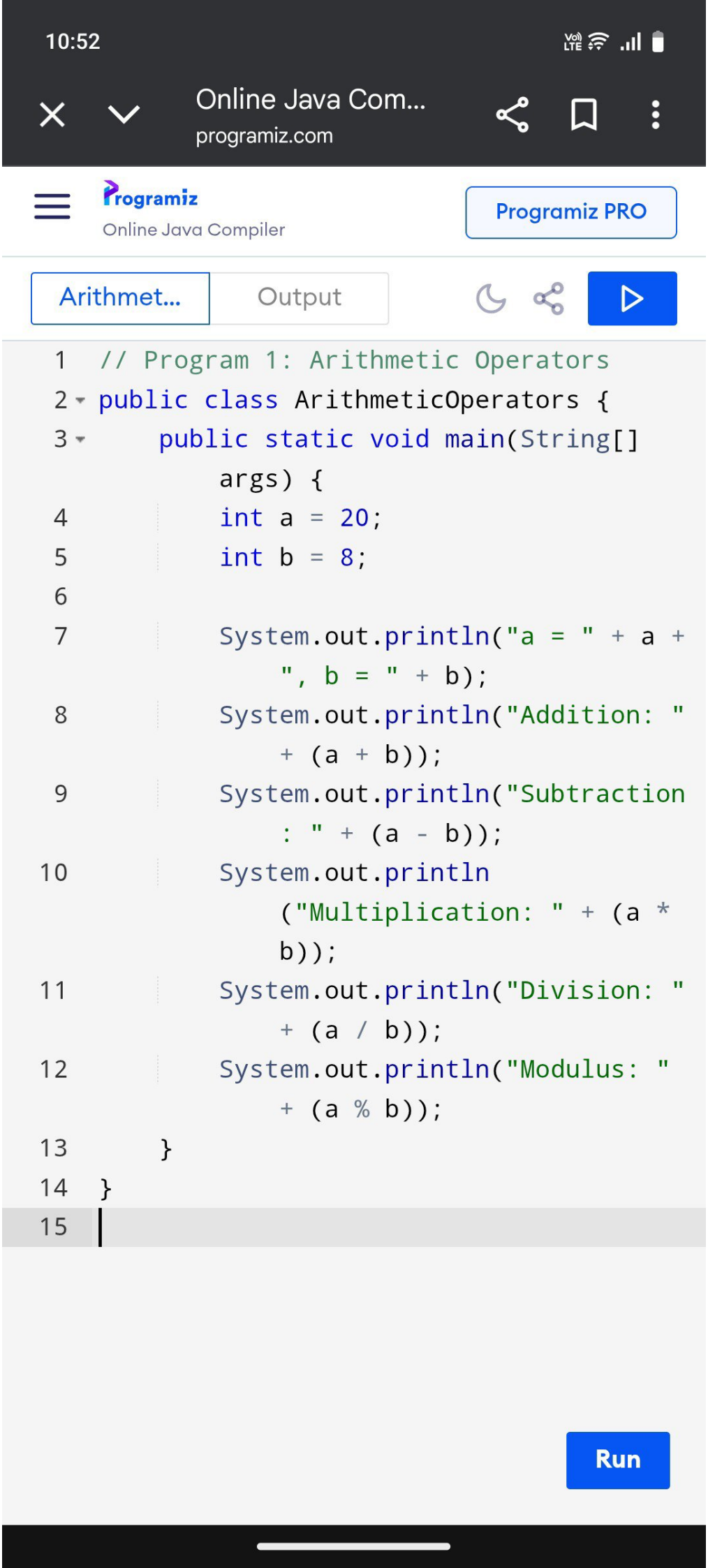
10:52
Online Java Com...
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Programiz PRO
Arithmet...
Output
1 // Program 1: Arithmetic Operators
2 public class ArithmeticOperators {
3 public static void main(String[] args) {
4 int a = 20;
5 int b = 8;
6
7 System.out.println("a = " + a + ", b = " + b);
8 System.out.println("Addition: " + (a + b));
9 System.out.println("Subtraction: " + (a - b));
10 System.out.println ("Multiplication: " + (a * b));
11 System.out.println("Division: " + (a / b));
12 System.out.println("Modulus: " + (a % b));
13 }
14 }
15
Run


