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\*\*\*\*\*\*\* Java Assignment Section-1 **\*\*\*\*\*\*\*\*\* Submitted By : 007\_ Monali Aher**

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1. Get yourself acquainted with java environment. Find out "javac" & "java" in your JDK box.

2. Understand the system variable : PATH

3. Write a Java program to print 'Hello' on screen and then print your name on a separate line.

Ans:

class akki{

public static void main(String args[]){

System.out.println("Hello");

System.out.println("MONA");

}

}

4. Write a Java program to print 'Hello' on screen and then print your name on the same line.

Ans:

class akki{

public static void main(String args[]){

System.out.println("Hello"+" "+"MONA");

}

}

5. Write a program to take "name" as command line argument and print "Hello "+<name> on the console?

Ans:

class akki{

public static void main(String args[]){

System.out.println("Hello"+" "+args[0]);

}

}

>> java MyFirstJavaProgram MONA

Hello MONA

6. Write a java program to take three numbers from command line and print the average ?

Ans:

class akki{

public static void main(String args[]){

int a=Intger.parseInt(args[0]);

int b=Intger.parseInt(args[1]);

int c=Intger.parseInt(args[2]);

inc d= (a+b+c)/3;

System.out.println(d);

}

}

>> java Avg 5 6 4

Average=5

7. Write a java program to calculate simple interest, get the required inputs from command line ?

Hint : SimpleInterest = (principal \* rate \* years)/100.0

Ans:

class akki{

public static void main(String args[]){

double a=Double.parseDouble(args[0]);

double b=Double.parseDouble(args[1]);

double c=Double.parseDouble(args[2]);

double d= (a\*b\*c)/100;

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

}

}

8. Write a java program to convert temperature from celsius to fahrenheit, get input from command line ?

Hint : F = (9\*C/5) + 32

Ans:

class akki{

public static void main(String args[]){

double c=Double.parseDouble(args[0]);

double F=(9\*c/5)+32;

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

}

}

9. Write a java program to print following face(pattern) on screen -

+"""""+

[| o o |]

| ^ |

| '-' |

+-----+

Ans:

public class akki {

public static void main (String[] args) {

System.out.println(" +\"\"\"\"\"+");

System.out.println("[| o o |]");

System.out.println(" | ^ | ");

System.out.println(" | '-' | ");

System.out.println(" +-----+ ");

}

}

10. Write a Java program to print the sum (addition), multiply, subtract, divide and remainder of two numbers received from command line?

Ans:

public static void main(String args[]){

int a=Integer.parseInt(args[0]);

int b=Integer.parseInt(args[1]);

int add=a+b;

int sub=a-b;

int mul=a\*b;

double remain=a%b;

System.out.println("addition="+add+" subtract="+sub+" multiplicatrion="+mul+" remainder="+remain);

}

}

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\*\*\*\*\*\*\* Java Assignment Section-2 \*\*\*\*\*\*\*\*\*

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1. Write a program to take "name" from user using Scanner and greet as shown below-

Ans:

import java.util.\*;

class akki{

public static void main(String[] args) {

Scanner sc=new Scanner(System.in);

System.out.println("enter name:");

String name=sc.next();

System.out.println("hello "+name);

sc.close();

}

}

>> Enter your name : Raj

Hello Raj , Welcome to Java World.

2. Write a java program to take 5 numbers using Scanner and print the average ?

Ans:

import java.util.\*;

class akki{

public static void main(String[] args) {

Scanner sc=new Scanner(System.in);

System.out.println("enter 5 no:");

int a=sc.nextInt();

int b=sc.nextInt();

int c=sc.nextInt();

int d=sc.nextInt();

int e=sc.nextInt();

float avg=(float)(a+b+c+d+e)/5;

System.out.println("average : "+avg);

sc.close();

}

}

>> Enter 5 numbers : 1 2 3 4 5

Average = 3

>> Enter 5 numbers : 2 3 5 7 9

Average = 5.2

3. Write a java program to calculate simple interest, get the required inputs

from Scanner ?

