/**
 * **Math and Arithmetic Operators in Java Example**
 *
 **/

The Java programming language supports various arithmetic operators for all floating-point and integer numbers. These operators are (`+`) (addition), (`-`) (subtraction),(`*`) (multiplication), (`/`) (division), and (`%`) (modulo). The following table summarizes the binary arithmetic operations in the Java programming language.

Operator	Use	Description
+	`op1 + op2`	Adds `op1` and `op2`; also used to concatenate strings
-	`op1 - op2`	Subtracts `op2` from `op1`
*	`op1 * op2`	Multiplies `op1` by `op2`
/	`op1 / op2`	Divides `op1` by `op2`
%	`op1 % op2`	Computes the remainder of dividing `op1` by `op2`

```
public class ArithmeticDemo {

    public static void main(String[] args) {

        //a few numbers
        int i = 37;
        int j = 42;
        double x = 27.475;
        double y = 7.22;
        System.out.println("Variable values...");
        System.out.println("    i = " + i);
        System.out.println("    j = " + j);
        System.out.println("    x = " + x);
        System.out.println("    y = " + y);

        //adding numbers
        System.out.println("Adding...");
        System.out.println("    i + j = " + (i + j));
        System.out.println("    x + y = " + (x + y));

        //subtracting numbers
        System.out.println("Subtracting...");
        System.out.println("    i - j = " + (i - j));
        System.out.println("    x - y = " + (x - y));

        //multiplying numbers
        System.out.println("Multiplying...");
        System.out.println("    i * j = " + (i * j));
        System.out.println("    x * y = " + (x * y));

        //dividing numbers
```

```
        System.out.println("Dividing...");
        System.out.println("    i / j = " + (i / j));
        System.out.println("    x / y = " + (x / y));

        //computing the remainder resulting from dividing numbers
        System.out.println("Computing the remainder...");
        System.out.println("    i % j = " + (i % j));
        System.out.println("    x % y = " + (x % y));

        //mixing types
        System.out.println("Mixing types...");
        System.out.println("    j + y = " + (j + y));
        System.out.println("    i * x = " + (i * x));
    }
}
```

```
The output from this program is:
Variable values...
    i = 37
    j = 42
    x = 27.475
    y = 7.22
Adding...
    i + j = 79
    x + y = 34.695
Subtracting...
    i - j = -5
    x - y = 20.255
Multiplying...
    i * j = 1554
    x * y = 198.37
Dividing...
    i / j = 0
    x / y = 3.8054
Computing the remainder...
    i % j = 37
    x % y = 5.815
Mixing types...
    j + y = 49.22
    i * x = 1016.58
```