#1

```
public class PROGRAM1 {

	public static void main(String[] args) {
		// TODO Auto-generated method stub
		System.out.println("HELLO WORLD");
		System.out.println("HELLO AGAIN");
		System.out.println("I LIKE TYPING");
		System.out.println("THIS IS INTERESTING");
		System.out.println("THIS IS FUN");
		System.out.println("YAY! PRINTING");
		System.out.println("I \"SAID\" NOT TOUCH THIS");


	}

}
```

#2

```
public class PROGRAM2 {

	public static void main(String[] args) {
		// TODO Auto-generated method stub
		System.out.println("+----------------------------------+");
		System.out.println("|                                  ####|");
	    System.out.println("|                                 ####|");
	    System.out.println("|                                 ####|");
	    System.out.println("|                                 ####|");
	    System.out.println("|   YAGYA SRIVASTAVA                 |");
		System.out.println("|   K-5/21,SIROMAN NAGAR,JAMSHEDPUR|");
	   System.out.println("+----------------------------------+");




	}

}
```

#3

```
public class PROGRAM3 {

	public static void main(String[] args) {
		// TODO Auto-generated method stub
		System.out.println("Y        Y"      +
"SSSSSSSSSSSSS");
		System.out.println(" Y      Y"       +       "S");
		System.out.println("  Y    Y"        +       "S");
		System.out.println("   Y  Y"         +       "S");
```

```
            System.out.println("    Y"           +       "s");
            System.out.println("    Y"           +
"SSSSSSSSSSSSS");
          System.out.println("    Y"           +
"S");
          System.out.println("    Y"           +
"S");
          System.out.println("    Y"           +
"S");
          System.out.println("    Y"           +
"S");
          System.out.println("    Y            +
SSSSSSSSSSSSSS");

      }

}
--------------------------------------------------------------------------
-----------------------------------------------------
#1

public class prograM1 {

      public static void main(String[] args) {
            // TODO Auto-generated method stub
            int year =2016;
            int regdno =1641018350;
            System.out.println("my regdno. is="+regdno);
            System.out.println("i have taken admission in year="+year);




      }

}

#2

public class ASS2program2 {

      public static void main(String[] args) {
            // TODO Auto-generated method stub
            int a =113;
            double b =2.71828;
            System.out.println("This is room # "+a);
            System.out.println("e is close to "+b);

      }

}
#3

public class prgrm3 {
```

```
	public static void main(String[] args) {
		// TODO Auto-generated method stub
		int a =1;
		int b =10;
		int c =a;
		 a =b;
		 b =c;
		System.out.println("a ="+a);
		System.out.println("b ="+b);


	}

}

#4

public class prgrm4 {

	public static void main(String[] args) {
		// TODO Auto-generated method stub
		int a =1;
		int b =10;
		a =a+b;
	    b =a-b;
	    a =a-b;
		  System.out.println("a ="+a);
		  System.out.println("b ="+b);


	}

}
#5
import java.util.Scanner;
public class prgrm5 {

	public static void main(String args[]) {
		// TODO Auto-generated method stub
		Scanner in =new Scanner(System.in);
		int N;

		System.out.println("Enter NUMBER");
		N = in.nextInt();
System.out.println("NUMBER "+N);
System.out.println("SQUARE "+N*N);
}
}

#6
import java.util.Scanner;
public class prgrm6 {
```

```
	public static void main(String args[]) {
		// TODO Auto-generated method stub
		Scanner in =new Scanner(System.in);
		int age;
		double weight,height;
		System.out.println("Enter the age,height,weight");
		age = in.nextInt();
		height = in.nextDouble();
		weight = in.nextDouble();
		System.out.println("So, you're "+age+" years
old"+","+height+"tall "+"and "+weight+" kg heavy");

	}

}
#7
import java.util.*;


public class program10 {

	public static void main(String[] args) {
		// TODO Auto-generated method stub
		Scanner in =new Scanner(System.in);
		int weight;
		double height,BMI;
		System.out.println("Enter the height in m,weight in kg");
		height = in.nextDouble();
		weight = in.nextInt();
		BMI =((weight)/(height*height));
		System.out.println("body mass index="+BMI);

	}

}

#8
import java.util.Scanner;


public class PROGRAM8 {

	public static void main(String[] args) {
		// TODO Auto-generated method stub
		Scanner in =new Scanner(System.in);
		double n1,n2,n3,result;
		System.out.println("What is your first number?");
		n1 =in.nextDouble();
		System.out.println("What is your second number?");
		n2 =in.nextDouble();
		System.out.println("What is your third number?");
		n3 =in.nextDouble();
		double sum = (n1+n2+n3);
		result = (sum/2);
```

```
            System.out.println(result);



      }

}
```