Hint : SI = (principal \* rate \* years)/100

Ans:

import java.util.\*;

class akki{

public static void main(String[] args) {

Scanner sc=new Scanner(System.in);

System.out.println("enter principle:");

int p=sc.nextInt();

System.out.println("rate:");

float r=sc.nextInt();

System.out.println("duration:");

int y=sc.nextInt();

float si=(p\*r\*y)/100;

System.out.println("SI : "+si);

sc.close();

}

}

4. Write a program to calculate the monthly in hand salary of an employee :

take input for basic salary,

HRA is 40% of basic salary,

PF amount to be deducted is 12% of basic,

Medical allowance is Rs 1200 per month,

Traveling allowance is Rs 800 per month,

Professional tax to be deducted is Rs 300.

Ans:

import java.util.\*;

class akki{

public static void main(String[] args) {

Scanner sc=new Scanner(System.in);

System.out.println("enter basic salary:");

double salary=sc.nextDouble();

double HRA=((40\*salary)/100);

System.out.println("HRA: "+HRA);

double PF=((12\*salary)/100);

System.out.println("PF: "+PF);

double InHand=(salary+HRA+2000-PF-300);

System.out.println("InHand salary: "+InHand);

sc.close();

}

}

5. Write a Java program to print the area and perimeter of a rectangle. Take required input using Scanner?

Ans:

import java.util.\*;

class akki{

public static void main(String[] args) {

Scanner sc=new Scanner(System.in);

System.out.println("Width:");

int width=sc.nextInt();

System.out.println("hight:");

int height=sc.nextInt();

double area=(width\*height);

double perimeter=2\*(height+width);

System.out.println("Area: "+area);

System.out.println("Perimeter: "+perimeter);

sc.close();

}

}

6. Write a Java program to print the area and perimeter of a circle. Take required input using Scanner?

Hint :

import java.util.\*;

class akki{

public static void main(String[] args) {

Scanner sc=new Scanner(System.in);

System.out.println("Radius:");

int radius=sc.nextInt();

double area=Math.PI\*radius\*radius;

double perimeter=2\*Math.PI\*radius;

System.out.println("Area: "+area);

System.out.println("Perimeter: "+perimeter);

sc.close();

}

}

7. Write a java program to calculate compound interest, get the required inputs

using Scanner ?

Ans:

import java.util.\*;

class akki{

public static void main(String[] args) {

Scanner sc=new Scanner(System.in);

System.out.println("enter principle:");

int p=sc.nextInt();

System.out.println("rate:");

float r=sc.nextInt();

System.out.println("duration:");

float t=sc.nextInt();

double ci = (p \* (Math.pow((1 + r/100), t))) - p;

System.out.println("CI: "+ci);

sc.close();

}

}

8. Write a java program to read roll no, name and marks of three subjects and calculate the total and percentage.

Test Data :

Input the Roll Number of the student :784

Input the Name of the Student :James

Input the marks of Physics, Chemistry and Computer Application : 70 80 90

Expected Output :

Roll No : 784

Name of Student : James

Marks in Physics : 70

Marks in Chemistry : 80

Marks in Computer Application : 90

Total Marks = 240

Percentage = 80.00

Ans:

import java.util.\*;

class akki{

public static void main(String[] args) {

Scanner sc=new Scanner(System.in);

System.out.println("enter Name:");

String name=sc.nextLine();

System.out.println("enter Phy marks:");

int phy=sc.nextInt();

System.out.println("enter chem marks:");

int chem=sc.nextInt();

System.out.println("enter CA marks:");

int CA=sc.nextInt();

System.out.println("Name: "+name);

System.out.println("Marks in Physics: "+phy);

System.out.println("Marks in Chemistry: "+chem);

System.out.println("Marks in CA: "+CA);

System.out.println("Total Marks: "+(phy+chem+CA));

System.out.println("Percentage: "+((phy+chem+CA)\*100/300));

sc.close();

}

}

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\*\*\*\*\*\*\* Java Assignment Section-3 \*\*\*\*\*\*\*\*\*

---------------------------------------------

1. Write a java program to swap two numbers stored in local variables?

Ans:

public class akki{

public static void main(String[] args) {

int a=10,b=20;

