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

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");

}

}

}

Output

Enter any two numbers to check for equality:

67

67

The two numbers are equal

Enter any two numbers to check for equality:

34

30

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");

}

}

}

Output is

Enter any two numbers to check for equality:

67

67

The two numbers are equal

Enter any two numbers to check for equality:

34

30

The numbers are not equal

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

import java.io.\*;

public 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");

}

}

Output

Var1 = 10

Var2 = 20

Var3 = 20

The sum is: 50

**Logical OR operator**

import java.io.\*;

public class Logical {

public static void main(String[] args)

{

// initializing variables

int a = 10, b = 1, c = 10, d = 30;

// Displaying a, b, c

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

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

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

System.out.println("Var4 = " + d);

// using logical OR to verify

// two constraints

if (a > b || c == d)

System.out.println("One or both"

+ " the conditions are true");

else

System.out.println("Both the"

+ " conditions are false");

}

}

Output

Var1 = 10

Var2 = 1

Var3 = 10

Var4 = 30

One or both the conditions are true

**Logical NOT**

import java.io.\*;

public class Logical {

public static void main(String[] args)

{

// initializing variables

int a = 10, b = 1;

// Displaying a, b, c

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

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

// Using logical NOT operator

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

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

}

}

Output

Var1 = 10

Var2 = 1

!(a < b) = true

!(a > b) = false

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

public class Test {

public static void main(String args[]) {

int a = 10;

int b = 20;

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

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

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

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

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

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

}

}

Output

a == b = false

a != b = true

a > b = false

a < b = true

b >= a = true

b <= a = false

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

public 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));

}

}

Output

The largest number of the two numbers is 5.0

The smallest number of the two numbers is 4.25