#9

```
import java.util.Scanner;


public class program9 {

      public static void main(String[] args) {
            // TODO Auto-generated method stub
            Scanner in =new Scanner(System.in);
            double gross,basic,hra,da;
            System.out.println("enter basic of your salary");
            basic =in.nextDouble();
            da =(0.4*basic);
            hra =(0.2*basic);
            gross =(basic+hra+da);
            System.out.println("Gross salary of a person is Rs "+gross);


      }

}
```

#10

```
import java.util.Scanner;
public class program13 {

      public static void main(String[] args) {
            // TODO Auto-generated method stub
            Scanner in =new Scanner(System.in);
            double f,convert;
            System.out.println("enter temp in fahrenheit");
            f =in.nextDouble();
        convert =(((5*f)/9) - 32);
        System.out.println("Temperature in celcius is "+convert +"
degree");
      }

}
```

#11

```
import java.util.Scanner;


public class program11 {
```

```
	public static void main(String[] args) {
		// TODO Auto-generated method stub
		Scanner in =new Scanner(System.in);
		double length,breadth,radius,area1,area2,peri1,peri2;
		double pi =3.14;
		System.out.println("enter length and breadth of rectangle");
		length =in.nextDouble();
		breadth =in.nextDouble();
		System.out.println("enter radius of circle");
		radius =in.nextDouble();
		area1 = (length*breadth);
		peri1 = (2*(length+breadth));
		area2 = (pi*radius*radius);
		peri2 = (2*pi*radius);
		System.out.println("Area of rectangle is "+area1);
		System.out.println("Perimeter of rectangle is "+peri1);
		System.out.println("Area of circle is "+area2);
		System.out.println("Area of circle is "+peri2);
	}

}


#12

import java.util.Scanner;


public class program12 {

	public static void main(String[] args) {
		// TODO Auto-generated method stub
		Scanner in =new Scanner(System.in);
		double den[] ={1,0.5,0.25};
		int i;
		System.out.println("enter amount");
		double amt =in.nextDouble();
		double copy =amt;
		double notes =0,ctr =0;
		System.out.println("\nDENOMINATIONS: \n");
		for(i=0;i<3;i++)
		{
			ctr =amt/den[i];
		if (ctr !=0)
		{
			System.out.println(den[i]+"\tx\t"+ctr+"\t
="+den[i]*ctr);
		}
		notes =notes+ctr;
		amt =amt%den[i];
		}
		System.out.println("TOTAL\t\t\t= "+copy);
		System.out.println("Total no. of notes ="+notes);
```

```
	}

}

#13

import java.util.Scanner;


public class program13 {

	public static void main(String[] args) {
		// TODO Auto-generated method stub
		Scanner in =new Scanner(System.in);
		int n,gross,doz,left1,left2;
		System.out.println("enter no. of egg");
		n =in.nextInt();
		gross = n/144;
		left1 =n%144;
		doz =left1/12;
		left2 =left1%12;


		System.out.println("your no. of eggs is "+gross +"gross"+doz
+"dozen"+"and"+left2 +"left over");
	}

}
--------------------------------------------------------------------------
-------------------------------------------------
#1
import java.util.*;
public class prog1ass3
{
	public static void main(String args[])
	{
	Scanner in =new Scanner(System.in);
	double ht;
	System.out.println("enter height");
	ht =in.nextDouble();
	if(ht>=6)
	{
		System.out.println("the person is tall");
	}
	else
	{
		System.out.println("the person is not tall");
	}
	}
}
```

#2

```
import java.util.*;
public class prog2ass3 {

	public static void main(String[] args)
		// TODO Auto-generated method stub
		{
			Scanner in= new Scanner(System.in);
			int marks;
			System.out.println("enter marks");
			marks =in.nextInt();
			if(marks>=40&&marks<=100)
			{
				System.out.println("you have passed in the exam");
			}
			else
			{
				System.out.println("failed in exam sorry");
			}


	}
}
```

#3

```
import java.util.Scanner;
public class prog3ass3 {

	public static void main(String[] args)
		// TODO Auto-generated method stub
		{
			Scanner in= new Scanner(System.in);
			int n;
			System.out.println("enter number");
			n =in.nextInt();
			if(n%2==0)
			{
				System.out.println("even number");
			}
			else
			{
				System.out.println("odd number");
			}

	}

}
```