System.out.println("before swap :"+" a:"+a+" b:"+b);

int temp=a;

a=b;

b=temp;

System.out.println("before swap :"+" a:"+a+" b:"+b);

}

}

2. Write a java program to swap two numbers stored in local variables without using additional variable?

Ans:

public class akki{

public static void main(String[] args) {

int a=10,b=20;

System.out.println("before swap :"+" a:"+a+" b:"+b);

a=a+b-a;

b=a+b-b;

System.out.println("before swap :"+" a:"+a+" b:"+b);

}

}

3. Write a java program to accept two integers and check whether they are equal or not?

Ans:

import java.util.Scanner;

public class akki{

public static void main(String[] args) {

Scanner sc=new Scanner(System.in);

System.out.println("a:");

int a=sc.nextInt();

System.out.println("b:");

int b=sc.nextInt();

if(a==b)

System.out.println("equals");

else

System.out.println("not equals");

}

}

>> Enter two integers : 15 15

first and second number are equal.

4. Write a java program to check whether a given number is positive or negative?

Ans:

import java.util.Scanner;

public class akki{

public static void main(String[] args) {

Scanner sc=new Scanner(System.in);

System.out.println("Enter num:");

int num=sc.nextInt();

if(num>0)

System.out.println("positive");

else

System.out.println("negative");

sc.close();

}

}

5. Write a java program to check whether a given number is even or odd?

Ans:

import java.util.Scanner;

public class akki{

public static void main(String[] args) {

Scanner sc=new Scanner(System.in);

System.out.println("Enter num:");

int num=sc.nextInt();

if(num%2==0)

System.out.println("Even");

else

System.out.println("Odd");

sc.close();

}

}

6. Write a java program to read age of a person, check if he/she is eligible to cast vote or not?

Ans:

import java.util.Scanner;

public class akki{

public static void main(String[] args) {

Scanner sc=new Scanner(System.in);

System.out.println("Enter Age:");

int Age=sc.nextInt();

if(Age>17)

System.out.println("eligible to cast vote");

else

System.out.println("not eligible to cast the vote");

sc.close();

}

}

7. Write a java program to read a number entered by user. Print -1 if this number is negative, 1 if it is positive, 0 if it is neither positive nor negative?

Ans:

import java.util.Scanner;

public class akki{

public static void main(String[] args) {

Scanner sc=new Scanner(System.in);

System.out.println("Enter Num:");

int Num=sc.nextInt();

if(Num>0)

System.out.println("1");

else if(Num==0)

System.out.println("0");

else

System.out.println("-1");

sc.close();

}

}

8. Write a program to find the largest of two numbers?

Ans:

import java.util.Scanner;

public class akki{

public static void main(String[] args) {

Scanner sc=new Scanner(System.in);

System.out.println("Enter Num1:");

int Num1=sc.nextInt();

System.out.println("Enter Num2:");

int Num2=sc.nextInt();

if(Num1>Num2)

System.out.println(Num1+" is greater");

else

System.out.println(Num2+" is greater");

sc.close();

}

}

9. Write a program to find the largest of three numbers?

Ans:

import java.util.Scanner;

public class assignment2{

public static void main(String[] args) {

Scanner sc=new Scanner(System.in);

System.out.println("Enter Num1:");

int Num1=sc.nextInt();

System.out.println("Enter Num2:");

int Num2=sc.nextInt();

System.out.println("Enter Num3:");

int Num3=sc.nextInt();

int temp=Num1>Num2?Num1:Num2;

int c=Num3>temp?Num3:temp;

System.out.println(c+" is greater");

sc.close();

}

}

10. Write a program to find the smallest of five numbers?

Ans:

import java.util.Scanner;

public class assignment2{

public static void main(String[] args) {

Scanner sc=new Scanner(System.in);

System.out.println("Enter Num1:");

int Num1=sc.nextInt();

System.out.println("Enter Num2:");

int Num2=sc.nextInt();

System.out.println("Enter Num3:");

int Num3=sc.nextInt();

System.out.println("Enter Num4:");

int Num4=sc.nextInt();

System.out.println("Enter Num5:");

int Num5=sc.nextInt();

int one=Num1<Num2?Num1:Num2;

int two=Num3<one?Num3:one;

int three=Num4<two?Num4:two;

int four=Num5<three?Num5:three;

System.out.println(four+" is smaller");

sc.close();

}

}

11. Write a java program to read roll no, name and marks of three subjects and calculate the total, percentage and division.

