLength(name);
15        System.out.println("Length of the name is: " + length);
16
17        // Call a method with parameters
18        String greeting = sayHello(name);
19        System.out.println(greeting);
20
21        // Call a method with default parameter
22        String defaultGreeting = sayHello();
23        System.out.println(defaultGreeting);
24
25        // Call a method with variable number of arguments
26        System.out.print("Enter three numbers separated by space: ");
27        int a = input.nextInt();
28        int b = input.nextInt();
29        int c = input.nextInt();
30        int sum = calculateSum(a, b, c);
31        System.out.println("Sum is: " + sum);
32
33        // Call a static method
34        String message = displayMessage();
35        System.out.println(message);
36
37        input.close();
38    }
39
40    // Method with a return value
41    public static int calculateLength(String str) {
42        return str.length();
43    }
44}
```

```
<terminated> CallMethod [Java Application] C:\Users\Administrator\p2\pool
Enter your name: Samm@y
Length of the name is: 6
Hello Samm@y!
Hello there!
Enter three numbers separated by space: 25 69 88
Sum is: 182
This is a static method.
```