#4

```
import java.util.Scanner;
public class prog4ass3 {

	public static void main(String[] args)
		// TODO Auto-generated method stub
		{
			Scanner in= new Scanner(System.in);
			char ch;
			System.out.println("enter character");
			ch =in.next().charAt(0);
			if(ch>=65&&ch<=90)
			{
				System.out.println("capital character");
			}
			else if(ch>=97&&ch<=122)
			{
				System.out.println("small character");
			}
			else if(ch>=48&&ch<=57)
			{
				System.out.println("numbers");
			}
			else
if((ch>=0&&ch<=47)||(ch>=58&&ch<=64)||(ch>=91&&ch<=96)||(ch>=123&&ch<=127
))
			{
				System.out.println("symbol");
			}

	}
}
```

#5

```
import java.util.Scanner;
public class prog5ass3 {

	public static void main(String[] args)
		// TODO Auto-generated method stub
		{
			Scanner in= new Scanner(System.in);
			int x1,x2,x3,y1,y2,y3,s1,s2,s3;
			System.out.println("enter coordinate of 1st point");
			x1 =in.nextInt();
			y1 =in.nextInt();
			System.out.println(x1+","+y1);
			System.out.println("enter coordinate of 2nd point");
			x2 =in.nextInt();
			y2 =in.nextInt();
			System.out.println(x2+","+y2);
			System.out.println("enter coordinate of 3rd point");
			x3 =in.nextInt();
			y3 =in.nextInt();
			System.out.println(x3+","+y3);
```

```
                s1 =(y2-y1)/(x2-x1);
                s2 =(y3-y2)/(x3-x2);
                s3 =(y3-y1)/(x3-x1);
                if(s1==s2||s2==s3||s1==s3)
                {
                      System.out.println("3 points are on st.line");
                }
                else
                {
                      System.out.println("3 points are not on st.line");
                }
      }

}

#6

import java.util.Scanner;
public class prog6ass3 {

      public static void main(String[] args)
            // TODO Auto-generated method stub
            {
                  Scanner in= new Scanner(System.in);
                  int a1,a2,a3;
                  System.out.println("enter ages");
                  a1= in.nextInt();
                  a2= in.nextInt();
                  a3= in.nextInt();
                  if(a1<a2&&a1<a3)
                  {
                        System.out.println("rahul is young");
                  }
                  if(a2<a1&&a2<a3)
                  {
                        System.out.println("ayush is young");
                  }
                  if(a3<a1&&a3<a2)
                  {
                        System.out.println("ajay is young");
                  }
      }

}


#7
import java.util.*;
public class PROG7ASS3 {

    public static void main(String[] args) {
        // TODO Auto-generated method stub
        Scanner in =new Scanner(System.in);
        int x,y;
```

```
        System.out.println("enter the coordinate");
        x =in.nextInt();
        y =in.nextInt();
        if(x>0&&y>0)
        {
            System.out.println("quadrant 1");
        }
        else if(x<0&&y>0)
        {
            System.out.println("quadrant 2");
        }
        else if(x<0&&y<0)
        {
            System.out.println("quadrant 3");
        }
        else
        {
               System.out.println("quadrant 4");
    }

}
}
```

#8

```
import java.util.*;
public class prog8ass3 {

      /**
       * @param args
       */
      public static void main(String[] args) {
            // TODO Auto-generated method stub
Scanner in= new Scanner(System.in);
double ht,wt,BMI;
System.out.println("Enter the height and weight");
ht =in.nextDouble();
wt =in.nextDouble();
BMI =(wt)/(ht*ht);
if(BMI<18.5)
{
      System.out.println("UNDERWEIGHT");
}
else if(BMI>=18.5&&BMI<25)
{
      System.out.println("NORMAL WEIGHT");

}
else if(BMI>=25&&BMI<30)
{
      System.out.println("OVERWEIGHT");

}
else if(BMI>=30)
```

```
{
	System.out.println("OBESE");
}
	}

}
```

