

# Chapter 2 Operators and Expressions by Munawar

## Operator

Operator are used to perform operations on variables and values.

Example:

$$5+7=12$$

5 and 7 is operands and + is operator

12 is a result

## Types of operators

Arithmetic operators ----- +, -, \*, /, %, ++, --

Assignment operators ----- =, +=

Comparison operators ----- ==, >=, <=

Logical operators ----- &&, ||, | (operates bitwise)

Arithmetic operator cannot work with Booleans % operator can work on floats and characters.

## Source Code

```
import java.util.Scanner;
public class Main {
    public static void main(String[] args) {
        // arithmetic operator + * % - etc
        int a=2;
        int b=20;
        int c=a+b;
        // % modulo operator
        int d=20%a;
        System.out.println(c);

        System.out.println(d);
        // assignment operator
        int e=c;
        System.out.println(e);
        // comparison operators == <= >=
```

```
        System.out.println(6==6);

//logical operator  && || |
        System.out.println(4<12&&6<12);
        System.out.println(4<5||4>8);
        //10
        //11
        //.....
        // 10
        System.out.println(2&3);

    }
}
```

Thank You