//Program to perform arithmetic opeartors

```java
public class ArithmeticOperators {
    public static void main(String[] args) {
        // Declare and initialize variables
        int num1 = 10;
        int num2 = 5;

        // Perform arithmetic operations
        int sum = num1 + num2;       // Addition
        int difference = num1 - num2; // Subtraction
        int product = num1 * num2;    // Multiplication
        int quotient = num1 / num2;   // Division
        int remainder = num1 % num2;  // Modulus (remainder)

        // Display the results
        System.out.println("Number 1: " + num1);
        System.out.println("Number 2: " + num2);
        System.out.println("Addition: " + sum);
        System.out.println("Subtraction: " + difference);
```

```java
        System.out.println("Multiplication: " + product);

        System.out.println("Division: " + quotient);

        System.out.println("Remainder: " + remainder);

    }

}
```

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2. Program to perform arithmetic operators with floating point.

```java
public class Math

 {

public static void main(String args[ ])

 {

// arithmetic using integers
System.out.println("Integer Arithmetic");

int a = 1 + 1;

int b = a * 3; int c = b / 4; int d = c - a; int e = -d;
System.out.println("a = " + a);

System.out.println("b = " + b);

System.out.println("c = " + c);

System.out.println("d = " + d);

System.out.println("e = " + e);
```

```java
// arithmetic using doubles
System.out.println("\nFloating Point Arithmetic");
double da = 1 + 1;

double db = da * 3;

double dc = db / 4;

double dd = dc - a;

double de = -dd; System.out.println("da = " + da);
System.out.println("db = " + db);
System.out.println("dc = " + dc);
System.out.println("dd = " + dd);
System.out.println("de = " + de);

}

}
```

// Java program to take an integer as input and print it

```java
import java.io.*;

import java.util.Scanner;


// Driver Class
public class Main{
    // main function
    public static void main(String[] args)
```

```java
{
    // Declare the variables
    int num;

    // Input the integer
    System.out.println("Enter the integer: ");

    // Create Scanner object
    Scanner s = new Scanner(System.in);

    // Read the next integer from the screen
    num = s.nextInt();

    // Display the integer
    System.out.println("Entered integer is: " + num);

    // Close the Scanner object
    s.close(); // Important to prevent resource leaks
    }
}
```

```java
import java.util.Scanner;

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

        System.out.print("Enter first number: ");
        double num1 = sc.nextDouble();

        System.out.print("Enter second number: ");
        double num2 = sc.nextDouble();

        System.out.print("Enter an operator (+, -, *, /): ");
        char operator = sc.next().charAt(0);

        double result;
        switch (operator) {
```

```java
            case '+':
                result = num1 + num2;
                break;
            case '-':
                result = num1 - num2;
                break;
            case '*':
                result = num1 * num2;
                break;
            case '/':
                result = num1 / num2;
                break;
            default:
                System.out.println("Invalid operator!");
                return;
        }
        System.out.println("The result is: " + result);
    }
}
```

5 //To find factorial of a number

```java
import java.util.Scanner;

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

        System.out.print("Enter a number: ");
        int num = sc.nextInt();
        int factorial = 1;

        for (int i = 1; i <= num; i++) {
            factorial *= i;
        }

        System.out.println("Factorial of " + num + " is: " + factorial);
    }
}
```