**ASSIGNMENT\_4**

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**1.Write a program to print numbers from 1 to 10.?**

**program :**

package hello.java;

public class for\_one\_ten {

public static void main(String[] args) {

// **TODO** Auto-generated method stub

for(int i=1;i<=10;i++)

{

System.***out***.println(i);

}

}

}

**2.Write a program to calculate the sum of first 10 natural number.?**

**program :**

package hello.java;

public class sumOfNtrlTen {

public static void main(String[] args) {

// **TODO** Auto-generated method stub

int sum=0,i;

System.***out***.println("FIRST TEN NATURAL NUMBER ARE: ");

for(i=1;i<=10;i++) {

sum=sum+i;

System.***out***.println( +i);

}

System.***out***.println("\nSUM OF FIRST 10 NATURAL NUMBER IS " +sum);

}

}

**3.Write a program that prompts the user to input a positive integer. It should then print the multiplication table of that number program :**

package hello.java;

import java.util.Scanner;

public class userInputMultiple {

public static void main(String[] args) {

// **TODO** Auto-generated method stub

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

System.***out***.println("ENTER ANY NUMBER,IT SHOWS MULTIPLE OF THAT NUMBER=");

int num=sc.nextInt();

System.***out***.println("MULTIPLICATION TABLE OF "+num+" IS ");

for(int i=1;i<=10;i++) {

System.***out***.println(num+"\*"+i+"=" +(num\*i));

}

}

}

**4.Write a program to find the factorial value of any number entered through the keyboard.**

**program:**

package hello.java;

import java.util.Scanner;

public class factorial {

public static void main(String[] args) {

int fact=1;

System.***out***.println("ENTER ANY NUMBER FOR FACTORIAL CHECK:-");

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

int num=sc.nextInt();

for(int i=num;i>0;i--) {

fact=fact\*i;

}

System.***out***.println("FACTORIAL OF "+num+" IS " +fact);

}

}

**5.Two numbers are entered through the keyboard. Write a program to find the value of one number raised to the power of another. (Do not use Java built-in method) program:**

package hello.java;

import java.util.Scanner;

public class baseExponent {

public static void main(String[] args) {

// **TODO** Auto-generated method stub

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

System.***out***.println("ENTER BASE NUMBER: ");

int base=sc.nextInt();

System.***out***.println("ENTER EXPONENT NUMBER: ");

int exp=sc.nextInt();

int temp=base;

for(int i=1;i<exp;i++) {

temp=temp\*base;

}

System.***out***.println("THE VALUE OF "+base+" TO THE POWER "+exp+" IS " +temp);

}

}

**6.Write a program that prompts the user to input an integer and then outputs the number with the digits reversed. For example, if the input is 12345, the output should be 54321. program:**

package hello.java;

import java .util.Scanner;

public class reveseNum {

public static void main(String[] args) {

// **TODO** Auto-generated method stub

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

System.***out***.println("ENTER ANY NUMBER,IT REVERSE:- ");

int num=sc.nextInt();

while(num>0)

{

int temp=num%10;

num=num/10;

System.***out***.println(temp);

}

}

}

**7.Write a program that reads a set of integers, and then prints the sum of the even and odd integers program:**

package hello.java;

import java.util.Scanner;

public class evenOdd {

public static void main(String[] args) {

// **TODO** Auto-generated method stub

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

System.***out***.println("ENTER ANY NUMBER:-");

int num=sc.nextInt();

int evensm=0,oddsm=0;

for(int i=1;i<=num;i++) {

if(i%2==0)

{

evensm=evensm+i;

}

else {

oddsm=oddsm+i;

}

}

System.***out***.println("SUM OF TOTAL EVEN NUMBER: " +evensm);

System.***out***.println("SUM OF TOTAL ODD NUMBER: " +oddsm);

}

}

**8.Write a program that prompts the user to input a positive integer. It should then output a message indicating whether the number is a prime number. program:**

package hello.java;

import java.util.Scanner;

public class primeNo {

public static void main(String[] args) {

// **TODO** Auto-generated method stub

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

System.***out***.println("ENTER ANY NUMBER= ");

int n=sc.nextInt();

int temp=0;

for(int i=2;i<=n-1;i++)

{

if(n%i==0)

{

temp=temp+1;

}

}

if(temp>0)

{

System.***out***.println( n+ " IS NOT PRIME NUMBER");

}

else

{

System.***out***.println( n+ " IS PRIME NUMBER");

}

}

}

**9.Write a program to calculate HCF of Two given number.**

**program:**

package hello.java;

import java.util.Scanner;

public class hcf {

public static void main(String[] args) {

// **TODO** Auto-generated method stub

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

System.***out***.println("ENTER TWO NUMBER=");

int a=sc.nextInt();

int b=sc.nextInt();

int hcf=0;

for(int i=1;i<=a || i<=b;i++)

{

if(a%i==0 && b%i==0)

{

hcf=i;

}

}

System.***out***.println("HCF OF GIVEN TWO NUMBER IS " +hcf);

}

}

**10.Write a do-while loop that asks the user to enter two numbers. The numbers should be added and the sum displayed. The loop should ask the user whether he or she wishes to perform the operation again. If so, the loop should repeat; otherwise it should terminate.**

package hello.java;

import java.util.Scanner;

public class addTwoNo {

public static void main(String[] args) {

// **TODO** Auto-generated method stub

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

float a,b,sum=0;

char ch;

do

{

System.***out***.println("ENTER TWO NUMBER");

a=sc.nextFloat();

b=sc.nextFloat();

sum=a+b;

System.***out***.println("SUM OF TWO NUMBER IS " +sum);

System.***out***.println("DO U WANT TO CONTINUE THIS PROCESS:(IF YES PRESS y or Y OTHERWISE PRESS ANY KEY)");

ch=sc.next().charAt(0);

}

while(ch=='y' || ch=='Y');

}

}

**11.Write a program to enter the numbers till the user wants and at the end it should display the count of positive, negative and zeros entered. program:**

package hello.java;

import java.util.Scanner;

public class positiveNegativeZero {

public static void main(String[] args) {

// **TODO** Auto-generated method stub

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

int countP=0,countz=0,countN=0;

char ch;

do

{

System.***out***.println("ENTER NUMBER");

int a=sc.nextInt();

if(a>0)

countP++;

else if(a<0)

countN++;

else

countz++;

System.***out***.println("POSITIVE NUMBER IS " +countP);

System.***out***.println("NEGATIVE NUMBER IS " +countN);

System.***out***.println("ZERO NUMBER IS " +countz);

System.***out***.println("DO YOU WANT TO CONTINUE:PRESS Y OR y:OTHERWISE PRESS ANY KEY TO EXIT.....");

ch=sc.next().charAt(0);

}

while(ch=='Y' || ch=='y');

}

}

**12.Write a program to enter the numbers till the user wants and at the end the program should display the largest and smallest numbers entered. program:**

package hello.java;

import java.util.Scanner;

public class minMax {

public static void main(String[] args) {

// **TODO** Auto-generated method stub

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

int num;

int largestNum=0,smallestNum=0;

char ch;

do

{

System.***out***.println("ENTER NUMBER= ");

num=sc.nextInt();

if(num>largestNum) {

largestNum=num;

}

else if(num<smallestNum)

smallestNum=num;

System.***out***.println("LARGEST NUMBER IS " +largestNum);

System.***out***.println("SMALLEST NUMBER IS " +smallestNum);

System.***out***.println(" PRESS Y OR y TO CONTINUE......");

ch=sc.next().charAt(0);

}while(ch=='y' || ch=='Y');

}

}