

Title: Performing Addition of Two Numbers in Java

Aim: To implement a Java program to perform the addition of two numbers and accept the numbers from the user.

Objective: To understand and demonstrate the concept of accepting input from the user in Java programming.

Introduction: In Java programming, we can accept input from the user using the Scanner class, which is available in the java.util package. In this lab, we will write a Java program to accept two numbers from the user and perform their addition.

Java Program:

```
java
import java.util.Scanner;

// Main class
public class AdditionOfTwoNumbers {
    // Main method
    public static void main(String[] args) {
        // Creating Scanner object to accept input from the user
        Scanner scanner = new Scanner(System.in);

        // Prompting the user to enter the first number
        System.out.print("Enter the first number: ");
        // Accepting the first number from the user
        double num1 = scanner.nextDouble();

        // Prompting the user to enter the second number
        System.out.print("Enter the second number: ");
        // Accepting the second number from the user
        double num2 = scanner.nextDouble();

        // Closing the Scanner object
        scanner.close();

        // Calculating the sum of the two numbers
```

```
        double sum = num1 + num2;

        // Displaying the result
        System.out.println("Sum of " + num1 + " and " + num2 + "
is: " + sum);
    }
}
```

Explanation:

1. We import the `java.util.Scanner` class to accept input from the user.
2. We define a class named `AdditionOfTwoNumbers`.
3. Inside the class, we define the `main` method, which is the entry point of our program.
4. We create a Scanner object named `scanner` to accept input from the user.
5. We prompt the user to enter the first number by displaying the message "Enter the first number: ".
6. We accept the first number entered by the user using the `nextDouble()` method of the Scanner class and store it in the variable `num1`.
7. Similarly, we prompt the user to enter the second number by displaying the message "Enter the second number: ".
8. We accept the second number entered by the user using the `nextDouble()` method and store it in the variable `num2`.
9. We close the Scanner object to release the resources.
10. We calculate the sum of the two numbers and store it in the variable `sum`.
11. Finally, we display the result by printing the sum of the two numbers.

Conclusion: In this lab, we have learned how to implement a Java program to perform the addition of two numbers and accept the numbers from the user using the Scanner class. This demonstrates the concept of accepting input from the user in Java programming.