package day\_5;

import java.util.Scanner;

import java.lang.Math;

public class day\_5 {

        //Program 1

//  public static void main(String[] args) {

//      System.out.println("Enter The Number Of Weeks");

//      Scanner sc= new Scanner(System.in);

//      int n=sc.nextInt();

//      for (int w=1;w<=n;w++) {

//          System.out.println("Week: "+w);

//          if (w==2) {

//              continue;

//          }

//          else {

//          for (int d=1;d<=7;d++) {

//              System.out.println("\tDay: "+d);

//              }

//          }

//      }

//  }

        //Program 2

//  public static void main(String[] args) {

//      System.out.println("Enter The Number Of Terms");

//      Scanner sc= new Scanner(System.in);

//      int n=sc.nextInt();

//      int sum=0;

//      for (int i=1;i<=n;i++) {

//          sum+=i;

//      }

//      System.out.println("The Summation Of First "+n+" Natural Numbers Is: "+sum);

//  }

        //Program 3

//  public static void main(String[] args) {

//      System.out.println("Enter The Number Of Terms");

//      Scanner sc= new Scanner(System.in);

//      int n=sc.nextInt();

//      int fact=1;

//      for (int i=1;i<=n;i++) {

//          fact\*=i;

//      }

//      System.out.println("The Factorial Of "+n+" Is: "+fact);

//  }

        //Program 4

//  public static void main(String[] args) {

//      System.out.println("Enter The Number Of Terms");

//      Scanner sc= new Scanner(System.in);

//      int n=sc.nextInt();

//      float sum=0;

//      for (int i=1;i<=n;i++) {

//          sum+=i;

//      }

//      float avg=sum/n;

//      System.out.println("The Average Of First "+n+" Natural Numbers Is: "+avg);

//  }

        //Program 5

//  public static void main(String[] args) {

//      System.out.println("Enter The Number(Base)");

//      Scanner sc= new Scanner(System.in);

//      int num=sc.nextInt();

//      System.out.println("Enter The Power(Exponent)");

//      int pow=sc.nextInt();

//      int expo=pow;

//      long result=1;

//      while (pow!=0) {

//          result\*=num;

//          --pow;

//      }

//      System.out.println("The Value Of "+num+" raised to "+expo+" is "+result);

//  }

        //Program 6

//  public static void main(String[] args) {

//      System.out.println("Enter The Number Of Terms");

//      Scanner sc= new Scanner(System.in);

//      int n=sc.nextInt();

//      for (int i=1;i<=n;i++) {

//          System.out.print(i\*i\*i);

//          System.out.print(",");

//      }

//      System.out.print("\b");

//  }

        //Program 7

//  public static void main(String[] args ) {

//      System.out.println("Enter The Number Of Odd Terms");

//      Scanner sc= new Scanner(System.in);

//      int n=sc.nextInt();

//      int sum=0;

//      System.out.print("The Odd Numbers Are :");

//      for(int i=1;i<=n;i++) {

//          System.out.print(2\*i-1+" ");

//          sum+=2\*i-1;

//      }

//      System.out.println();

//      System.out.println("The Sum Of Odd Natural Number Upto "+n+" Terms: "+sum);

//  }

        //Program 8

//  public static void main(String[] args) {

//      System.out.println("Enter The Number Of Terms");

//      Scanner sc= new Scanner(System.in);

//      int n=sc.nextInt();

//      float s=0;

//      for(int i=1;i<=n;i++)

//         {

//             if(i<n)

//             {

//           System.out.print("1/"+i+" + ");

//           s+=1/(float)i;

//             }

//           if(i==n)

//           {

//               System.out.print("1/"+i+" + ");

//           s+=1/(float)i;

//           }

//           }

//      System.out.println("\b");

//              System.out.print("Sum of Series upto "+n+" terms : "+s);

//      }

        //Program 9

//  public static void main(String[] args) {

//      System.out.println("Enter The Number Of Rows");

//      Scanner sc= new Scanner(System.in);

