//Name:Sourav Kumar Rungta

//Program of typecasting with operators.

class prog5{

    public static void main(String[] args) {

        int a=5;

        int b=10;

        double d=a;

        System.out.println(d);

    //Assignment Operator

    int c;

    c = a;

    System.out.println("Assigning c as a: "+c);

    c += a;

    System.out.println("Assignment operator as addition: "+c);

    //Comparison Operator

    if(a>b){

    System.out.println("True, a is greater than b");

    }

    else;{

    System.out.println("False, b is greater than a");

    }

    //Logical Operator

    if((a>b)&&(b>a)){

    System.out.println("If both condition follows then True");

    }

    else;

    System.out.println("If both condition does not follows then False");

    }

}

//Name:Sourav Kumar Rungta

//Program of randoms.

class prog6 {

    public static void main(String[] args) {

        int rn=(int)(Math.random()\*50);

        System.out.println(rn);

    }

}

//Name:Sourav Kumar Rungta

//Program of switch case with operators.

public class prog7 {

    public static void main(String[] args) {

        int a=5;

        int b=3;

        int c;

        int roll=4;

        switch(roll) {

        case 1:

            c=a+b;

            System.out.println("Add");

            break;

        case 2:

            c=a-b;

            System.out.println("Substract");

            break;

        case 3:

            c=a\*b;

            System.out.println("Multiply");

            break;

        case 4:

            c=a/b;

            System.out.println("Divide");

            break;

                default:

            }

    }

}

//Name:Sourav Kumar Rungta

//Program of pattern using for loop.

class prog8{

    public static void main(String[] args) {

    int n = 5;

    for (int i = 1; i <= n; ++i) {

      for (int j = 1; j <= i; ++j) {

        System.out.print("\* ");

      }

      System.out.println();

    }

    }

}

//Name:Sourav Kumar Rungta

//Program of pattern using while loop.

class prog9{

public static void main(String args[]){

    int row=1,column=1;

    int x;

    do{

    x=4;

    do{

    System.out.print("");

        x--;

    }while(x>=row);

        column=1;

    do{

    System.out.print("\*"+" ");

        column++;

    }while(column<=row);

    System.out.println(" ");

        row++;

    }while (row<=5);

    }

}

//Name:Sourav Kumar Rungta

//Program of array.

import java.util.\*;

class prog10

{

    public static void main(String[] args) {

        String[] name={"Sourav","Abhi","Rungta"};

        System.out.print(name[0]);

    }

}

//Name:Sourav Kumar Rungta

//Program of methods.

import java.util.\*;

class prog11 {

    static void f1(){

        System.out.println("Sourav Rungta");

    }

    public static void main(String[] args) {

        f1();

    }

}

//Name:Sourav Kumar Rungta

//Program of funtion overload.

public class prog12

{

        static int f1(int a, int b){

            return a+b;

        }

        static double f2(double a, double b){

            return a-b;

        }

        public static void main(String[] args){

            int a = f1(10,20);

            double d = f2(10.0,20.0);

            System.out.println(a);

            System.out.println(d);

        }

}

//Name:Sourav Kumar Rungta

//Program of user input addition.

import java.util.\*;

class Main {

  public static void main(String[] args) {

    Scanner scan = new Scanner(System.in);

    System.out.print("Enter a:");

    int a = scan.nextInt();

    System.out.print("Enter b:");

    int b = scan.nextInt();

    int c=a+b;

    System.out.println("Value of c=" + c);

  }

}

//Name:Sourav Kumar Rungta

//Program of multiplication table(13) using for loop.

public class prog14 {

    public static void main(String[] args) {

        int num = 13;

        for(int i = 1; i <= 10; ++i)

        {

            System.out.printf("%d \* %d = %d \n", num, i, num \* i);

        }

    }

}