Ans:

import java.util.\*;

class akki{

public static void main(String[] args) {

Scanner sc=new Scanner(System.in);

System.out.println("enter name:");

String name=sc.nextLine();

System.out.println("enter RollNo:");

int rollNo=sc.nextInt();

System.out.println("enter Subjects Marks physics, Chem, CA:");

int arr[]=new int[3];

for(int i=0;i<3;i++){

arr[i]=sc.nextInt();

}

System.out.println("Name: "+name);

System.out.println("RollNo: "+rollNo);

double percentage= (arr[0]+arr[1]+arr[2])/3;

System.out.println("Percentage: "+percentage);

System.out.println("Division: ");

if(percentage>65){

System.out.println("first class with distinction");

}

else if(percentage>=60 && percentage<65){

System.out.println("first class ");

}

else if(percentage>=55 && percentage<60){

System.out.println("second class ");

}

else if(percentage>=50 && percentage<55){

System.out.println("second class ");

}

else if(percentage>=35 && percentage<50){

System.out.println("pass class ");

}

else

System.out.println("fail");

sc.close();

}

}

-----

Test Data :

Input the Roll Number of the student :784

Input the Name of the Student :James

Input the marks of Physics, Chemistry and Computer Application : 70 80 90

Expected Output :

Roll No : 784

Name of Student : James

Marks in Physics : 70

Marks in Chemistry : 80

Marks in Computer Application : 90

Total Marks = 240

Percentage = 80.00

Division = First

12. Write a java program to read temperature in centigrade and display a suitable message according to temperature state below :

Temp < 0 then Freezing weather

Temp 0-10 then Very Cold weather

Temp 10-20 then Cold weather

Temp 20-30 then Normal in Temp

Temp 30-40 then Its Hot

Temp >=40 then Its Very Hot

Ans:

import java.util.\*;

class akki{

public static void main(String[] args) {

Scanner sc=new Scanner(System.in);

System.out.println("enter temperature:");

int temp=sc.nextInt();

if(temp>0 && temp<10){

System.out.println("Very Cold weather");

}

else if(temp>10 && temp<=20){

System.out.println("Cold weather ");

}

else if(temp>20 && temp<=30){

System.out.println("Normal in Temp");

}

else if(temp>30 && temp<=40){

System.out.println("Its Hot ");

}

else{

System.out.println("Its Very Hot");

}

sc.close();

}

}

Test Data :

42

Expected Output :

Its very hot.

13. Write a Java program to print the ascii value of a given character?

Ans:

import java.util.\*;

class akki{

public static void main(String[] args) {

Scanner sc=new Scanner(System.in);

System.out.println("Enter Char:");

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

int ascii=ch;

System.out.println("ascii of "+ch+" = "+ascii);

sc.close();

}

}

14. Write a Java program that takes a year from user and print whether that year is a leap year or not.

Hint : a leap year is divisible by 4 and (not div by 100 or if div by both 100 &400)

Ans:

import java.util.\*;

class akki{

public static void main(String[] args) {

Scanner sc=new Scanner(System.in);

System.out.println("Enter year");

int year=sc.nextInt();

if(year%4==0 && year%100!=0)

System.out.println("Leap year");

else if(year%100==0 && year%400==0)

System.out.println("Leap year");

else

System.out.println("Not Leap year");

sc.close();

}

}

15. Write a java program to check if a given number is divisble by 3 and 5 ?

Ans:

import java.util.\*;

class akki{

public static void main(String[] args) {

Scanner sc=new Scanner(System.in);

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

int num=sc.nextInt();

if(num%3==0 && num%5==0 ){

System.out.println(num+" is divisible by 3 & 5");

}

else if(num%3==0){

System.out.println(num+" is divisible by 3 but not by 5");

