

```
class ArithmeticDemo {

    public static void main (String[] args) {

        int result = 1 + 2;
        // result is now 3
        System.out.println("1 + 2 = " + result);
        int original_result = result;

        result = result - 1;
        // result is now 2
        System.out.println(original_result + " - 1 = " + result);
        original_result = result;

        result = result * 2;
        // result is now 4
        System.out.println(original_result + " * 2 = " + result);
        original_result = result;

        result = result / 2;
        // result is now 2
        System.out.println(original_result + " / 2 = " + result);
        original_result = result;

        result = result + 8;
        // result is now 10
        System.out.println(original_result + " + 8 = " + result);
        original_result = result;

        result = result % 7;
        // result is now 3
        System.out.println(original_result + " % 7 = " + result);
    }
}
```

**This program prints the following:**

1 + 2 = 3  
3 - 1 = 2  
2 \* 2 = 4  
4 / 2 = 2  
2 + 8 = 10  
10 % 7 = 3