#9

```
import java.util.*;
public class prog9ass3 {

	/**
	 * @param args
	 */
	public static void main(String[] args) {
		// TODO Auto-generated method stub
		Scanner in= new Scanner(System.in);
		int m;
		System.out.println("enter the marks");
		m =in.nextInt();
		switch(m/10)
		{
			case 10 : System.out.println("GRADE O");
				 break;
			case 9 : System.out.println("GRADE A");
				break;
			case 8 : System.out.println("GRADE A");
					break;
			case 7 : System.out.println("GRADE B");
					break;
			case 6 : System.out.println("GRADE C");
					break;
			case 5 : System.out.println("GRADE D");
				   break;
			case 4 : System.out.println("GRADE E");
					break;
			case 3 : System.out.println("GRADE F");
				   break;
			case 2 : System.out.println("GRADE F");
		  break;
			case 1 : System.out.println("GRADE F");
		  break;
			case 0 : System.out.println("GRADE F");
		  break;
			default : System.out.println("WRONG CHOICE");
		}

	}

}
```

#10

```
import java.util.*;
public class prog10ass3 {

	/**
	 * @param args
	 */
	public static void main(String[] args) {
		// TODO Auto-generated method stub
Scanner in =new Scanner(System.in);
int yy;
System.out.println("ENTER THE YEAR");
yy =in.nextInt();
if(yy<1966)
{
	System.out.println("O");
}
else if(yy>=1966&&yy<=1980)
{
	System.out.println("generation X");
}
else if(yy>1980&&yy<=1999)
{
	System.out.println("generation Y");
}
else if(yy>=2000&&yy<=2012)
{
	System.out.println("generation Z");
}
else
{
	System.out.println("K");
}


	}

}


#11

import java.util.*;
public class PROG11ASS3 {

	/**
	 * @param args
	 */
	public static void main(String[] args) {
		// TODO Auto-generated method stub
		Scanner in =new Scanner(System.in);
		double s1,s2,s3;
		int c=0;
		System.out.println("ENTER SIDES OF TRIANGLE");
```

```
            s1 =in.nextDouble();
            s2 =in.nextDouble();
            s3 =in.nextDouble();
            if(s1==s2||s2==s3||s1==s3)
            {
                  c++;
            }
            if(c==0)
            {
                  System.out.println("IRREGULAR");
            }
            else if(c==1)
            {
                  System.out.println("symmetric");

            }
            else if(c>1)
            {
                  System.out.println("REGULAR");
            }

      }

}


#12

import java.util.*;
public class PROG12ASS3 {

      /**
       * @param args
       */
      public static void main(String[] args) {
            // TODO Auto-generated method stub
Scanner in =new Scanner(System.in);
String n1="",n,malename,femalename;
int maleage,femaleage;
{
System.out.println("WHAT IS YOUR GENDER? (PLEASE ANSWER IN M OR F)");
n =in.next();
}
if(n=="M")
{
      System.out.println("FIRST NAME :");
      malename =in.next();

      System.out.println("AGE :");
      maleage =in.nextInt();
      if(maleage>19)
      {
            System.out.println("Then I shall call you Mr."+malename);
      }
```

```
	else
	{
		System.out.println("Then I shall call you Ms."+malename);
	}

}
else if(n=="F")
{
	System.out.println("FIRST NAME :");
	femalename =in.next();
	System.out.println("AGE :");
	femaleage =in.nextInt();
	if(femaleage>19)
	{
		System.out.println("Are you married, "+femalename+"(yes or
no)?");
		n1 =in.next();
	}
	if(n1=="yes")
	{
		System.out.println("Then I shall call you Mrs. "+femalename);
	}
	else if(n1=="no")
	{
		System.out.println("Then I shall call you Ms. "+femalename);
	}
}
	}

}
--------------------------------------------------------------------------
-----------------------------------------------------------------
#1
public class ass4prg1 {

	public static void main(String[] args) {
		// TODO Auto-generated method stub
		{
			int n=1;
			while(n<=5)
			{
				System.out.println("welcome to iter");
				n++;
			}
		}

	}

}

#2
import java.util.Scanner;
public class ass4prg2 {
```

```
	public static void main(String[] args) {
		// TODO Auto-generated method stub
Scanner in =new Scanner(System.in);
int n,i;
System.out.println("Count upto-");
n =in.nextInt();
for(i=0;i<=n;i++)
{
System.out.println(i+",");
}
}
}
#3

import java.util.Scanner;
public class ass4prg3 {

	public static void main(String[] args) {
		// TODO Auto-generated method stub
Scanner in =new Scanner(System.in);
int n1,n2,n3,i;
System.out.println("Count from-");
System.out.println("Count to-");
System.out.println("Count by-");
n1 =in.nextInt();
n2 =in.nextInt();
n3 =in.nextInt();
for(i=n1;i<=n2;i=i+n3)
{
System.out.println(i+",");
}
}
}

#4
import java.util.Scanner;
public class prg4ass4 {

	public static void main(String[] args) {
		// TODO Auto-generated method stub
Scanner in =new Scanner(System.in);
double i;

for(i=-2;i<=2;i=i+0.5)
{
	System.out.println(i);
}

	}

}

#5
```

```
public class prg5ass4 {

	public static void main(String[] args) {
		// TODO Auto-generated method stub
int a=1000,b=2000,i;
for(i=a;i<=b;i++)
{
	System.out.print(i+",");
	if(i%5==0)
		System.out.println();

	}
	}
}
```