10:52
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Arithmet...
Output
a = 20, b = 8
Addition: 28
Subtraction: 12
Multiplication: 160
Division: 2
Modulus: 4
=== Code Execution Successful ===

```java
// Program 2: Relational and Logical Operators
public class RelationalLogicalOperators {
    public static void main(String[] args) {
        int x = 10;
        int y = 20;

        // Relational operators
        System.out.println("x == y: " + (x == y));
        System.out.println("x != y: " + (x != y));
        System.out.println("x > y: " + (x > y));
        System.out.println("x < y: " + (x < y));
        System.out.println("x >= y: " + (x >= y));
        System.out.println("x <= y: " + (x <= y));

        // Logical operators
        boolean condition1 = (x < y);
        boolean condition2 = (x > 5);

        System.out.println("\nLogical AND (&&): " + (condition1 && condition2));
        System.out.println("Logical OR (||): " + (condition1 || condition2));
        System.out.println("Logical NOT (!): " + (!condition1));
    }
}
```

Run

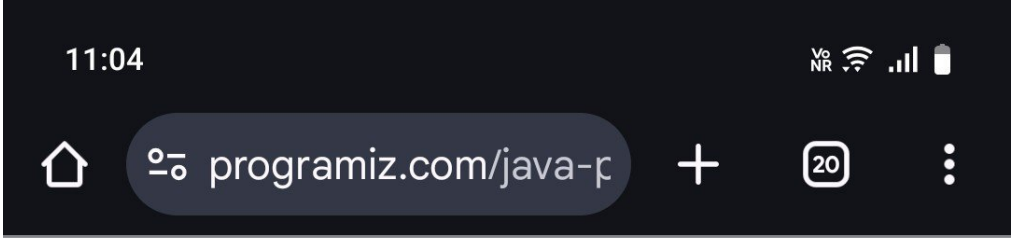
```java
// Program 2: Relational and Logical Operators
public class RelationalLogicalOperators {
    public static void main(String[] args) {
        int x = 10;
        int y = 20;

        // Relational operators
        System.out.println("x == y: " + (x == y));
        System.out.println("x != y: " + (x != y));
        System.out.println("x > y: " + (x > y));
        System.out.println("x < y: " + (x < y));
        System.out.println("x >= y: " + (x >= y));
        System.out.println("x <= y: " + (x <= y));

        // Logical operators
        boolean condition1 = (x < y);
        boolean condition2 = (x > 5);

        System.out.println("\nLogical AND (&&): " + (cond
        && condition2));
```

```
6
7           // Relational operators
8           System.out.println("x == y: " +
                (x == y));
9           System.out.println("x != y: " +
                (x != y));
10          System.out.println("x > y: " +
                (x > y));
11          System.out.println("x < y: " +
                (x < y));
12          System.out.println("x >= y: " +
                (x >= y));
13          System.out.println("x <= y: " +
                (x <= y));
14
15          // Logical operators
16          boolean condition1 = (x < y);
17          boolean condition2 = (x > 5);
18
19          System.out.println("\nLogical
                AND (&&): " + (condition1
                && condition2));
20          System.out.println("Logical OR
                (||): " + (condition1 ||
                condition2));
21          System.out.println("Logical NOT
                (!): " + (!condition1));
22      }
23  }
24
```

```
x == y: false
x != y: true
x > y: false
x < y: true
x >= y: false
x <= y: true

Logical AND (&&): true
Logical OR (||): true
Logical NOT (!): false

=== Code Execution Successful ===
```

```java
// Program 3: Assignment and Unary
    Operators
public class AssignmentUnaryOperators {
    public static void main(String[]
        args) {
        int num = 10;
        System.out.println("Initial
            value: " + num);

        // Assignment operators
        num += 5;  // num = num + 5
        System.out.println("After += 5:
            " + num);

        num -= 3;  // num = num - 3
        System.out.println("After -= 3:
            " + num);

        num *= 2;  // num = num * 2
        System.out.println("After *= 2:
            " + num);

        num /= 4;  // num = num / 4
        System.out.println("After /= 4:
            " + num);

        // Unary operators
        System.out.println("\nPost
            -increment: " + (nu
            // use then increase
```

```
8           num += 5;  // num = num + 5
9           System.out.println("After += 5:
                " + num);
10
11          num -= 3;  // num = num - 3
12          System.out.println("After -= 3:
                " + num);
13
14          num *= 2;  // num = num * 2
15          System.out.println("After *= 2:
                " + num);
16
17          num /= 4;  // num = num / 4
18          System.out.println("After /= 4:
                " + num);
19
20          // Unary operators
21          System.out.println("\nPost
                -increment: " + (num++));
                // use then increase
22          System.out.println("After post
                -increment: " + num);
23
24          System.out.println("Pre
                -increment: " + (++num));
                // increase then use
25          System.out.println("Pre
                -decrement: " + (--num));
26      }
27  }
```



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Assignm... Output

```
Initial value: 10
After += 5: 15
After -= 3: 12
After *= 2: 24
After /= 4: 6

Post-increment: 6
After post-increment: 7
Pre-increment: 8
Pre-decrement: 7

=== Code Execution Successful ===
```