//      int row=sc.nextInt();

//      int i,j,p,q;

//         for(i=1;i<=row;i++)

//         {

//           if(i%2==0)

//           { p=1;q=0;}

//           else

//           { p=0;q=1;}

//            for(j=1;j<=i;j++)

//           if(j%2==0)

//              System.out.print(p);

//           else

//              System.out.print(q);

//           System.out.println();

//         }

//  }

        //Program 10

//  public static void main(String[] args) {

//      int num,r,sum=0,t;

//      Scanner sc=new Scanner(System.in);

//      System.out.println("Input a number: ");

//      num=sc.nextInt();

//      for(t=num;num!=0;num=num/10){

//           r=num % 10;

//           sum=sum\*10+r;

//      }

//  System.out.println("The number in reverse order is "+sum);

//  }

        //Program 11

//  public static void main(String[] args) {

//      long num;

//      int count = 0;

//      Scanner sc=new Scanner(System.in);

//      System.out.println("Enter any number: ");

//      num=sc.nextLong();

//      do

//      {

//          count++;

//          num /= 10;

//      } while(num != 0);

//      System.out.println("Total digits: "+count);

//  }

        //Program 12

//  public static void main(String[] args) {

//      Scanner sc=new Scanner(System.in);

//      int num, originalNum, remainder, n = 0;

//         float result = 0;

//         System.out.println("Enter an integer: ");

//         num=sc.nextInt();

//         originalNum = num;

//         for (originalNum = num; originalNum != 0; ++n) {

//             originalNum /= 10;

//         }

//         for (originalNum = num; originalNum != 0; originalNum /= 10) {

//             remainder = originalNum % 10;

//            result += Math.pow(remainder, n);

//         }

//         if ((int)result == num)

//          System.out.println(num+" is an Armstrong number.");

//         else

//          System.out.println(num+" is not an Armstrong number.");

//  }

        //Program 13

//  public static void main(String[] args) {

//       float xValue;

//       Scanner sc=new Scanner(System.in);

//          System.out.println("Enter the number ");

//          xValue=sc.nextFloat();

//          System.out.println(xValue+":");

//          while(xValue >= 0) {

//              System.out.print(xValue+" ");

//              xValue -= 0.5;}

//  }

        //Program 14

//  public static void main(String[] args) {

//      int i, j, rows;

//      Scanner sc = new Scanner(System.in);

//      System.out.print("Enter the number of rows you want to print: ");

//      rows = sc.nextInt();

//      for (i= 0; i<= rows-1; i++)

//      {

//      for (j=0; j<=i; j++)

//      {

//      System.out.print("\*"+ " ");

//      }

//      System.out.println("");

//      }

//      for (i=rows-1; i>=0; i--)

//      {

//      for(j=0; j <= i-1;j++)

//      {

//      System.out.print("\*"+ " ");

//      }

//      System.out.println("");

//      }

//      }

        //Pattern 15

//  public static void main(String[] args) {

//      char operator;

//      Double number1, number2, result;

//      Scanner input = new Scanner(System.in);

//      System.out.println("Choose an operator: +, -, \*, or /");

//      operator = input.next().charAt(0);

//      System.out.println("Enter first number");

//      number1 = input.nextDouble();

//      System.out.println("Enter second number");

//      number2 = input.nextDouble();

//      switch (operator) {

//        case '+':

//          result = number1 + number2;

//          System.out.println(number1 + " + " + number2 + " = " + result);

//          break;

//        case '-':

//          result = number1 - number2;

//          System.out.println(number1 + " - " + number2 + " = " + result);

//          break;

//        case '\*':

//          result = number1 \* number2;

//          System.out.println(number1 + " \* " + number2 + " = " + result);

//          break;

//        case '/':

//          result = number1 / number2;

//          System.out.println(number1 + " / " + number2 + " = " + result);

//          break;

//        default:

//          System.out.println("Invalid operator!");

//          break;

//      }

//  }

    }