1.program Armstrong

import java.util.\*;

public class arm

{

public static void main(String[] args)

{

int n, rev=0, num, rem;

Scanner sc=new Scanner(System.in);

System.out.print("Enter number: ");

n=sc.nextInt();

num=n;

while (num>0)

{

rem=num%10;

rev=rev+(rem\*rem\*rem);

num=num/10;

}

if(rev==n)

{

System.out.println("It is an Armstrong number.");

}

else

{

System.out.println("It is not an Armstrong number.");

}

}

}

2.program armstrong1

import java.util.\*;

public class arms

{

public static void main(String[] args)

{

System.out.print("Armstrong numbers from 100 to 999 are: ");

for(int i=100; i<1000; i++)

{

int n=i, rev=0, rem=0;

while(n>0)

{

rem=n%10;

rev=rev+(rem\*rem\*rem);

n=n/10;

}

if(rev==i)

{

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

}

}

}

}

3.program simple and compound interest

import java.util .\*;

class simcom

{

public static void main (String argu[ ])

{

double pr, rate, t, sim,com;

Scanner sc=new Scanner (System. in);

System.out.println("Enter the amount:");

pr=sc.nextDouble();

System. out. println("Enter the No.of years:");

t=sc.nextDouble();

System. out. println("Enter the Rate of interest");

rate=sc.nextDouble();

sim=(pr \* t \* rate)/100;

com=pr \* Math.pow(1.0+rate/100.0,t) - pr;

System.out.println("Simple Interest="+sim);

System.out. println("Compound Interest="+com);

}

}

4.program marks

import java.util .\*;

public class mks

{

public static void main (String args[ ])

{

Scanner sc=new Scanner (System. in);

float sub1,sub2,sub3;

System.out.println("Enter First Subject marks:");

sub1=sc.nextInt();

System.out.println("Enter Second Subject marks:");

sub2=sc.nextInt();

System.out.println("Enter Third Subject marks:");

sub3=sc.nextInt();

if(sub1>60&& sub2>60 && sub3>60)

{

System.out.println("Passes");

}

else if((sub1>60 && sub2>60) || (sub2>60 && sub3>60) || (sub1>60 && sub3>60))

{

System.out.println("Promoted");

}

else

{

System.out.println("Failed");

}

}

}

5.program income tax

import java.util.\*;

class tax

{

public static void main(String args[])

{

double income,tax=0;

Scanner sc=new Scanner(System.in);

System.out.print("Enter CTC:Rs.");

income=sc.nextDouble();

if(income<=180000)

{

System.out.println("No Tax");

}

else if(income<=300000)

{

tax=income\*0.10;

System.out.println("Tax:Rs."+tax);

}

else if(income<=500000)

{

tax=income\*0.20;

System.out.println("Tax:Rs."+tax);

}

else if(income<=1000000)

{

tax=income\*0.30;

System.out.println("Tax:Rs."+tax);

}

else

{

System.out.println("Enter valid CTC");

}

}

}

6.program CUI

import java.util.\*;

public class cui

{

public static void main(String[] args)

{

Scanner sc=new Scanner(System.in);

int totalAttempts=3, temp=totalAttempts;

String uname="Glenn";

String pass="password";

System.out.println("You Have total "+totalAttempts+" Attempts");

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

{

System.out.println("Enter Your UserName : ");

String Iname=sc.nextLine();

System.out.println("Enter Your Password: ");

String pass1=sc.nextLine();

if(uname.equals (lname) && pass.equals(pass1))

{

System.out.println("Welcome "+lname+" you have successfully logged In ");

break;

}

else

{

System.out.println("Incorrect Login");

totalAttempts--;

System.out.println("You have now "+totalAttempts+" Attempts");

}

if (totalAttempts == 0)

{

System.out.println("Maximum number of attempts exceeded");

}

}

}

}

7.program array

import java.util.\*;

public class array

{

public static void main(String[] args)

{

Scanner sc = new Scanner(System.in);

int i, j=0, flag=0, x;

System.out.println("Enter array elements: ");

int Arr[] = new int[15];

for(i = 0; i < Arr.Length; i++)

Arr[i] = sc.nextInt();

System.out.println("Enter the element you want to find: ");

x = sc.nextInt();

for(j = 0; j < Arr.Length; j++)

{

if(Arr[j] == x)

{

flag = 1;

break;

}

else

{

flag = 0;

}

}

if(flag == 1)

{

System.out.println("Element found at position: "+(j + 1));

}

else

{

System.out.println("Element not found");

}

}

}

8.progarm bubble sort

class Demo {

static void bubbleSort(int[] arr) {

int n = arr.length;

int temp = 0;

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

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

if(arr[j-1] > arr[j]){

//swap elements

temp = arr[j-1];

arr[j-1] = arr[j];

arr[j] = temp;

}

}

}

}

public static void main(String[] args) {

int arr[] ={5,12,14,6,78,19,1,23,26,35,37,7,52,86,47};

System.out.println("Array Before Bubble Sort");

for(int i=0; i < arr.length; i++){

System.out.print(arr[i] + " ");

}

System.out.println();

bubbleSort(arr);//sorting array elements using bubble sort

System.out.println("Array After Bubble Sort");

for(int i=0; i < arr.length; i++){

System.out.print(arr[i] + " ");

}

}

}

9.