#6

```
public class prg6ass4 {

	public static void main(String[] args) {
		// TODO Auto-generated method stub
int i;
for(i=0;i<=20;i=i+2)
{
	System.out.print(i+" ");
}
	}

}
```

#7

```
public class prg7ass4 {

	public static void main(String[] args) {
		// TODO Auto-generated method stub
		int i;
for(i=1;i<=1000;i++)
{
	if(i%3==0||i%5==0)

	{
		System.out.println(i+",");
	}
}
	}

}
```

#8

```
import java.util.*;
```

```
public class prg8ass4 {

	public static void main(String[] args) {
		// TODO Auto-generated method stub
Scanner in=new Scanner(System.in);
int i,n,a;
System.out.println("enter the multiple");
n =in.nextInt();
for(i=1;i<=10;++i)
{
	a =n*i;

	System.out.println(n+"*"+i+"="+a);
}
	}

}


#9
import java.util.*;
public class prg9ass4 {

	public static void main(String[] args) {
		// TODO Auto-generated method stub

int i,j;
double s =0.0,s2=0.0,diff,sq;
for(i=1;i<=100;i++)
{
s =s+(i*i);
}
for(j=1;j<=100;j++)
{
s2 =s2+j;
}
sq =s2*s2;
diff =sq-s;
System.out.println("difference "+diff);
}
}

#10

public class ass4prg10 {

	/**
	 * @param args
	 */
	public static void main(String[] args) {
		// TODO Auto-generated method stub
		int i,j;
		for(i=1;i<=5;i++)
		{
```

```
                System.out.print(i);
            }
            for(j=4;j>=1;j--)
            {
                System.out.print(j);
            }

      }

}

#11

import java.util.*;
public class ass4prg11 {

      /**
       * @param args
       */
      public static void main(String[] args) {
            // TODO Auto-generated method stub
Scanner in =new Scanner(System.in);
int i,n;
double s=0.0,avg;
System.out.println("enter the number");
n =in.nextInt();
for(i=1;i<=n;i++)
{
System.out.println(Math.Random());
s =s+Math.Random();
}
avg =s/n;
System.out.println("average "+avg);
}
}\

#12import java.util.*;
public class ass4prg11 {

      /**
       * @param args
       */
      public static void main(String[] args) {
            // TODO Auto-generated method stub
Scanner in =new Scanner(System.in);
int i,n,d,x;
double s=0.0;
System.out.println("enter the number");
n =in.nextInt();
x =n;
while(x>0)
{
      d =x%10;
      s =s+d;
```

```
      x =x/10;
      System.out.println(d);
}
if(s%9 ==0)
{
      System.out.println("no. is divisible by 9");
}
else
{
      System.out.println("no. is not divisible by 9");
}

      }

}
```

#13

```
public class ass4prg12 {

      /**
       * @param args
       */
      public static void main(String[] args) {
            // TODO Auto-generated method stub
            int n=1;
            while(n<=5)
            {
                  System.out.println("******");
                  n++;
            }

      }

}
```