}

else if(num%5==0){

System.out.println(num+" is divisible by 5 but not by 3");

}

else

System.out.println(num+" not divisible by both");

sc.close();

}

}

16. Write a java program to ask user to enter test marks of three subjects such as Phy, Chem, Math. Max marks for each subject is 100. Now calculate average of marks. Display following message based on average marks calculated -

Ans:

import java.util.\*;

class akki{

public static void main(String[] args) {

Scanner sc=new Scanner(System.in);

System.out.println("Subjects Marks physics, Chem, Math:");

int arr[]=new int[3];

for(int i=0;i<3;i++){

arr[i]=sc.nextInt();

}

double percentage= (arr[0]+arr[1]+arr[2])/3;

System.out.println("Percentage: "+percentage);

System.out.println("Division: ");

if(percentage<30){

System.out.println("you are failed");

}

else if(percentage>=30 && percentage<60){

System.out.println("passed with Second division");

}

else if(percentage>=60 && percentage<80){

System.out.println("passed wirh Fiear division ");

}

else

System.out.println("passed with first class with distinction");

sc.close();

}

}

avg < 30 : You are failed.

avg >= 30 but < 60 : You passed with Second division

avg >=60 but < 80 : You passed wirh Fiear division

avg>=80 : You passed with First class distinction

17. Write a java program to ask user to enter a number between 1 and 7, print week day as per below mappings -

(1 - Monday, 2-Tuesday, .... 7-Sunday)

Ans:

import java.util.Scanner;

public class assignment2{

public static void main(String[] args) {

Scanner sc=new Scanner(System.in);

System.out.println("Enter Num:");

int Num=sc.nextInt();

switch(Num){

case 1: System.out.println("Monday");

break;

case 2:System.out.println("tuesday");

break;

case 3:System.out.println("Wednsday");

break;

case 4:System.out.println("Thurday");

break;

case 5:System.out.println("Friday");

break;

case 6:System.out.println("Satday");

break;

case 7:System.out.println("Sunday");

break;

default:System.out.println("Invalid Input");

}

sc.close();

}

}

18. Write a Java program to check if character entered by user is a vowel, consonant or other character?

Ans:

import java.util.Scanner;

class akki{

public static void main(String[] args) {

Scanner sc=new Scanner(System.in);

System.out.println("Enter char:");

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

if(ch=='a'||ch=='e'||ch=='i'||ch=='o'||ch=='u'||ch=='A'||ch=='E'||ch=='I'||ch=='O'||ch=='U'){

System.out.println(ch+" is Vowel");

}

else if(ch>='a'&& ch<='z' || ch>='A' && ch<='Z'){

System.out.println(ch+" is Consonant");

}

else

System.out.println(ch+ "not Char");

sc.close();

}

}

19. Write a java program to ask user to enter month number (1-12) , print month name as per below mappings -

(1 - January, 2-Feburary ... 12- December)

Ans:

import java.util.Scanner;

public class assignment2{

public static void main(String[] args) {

Scanner sc=new Scanner(System.in);

System.out.println("Enter Month:");

int Num=sc.nextInt();

switch(Num){

case 1: System.out.println("January");

break;

case 2:System.out.println("Febuary");

break;

case 3:System.out.println("March");

break;

case 4:System.out.println("April");

break;

case 5:System.out.println("May");

break;

case 6:System.out.println("June");

break;

case 7:System.out.println("July");

break;

case 8:System.out.println("Augast");

break;

case 9:System.out.println("September");

break;

case 10:System.out.println("Octomber");

break;

case 11:System.out.println("November");

break;

case 12:System.out.println("December");

break;

default:System.out.println("Invalid Input");

}

sc.close();

}

}

20. Write a program to read 5 numbers from user, print the second highest number?

Ans:

import java.util.\*;

class akki{

public static void main(String[] args) {

Scanner sc=new Scanner(System.in);

int max=0;

int arr[]=new int [5];

System.out.println("Enter 5 numbers:");

for(int i=0;i<5;i++)

{

arr[i]=sc.nextInt();

}

Arrays.sort(arr);

