**Operators**

**1. Write a function for arithmetic operators(+,-,\*,/)**

import java.io.\*;

class Addition {

public static void main(String[] args)

{

// initializing variables

int num1 = 10, num2 = 20, sum = 0;

// Displaying num1 and num2

System.out.println("num1 = " + num1);

System.out.println("num2 = " + num2);

// adding num1 and num2

sum = num1 + num2;

System.out.println("The sum = " + sum);

}

}

import java.io.\*;

class Subtraction {

public static void main(String[] args)

{

// initializing variables

int num1 = 20, num2 = 10, sub = 0;

// Displaying num1 and num2

System.out.println("num1 = " + num1);

System.out.println("num2 = " + num2);

// subtracting num1 and num2

sub = num1 - num2;

System.out.println("Subtraction = " + sub);

}

}

import java.io.\*;

class Multiplication {

public static void main(String[] args)

{

// initializing variables

int num1 = 20, num2 = 10, mult = 0;

// Displaying num1 and num2

System.out.println("num1 = " + num1);

System.out.println("num2 = " + num2);

// Multiplying num1 and num2

mult = num1 \* num2;

System.out.println("Multiplication = " + mult);

}

}

import java.io.\*;

class Division {

public static void main(String[] args)

{

// initializing variables

int num1 = 20, num2 = 10, div = 0;

// Displaying num1 and num2

System.out.println("num1 = " + num1);

System.out.println("num2 = " + num2);

// Dividing num1 and num2

div = num1 / num2;

System.out.println("Division = " + div);

}

}

**2. Write a method for increment and decrement operators(++, --)**

public class IncrementDecrement

{

public static void main(String[] args)

{

int number = 50;

// Display the value in number.

System.out.println("Number is " + number);

// Increment number.

number++;

// Display the value in number.

System.out.println("Now, number is " + number);

// Decrement number.

number--;

// Display the value in number.

System.out.println("Now, number is " + number);

}

}

**3. Program to equal operator and not equal operators**

public class Main {

public static void main(String[] args) {

int x = 4;

int y = 7;

if (x != y) {

System.out.println("x and y are not equal.");

} else {

System.out.println("x and y are equal.");

}

}

}

import java.util.Scanner;

class EqualToAndNotEqualToOperator{

public static void main(String[] args){

Scanner in=new Scanner(System.in);

System.out.println("Enter any two numbers to check for equality: ");

int num1=in.nextInt();

int num2=in.nextInt();

if(num1==num2){

System.out.println("The two numbers are equal");

}

else if(num1!=num2){

System.out.println("The numbers are not equal");

}

}

}

**4. Write a program to find the two numbers equal or not.**

import java.util.Scanner;

class EqualToAndNotEqualToOperator{

public static void main(String[] args){

Scanner in=new Scanner(System.in);

System.out.println("Enter any two numbers to check for equality: ");

int num1=in.nextInt();

int num2=in.nextInt();

if(num1==num2){

System.out.println("The two numbers are equal");

}

else if(num1!=num2){

System.out.println("The numbers are not equal");

}

}

}

**5. Programs on Logical AND,OR operator and Logical NOT**

import java.io.\*;

class Logical {

public static void main(String[] args)

{

// initializing variables

int a = 10, b = 20, c = 20, d = 0;

// Displaying a, b, c

System.out.println("Var1 = " + a);

System.out.println("Var2 = " + b);

System.out.println("Var3 = " + c);

// using logical AND to verify

// two constraints

if ((a < b) && (b == c)) {

d = a + b + c;

System.out.println("The sum is: " + d);

}

else

System.out.println("False conditions");

}

}

**6. Program for relational operators (<,<==, >, >==)**

class Main {

public static void main(String[] args) {

// declare variables

int a = 12, b = 5;

// addition operator

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

// subtraction operator

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

// multiplication operator

System.out.println("a \* b = " + (a \* b));

// division operator

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

// modulo operator

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

}

}

**7. Print the smaller and larger number**

class Test {

public static void main(String[] args) {

float num1 = 4.25f;

int num2 =5;

System.out.println("The largest number of the two numbers is " + Math.max(num1,num2));

System.out.println("The smallest number of the two numbers is " + Math.min(num1,num2));

}

}