#14a

```
public class ass4prg14a {

      /**
       * @param args
       */
      public static void main(String[] args) {
            // TODO Auto-generated method stub
            int i,j;
            for(i=1; i<=6; i++)
            {
            for(j=1; j<i; j++)
            {
            System.out.print("*");
            }
            System.out.println();
```

```
	}
	}

}


#14b

public class ass4prg14b {

	/**
	 * @param args
	 */
	public static void main(String[] args) {
		// TODO Auto-generated method stub
		for(int i=1; i<=5; i++) {

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

			  System.out.print(j);
			 }

			 System.out.println();
			}

	}

}


#14c
public class ass4prg14b {

	/**
	 * @param args
	 */
	public static void main(String[] args) {
		// TODO Auto-generated method stub
		for(int i=1; i<=5; i++) {

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

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

			 System.out.println();
			}

	}

}

#14d
```

```
public class ass4prg14d {

	/**
	 * @param args
	 */
	public static void main(String[] args) {
		// TODO Auto-generated method stub
		int n = 1;
	  for (int i = 1; i <= 5; i++) {
		  for (int j = 1; j <= i; j++) {
			  System.out.print(n+ " ");
			  n++;
		  }

		  System.out.println();


	}
	}
}
```

```
#1
import java.util.*;
public class ass5prg1 {

	public static void main(String[] args) {
		// TODO Auto-generated method stub
Scanner in =new Scanner(System.in);
int a,b,c,d;
System.out.println("enter a b c");
a =in.nextInt();
b =in.nextInt();
c =in.nextInt();
d =a;
a =b;
b =c;
c =d;
System.out.println(a);
System.out.println(b);
System.out.println(c);

	}
}
}
#2

import java.util.Scanner;
public class ass5prg2 {
```

```
	public static void main(String[] args) {
		// TODO Auto-generated method stub
Scanner in =new Scanner(System.in);
int a,b,c;
System.out.println("enter a b c");
a =in.nextInt();
b =in.nextInt();
c =in.nextInt();
a =a+b+c;
b =a-b-c;
c =a-b-c;
a =a-b-c;
System.out.println(a);
System.out.println(b);
System.out.println(c);

	}
}
}
#3
import java.util.Scanner;
public class ass5prg3 {

	public static void main(String[] args) {
		// TODO Auto-generated method stub
Scanner in =new Scanner(System.in);
int d,e,a,b,c;
System.out.println("enter a b c d");
a =in.nextInt();
b =in.nextInt();
c =in.nextInt();
d =in.nextInt();
e =a;
a =b;
b =c;
c =d;
d =e;
System.out.println(a);
System.out.println(b);
System.out.println(c);
System.out.println(d);

	}

}
#4
import java.util.Scanner;
public class ass5prg4 {

	public static void main(String[] args) {
		// TODO Auto-generated method stub
Scanner in =new Scanner(System.in);
int i,c=0,m,n;
System.out.println("enter n");
```

```
n =in.nextInt();
for(i=1;i<=n;i++)
{
System.out.println("enter marks");
m =in.nextInt();
if(m>=40)
{
c++;
}
}
System.out.println("counts is "+c);
}
}
#5 no need of doing it
#6
import java.util.*;
class prg6ass5
{
    public static void main(String args[])
    {
        Scanner in =new Scanner(System.in);
        int n,i,c=0,num;
        System.out.println("enter a no.");
        n =in.nextInt();
        for(i=1;i<=n;i++)
        {
            System.out.println("enter a number");
            num =in.nextInt();
            if(num>0)
            {
                c++;
            }
        }
        System.out.println("number of positive number ="+c);
        System.out.println("number of negative number ="+(n-c));
    }
}

#7
import java.util.*;
class prg7ass5
{
    public static void main(String args[])
    {
        Scanner in =new Scanner(System.in);
        int n,i,num;
        double s =0.0,avg=0.0;
        System.out.println("enter a no.");
        n =in.nextInt();
        for(i=1;i<=n;i++)
        {
            System.out.println("enter a number");
            num =in.nextInt();
            {
```

```
                s =s+num;
            }
        }
        avg =s/n;
        System.out.print("sum is "+s);
        System.out.print("average is "+avg);
    }
}
```

#8

```
import java.util.*;
class prg8ass5
{
    public static void main(String args[])
    {
        Scanner in =new Scanner(System.in);
        int n,i,num;
        double sq =0.0,s =0.0;
        System.out.println("enter how many nos");
        n =in.nextInt();
        for(i=1;i<=n;i++)
        {
            System.out.println("enter no. one by 1");
            num =in.nextInt();
            sq= num*num;
            s =s+sq;
        }

        System.out.println("sum is "+s);
    }
}
```

#9

```
import java.util.*;
class prg9ass5
{
    public static void main(String args[])
    {
        Scanner in =new Scanner(System.in);
        int n,i,num;
        double s =0.0,hm =0;
       System.out.println("enter a no.");
        n =in.nextInt();
        for(i=1;i<=n;i++)
        {
            System.out.println("enter number");
            num =in.nextInt();
            s =s+(1/num);
            hm =n/s;
        }
        System.out.print("HARMONIC="+hm);
    }
}
```

#10

```
import java.util.*;
class prg10ass5
{
    public static void main(String args[])
    {
        Scanner in =new Scanner(System.in);
        int n,i;
        double m=0;
       System.out.println("enter no of terms");
        n =in.nextInt();
        for(i=0;i<=n; )
        {
            m =Math.pow(2,i);
            System.out.println(m+" ");
            i++;
        }

    }
}
```