System.out.println("2nd highest no: "+arr[5-2]);

sc.close();

}

}

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\*\*\*\*\*\*\* Java Assignment Section-4 \*\*\*\*\*\*\*\*\*

---------------------------------------------

1. Write a java program to print first 10 natural numbers and their sum?

Ans:

class akki{

public static void main(String[] args) {

int num=10,i,sum=0;

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

{

sum=sum+i;

}

System.out.println("Sum of 1st 10 natural no.: "+sum);

}

}

2. Write a java program to read 10 numbers from keyboard and find their sum and average?

Ans:

import java.util.Scanner;

class akki{

public static void main(String[] args) {

Scanner sc=new Scanner(System.in);

int sum=0;

System.out.println("enter 10 numbers:");

for(int i=0;i<10;i++){

int num=sc.nextInt();

sum=sum+num;

}

System.out.println("Sum of 10 no.: "+sum);

}

}

3. Write a program in java to display the multiplication table of a given integer?

Ans:

import java.util.Scanner;

class akki{

public static void main(String[] args) {

Scanner sc=new Scanner(System.in);

System.out.println("enter number:");

int num=sc.nextInt();

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

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

}

}

}

>> Enter the number : 5

5 X 1 = 5

5 X 2 = 10

.

.

5 X 10 = 50

4. Write a program to calculate the factorial of the given number?

Ans:

5. Write a program to display the pattern like right angle triangle using an asterisk as shown below:

\*

\*\*

\*\*\*

\*\*\*\*

Ans:

import java.util.Scanner;

class akki{

public static void main(String[] args) {

Scanner sc=new Scanner(System.in);

System.out.println("no. of rows:");

int row=sc.nextInt();

for(int i=0;i<row;i++){

for(int j=0;j<=i;j++){

System.out.print("\*");

}

System.out.println();

}

}

}

6. Write a program to display the pattern like right angle triangle with a number as shown below :

1

12

123

1234

Ans:

import java.util.Scanner;

class akki{

public static void main(String[] args) {

Scanner sc=new Scanner(System.in);

System.out.println("no. of rows:");

int row=sc.nextInt();

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

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

System.out.print(j);

}

System.out.println();

}

}

}

7. Write a program to make such a pattern like right angle triangle with a number which will repeat a number in a row, as shown below :

1

22

333

4444

Ans:

import java.util.Scanner;

class akki{

public static void main(String[] args) {

Scanner sc=new Scanner(System.in);

System.out.println("no. of rows:");

int row=sc.nextInt();

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

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

System.out.print(i);

}

System.out.println();

}

}

}

8. Write a program to make such a pattern like right angle triangle with number increased by 1 as shown below :

1

2 3

4 5 6

7 8 9 10

Ans:

import java.util.Scanner;

class akki{

public static void main(String[] args) {

Scanner sc=new Scanner(System.in);

int n=1;

System.out.println("no. of rows:");

int row=sc.nextInt();

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

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

System.out.print(n+" ");

n++;

}

System.out.println();

}

}

}

9. Write a program to make such a pattern like a pyramid with an asterisk, as show below :

\*

\* \*

\* \* \*

\* \* \* \*

Ans:

public class assignment2{

public static void main(String[] args) {

int i,j,row=4;

for(i=0;i<row;i++)

{

for(j=row-i;j>1;j--)//for space

{

System.out.print(" ");

}

for(j=0;j<=i;j++)

{

System.out.print("\* ");

}

System.out.println();

}

}

}

10. Write a program to make such a pattern like a pyramid with a number which will repeat the number in the same row as shown below :

1

2 2

3 3 3

4 4 4 4

Ans:

import java.util.Scanner;

class akki{

public static void main(String[] args) {

Scanner sc=new Scanner(System.in);

System.out.println("no. of rows:");

int row=sc.nextInt();

int i,j,n=1;

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

for(j=row-i;j>0;j--){

System.out.print(" ");

}

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

System.out.print(n+" ");

}

n++;

System.out.println("");

}

}

}

11. Write a program to check whether a given number is a perfect number or not?

Ans:

import java.util.Scanner;

class akki{

public static void main(String[] args) {

Scanner sc=new Scanner(System.in);

