FUNCTIONS :

1. Write a program with a method named get Total that accepts two integers as an argument and return its sum. Call this method from main( ) and print the results.

Program:

```
Public class SumCalculator {
// Method to calculate the sum of two integers
public static int getTotal(int num1, int num2) {
   return num1 + num2;
}

public static void main(String[] args) {
   // Declare two integers
   int number1 = 10;
   int number2 = 20;

   // Call the getTotal method and store the result
   int result = getTotal(number1, number2);

   // Print the result
   System.out.println("The sum of " + number1 + " and " + number2 + " is: " + result);
  }
}
```

Output:

The sum of 10 and 20 is: 30

2. Write a Java method to compute the sum of the digits in an integer.
   Test Data:
   Input an integer: 25
   Expected Output: The sum is 7

Program:

```
import java.util.Scanner;
 public class DigitSumCalculator {
   // Method to compute the sum of the digits in an integer
   public static int sumOfDigits(int number) {
      int sum = 0;
      while (number != 0) {
         sum += number % 10; // Extract the last digit and add to sum
         number /= 10;      // Remove the last digit
      }
      return sum;
   }

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

      // Input an integer
      System.out.print("Input an integer: ");
      int inputNumber = scanner.nextInt();
```

```
        // Calculate the sum of the digits
        int result = sumOfDigits(inputNumber);

        // Print the result
        System.out.println("The sum is: " + result);
    }
}
```

Output:

Input an integer: 25

The sum is: 7

3. Write a Java method to find the smallest number among three numbers.
   Test Data:
   Input the first number: 25
   Input the Second number: 37
   Input the third number: 29
   Expected Output:
   The smallest value is 25.0

Program:

```
import java.util.Scanner;

public class SmallestNumberFinder {
    // Method to find the smallest number among three numbers
    public static double findSmallest(double num1, double num2, double num3) {
        return Math.min(num1, Math.min(num2, num3));
    }
```

```
    public static void main(String[] args) {
        Scanner scanner = new Scanner(System.in);

        // Input three numbers
        System.out.print("Input the first number: ");
        double firstNumber = scanner.nextDouble();

        System.out.print("Input the second number: ");
        double secondNumber = scanner.nextDouble();

        System.out.print("Input the third number: ");
        double thirdNumber = scanner.nextDouble();

        // Find the smallest number
        double smallest = findSmallest(firstNumber, secondNumber, thirdNumber);

        // Print the smallest number
        System.out.println("The smallest value is " + smallest);
    }
}
```

Output:

```
Input the first number: 25
Input the second number: 37
Input the third number: 29
The smallest value is 25.0
```

4. Write a Java method to compute the average of three numbers. Test Data: Input the first number: 25 Input the second number: 45 Input the third number: 65 Expected Output: The average value is 45.0

Program:

```
import java.util.Scanner;


public class AverageCalculator {
  // Method to compute the average of three numbers
  public static double computeAverage(double num1, double num2, double num3) {
    return (num1 + num2 + num3) / 3;
  }


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


    // Input three numbers
    System.out.print("Input the first number: ");
    double firstNumber = scanner.nextDouble();


    System.out.print("Input the second number: ");
    double secondNumber = scanner.nextDouble();


    System.out.print("Input the third number: ");
    double thirdNumber = scanner.nextDouble();


    // Compute the average
```

```
        double average = computeAverage(firstNumber, secondNumber, thirdNumber);

        // Print the average
        System.out.println("The average value is " + average);
    }
}
```

Output:

Input the first number: 25

Input the second number: 45

Input the third number: 65

The average value is 45.0

5.Write a program in Java to find the square of any number using the function. Test Data : Input any number for square : 20 Expected Output : The square of 20 is : 400.00

Program:

```
import java.util.Scanner;


public class SquareCalculator {
    // Method to compute the square of a number
    public static double calculateSquare(double number) {
        return number * number;
    }
```

```
    public static void main(String[] args) {
        Scanner scanner = new Scanner(System.in);

        // Input a number
        System.out.print("Input any number for square: ");
        double inputNumber = scanner.nextDouble();

        // Calculate the square
        double square = calculateSquare(inputNumber);

        // Print the result
        System.out.printf("The square of %.2f is: %.2f\n", inputNumber, square);
    }
}
```

Output:

```
Input any number for square: 20
The square of 20.00 is: 400.00
```

6. Write a program in to swap two numbers using function. Test Data : Input 1st number : 2 Input 2nd number : 4 Expected Output : Before swapping: n1 = 2, n2 = 4 After swapping: n1 = 4, n2 = 2 .

Program:

```
import java.util.Scanner;

public class NumberSwapper {
  // Method to swap two numbers
  public static void swapNumbers(int[] numbers) {
    // Swap using a temporary variable
    int temp = numbers[0];
    numbers[0] = numbers[1];
    numbers[1] = temp;
  }

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

    // Input two numbers
    System.out.print("Input 1st number: ");
    int num1 = scanner.nextInt();

    System.out.print("Input 2nd number: ");
    int num2 = scanner.nextInt();

    // Print numbers before swapping
    System.out.println("Before swapping: n1 = " + num1 + ", n2 = " + num2);

    // Call swap function
    swapNumbers(new int[]{num1, num2});

    // Print numbers after swapping
    System.out.println("After swapping: n1 = " + num1 + ", n2 = " + num2);
  }
}
```

Output:

Before swapping: n1 = 2, n2 = 4

After swapping: n1 = 4, n2 = 2