#11

```
import java.util.*;
class prg11ass5
{
    public static void main(String args[])
    {
        Scanner in =new Scanner(System.in);
        int n,i,term =0;
        System.out.println("enter the no. of term");
        n =in.nextInt();
        for(i=1;i<=n;i++)
        {
            if(i%2==0)
            {
                term =1;

            }
            else
            {
                term =-1;
            }
            System.out.print(term+" ");

    }
}
}
```

#12

```
import java.util.*;
class prg12ass5
{
```

```
    public static void main(String args[])
    {
        Scanner in =new Scanner(System.in);
        int n,i;
        double m =0.0,s =0.0;
        System.out.println("enter the no. of term");
        n =in.nextInt();
        for(i=0;i<=n;i++)
        {
            m =Math.pow(-1,i)*((2*i)+1);
            s =s+m;
        }

        System.out.println(s);
    }
}
```

#13

```
import java.util.*;
class prg13ass5
{
    public static void main(String args[])
    {
        Scanner in =new Scanner(System.in);
        int n,i,p=1;
        System.out.println("enter the no. for factorial");
        n =in.nextInt();
        for(i=1;i<=n;i++)
        {
            p =p*i;
        }
        System.out.println("Factorial is "+p);
    }
}
```

#14

```
import java.util.*;
class prg14ass5
{
    public static void main(String args[])
    {
        Scanner in =new Scanner(System.in);
        int n,i;
        double p= 1.0;
        System.out.println("enter the no. for factorial");
        n =in.nextInt();
        for(i=1;i<=n;i++)
        {
            p =p*(i);
```

```
        }
        System.out.println("Factorial is "+(1/p));
    }
}

#15
import java.util.*;
class prg15ass5
{
    public static void main(String args[])
    {
        Scanner in =new Scanner(System.in);
        int x,n,i;
        double p= 1.0;
        System.out.println("enter the no. for factorial");
        n =in.nextInt();
        System.out.println("enter value of x");
        x =in.nextInt();
        for(i=1;i<=n;i++)
        {
            p =p*(i);
        }
        System.out.println("Value is "+((Math.pow(x,n)/p)));
    }
}

#16
import java.util.*;
class prg16ass5
{
    public static void main(String args[])
    {
        Scanner in =new Scanner(System.in);
       int n,i=1,f=1;
       System.out.println("Enter the number");
       n =in.nextInt();
       while(f<n)
       {
           f =f*i;
           i++;
        }
        if(f==n)
        {
            System.out.println("factorial");
        }
        else
        {
            System.out.println("not factorial");
        }
    }
}
#17 no answer
#18
import java.util.*;
```

```
class prg18ass5
{
    public static void main(String args[])
    {
        Scanner in =new Scanner(System.in);
       int a,b,i=1,f=1,mul =0,p=0;
       System.out.println("Enter the numbers");
       a =in.nextInt();
       b =in.nextInt();
       if(a>0)
       {
           for(i=0;i<a;i++)
           {
               mul +=b;
            }
        }
        else
        {
            for(i=0;i>a;i--)
           {
               mul -=b;
            }
        }
        p =a*b;
        System.out.println("prod "+p);
        System.out.println("multi "+mul);
    }
}
```

#1

```
class ass6prg1
{
    public static void main(String args[])
    {
        double x= 3;
        x =Math.toRadians(x);
        double term =x;
        double tsin =x;
        int i= 1;
        while(term>0.000001)
        {
            i =i+2;
            term = -term*((x*x)/(i*(i-1)));
            tsin =term+tsin;
        }
        System.out.println(tsin);
    }
}
```

#2

```
import java.util.*;
class ass6prg2
{
    public static void main(String args[])
    {
        Scanner in =new Scanner(System.in);
        int i,p=1,n;
        double s =0.0;
        System.out.println("Enter a number");
        n =in.nextInt();
        if(n>0)
        {
        for(i=1;i<=n;i++)
        {
            p =p*i;
            s =s+p;
        }

    }
    System.out.println("sum "+s);
}

}
```

#3

```
import java.util.*;
class ass6prg3
{
    public static void main(String args[])
    {
        Scanner in =new Scanner(System.in);
        int i,p=1,n;
        double s =1.0;
        System.out.println("Enter a number");
        n =in.nextInt();
        if(n>0)
        {
        for(i=1;i<n;i++)
        {
            p =p*i;
            s =s+(1/p)+1;
        }

    }
    System.out.println("e = "+s);
}

}
```