System.out.println("enter no.:");

int Num=sc.nextInt();

int sum=0;

for(int i=1;i<=Num/2;i++)

{

if(Num%i==0)

{

sum=sum+i;

}

}

if(sum==Num && Num>0)

{

System.out.println(Num+" perfect no.");

}

else

System.out.println(Num+" not perfect no.");

}

}

Note :

Defintion of Perfect Number : sum of all divisor of the number is equal to the number itself.

eg. Number = 6 is perfrect because

All positive divisor = 1 2 3, their sum=6

12. Write a program to check whether a given number is an armstrong number or not?

Ans:

import java.util.Scanner;

class akki{

public static void main(String[] args) {

Scanner sc=new Scanner(System.in);

System.out.println("enter no.:");

int Num=sc.nextInt();

int sum=0,a,temp=Num;

while(Num>0){

a=Num%10;

Num=Num/10;

sum=sum+(a\*a\*a);

}

if(temp==sum)

{

System.out.println("armstrong ");

}

else

System.out.println("not armstrong");

}

}

Note : When the sum of the cube of the individual digits of a number is equal to that number, the number is called Armstrong number. For Example 153 is an Armstrong number because 153 = 1^3 +5^3 + 3^3.

13. Write a program to determine whether a given number is prime or not?

Ans:

import java.util.Scanner;

class akki{

public static void main(String[] args) {

Scanner sc=new Scanner(System.in);

System.out.println("enter no.:");

int Num=sc.nextInt();

boolean flag=false;

if(Num==0 || Num==1)

{

System.out.println("not prime");

}

else

for(int i=2;i<=Num/2;i++)

{

if(Num%i==0){

System.out.println("not prime");

flag=true;

break;

}

}

if(flag==false){

System.out.println("prime");

}

sc.close();

}

}

14. Write a program to display the first n terms of Fibonacci series.

Ans:

import java.util.Scanner;

class akki{

public static void main(String[] args) {

Scanner sc=new Scanner(System.in);

System.out.println("enter terms.:");

int terms=sc.nextInt();

int first=0,second=1,sum=0;

System.out.print(first+" "+second);

for(int i=2;i<terms;++i){

sum=first+second;

System.out.print(" "+sum);

first=second;

second=sum;

}

sc.close();

}

}

Fibonacci series 0 1 2 3 5 8 13 .....

Test Data :

Input number of terms to display : 10

Expected Output :

Here is the Fibonacci series upto to 10 terms :

0 1 1 2 3 5 8 13 21 34

15. Write a program to display the number in reverse order.

Ans:

import java.util.Scanner;

class akki{

public static void main(String[] args) {

Scanner sc=new Scanner(System.in);

System.out.println("enter Num.:");

int Num=sc.nextInt();

int rev=0;

while(Num>0)

{

int rem=Num%10;

Num=Num/10;

rev=rev\*10+rem;

}

System.out.println(rev);

sc.close();

}

}

16. Write a program to check whether a number is a palindrome or not.

Note: If reverse of a number is same as that of number , then it is called palindrome. eg. 11, 151, 121,

Ans:

import java.util.Scanner;

class akki{

public static void main(String[] args) {

Scanner sc=new Scanner(System.in);

System.out.println("enter Num.:");

int Num=sc.nextInt();

int rev=0;

int temp=Num;

while(Num>0)

{

int rem=Num%10;

Num=Num/10;

rev=rev\*10+rem;

}

if(temp==rev){

System.out.println("palindrom");

}

else

System.out.println("not palindrom");

sc.close();

}

}

17. Write a program to check whether a given number is a Strong Number or not?

Note : If sum of factorial of each digit of a number is equal to that number, then that number is called strong number.

Ans:

18. Write a program to find the length of a string without using the library function?

Ans:

19. Write a program to print all numbers between 1 & 100 which are divisible by 3 and 5 both?

Ans:

class akki{

public static void main(String []args)

{

int N = 100;

for (int i= 0; i < N; i++)

{

if (i % 3 == 0 && i% 5 == 0)

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

}

}

}