#4

```
class ass6prg4
{
    public static void main(String args[])
    {
        double x= 30;
        x =Math.toRadians(x);
        double term =1;
        double tcos =1;
        int i= 0;
        while(term>0.000001)
        {
            i =i+2;
            term = -term*((x*x)/(i*(i-1)));
            tcos =term+tcos;
        }
        System.out.println(tcos);
    }
}
```

#5

```
import java.util.*;
class ass6prg5
{
    public static void main(String args[])
    {
        Scanner in =new Scanner(System.in);
        int a =0,b =1,c,n,i;
        System.out.println("enter the no.");
        n =in.nextInt();
        System.out.print(a+","+b);
        for(i=1;i<=(n-2);i++)
        {
            c =a+b;
            System.out.print(","+c);
            a =b;
            b =c;
        }
    }
}
```

#6

```
import java.util.*;
class ass6prg6
{
    public static void main(String args[])
    {
        Scanner in =new Scanner(System.in);
        int a =0,b =1,n,i=1;
        System.out.println("enter the no.");
        n =in.nextInt();
        System.out.print(a+","+b);
```

```
        while(i<(n-2))
        {
            a =a+b;
            b =a+b;
            i =i+2;
            System.out.print(","+a+","+b);
        }
    }
}
```

#7

```
import java.util.*;
class ass6prg7
{
    public static void main(String args[])
    {
        Scanner in =new Scanner(System.in);
        int a =1,b =3,c,n,i;
        System.out.println("enter the no.");
        n =in.nextInt();
        System.out.print(a+","+b);
        for(i=1;i<=n;i++)
        {
            c =a+b;
            System.out.print(","+c);
            a =b;
            b =c;
        }
    }
}
```

#8

```
import java.util.*;
class ass6prg8
{
    public static void main(String args[])
    {
        Scanner in =new Scanner(System.in);
        int a =0,b =1,c=1,d,n,i;
        System.out.println("enter the no.");
        n =in.nextInt();
        System.out.print(a+","+b+","+c);
        for(i=1;i<=(n-3);i++)
        {
            d =a+b+c;
            System.out.print(","+d);
            a =b;
            b =c;
            c =d;
        }
    }
}
```

#9

```
import java.util.*;
class ass6prg9
{
    public static void main(String args[])
    {
        Scanner in =new Scanner(System.in);

            System.out.print("Enter a number");
            int n =in.nextInt();
            int n1 =in.nextInt();
            if(n<0)
        System.out.println("Kindly enter a positive number");
     else
     {
         int a=0, b=1 ,c=0;
         while(c<n)
          {
              c = a + b;
              a = b;
              b = c;
          }
          if((c==n)&&(c+b!=n1))
              System.out.println("The number belongs to Fibonacci
Series.");
           else
              System.out.println("The number does not belong to Fibonacci
Series.");
     }
   }
}
#10
import java.util.*;
class ass6prg10
{
    public static void main(String args[])
    {
        Scanner in =new Scanner(System.in);
        int n,i,j,p1=1,p2=1,zf=0;
        double s =0.0,s1 =0;
        System.out.println("Enter a number");
        n =in.nextInt();
        for(i=1;i<=(n-2);i++)
        {
            p1 =p1*i;
        }
        if((n-3)==zf)
        {
            s1 =1.0;
            s =s+s1+p1;
        }
        else
        {
            for(j=1;j<=(n-3);j++)
            {
```

```
                p2 =p2*j;
            }
            s =s+p1+p2;
        }

        System.out.println("sum factorial is "+s);
    }
}
```

#11

```
import java.util.*;
class ass6prg11
{
    public static void main(String args[])
    {
        Scanner in =new Scanner(System.in);
        int n,d,rev=0;
        System.out.println("Enter a number");
        n =in.nextInt();
        while(n>0)
        {
            d =n%10;
            rev =rev*10+d;
            n =n/10;
        }
        System.out.println("reverse is "+rev);
    }
}
```

#12

```
import java.util.*;
class ass6prg12
{
    public static void main(String args[])
    {
        Scanner in =new Scanner(System.in);
        int n,d,c=0;

        System.out.println("Enter a number");
        n =in.nextInt();
        while(n>0)
        {
            d =n%10;
            c++;
            n =n/10;
        }
        System.out.println("count is "+c);
    }
}
```

#13

```
import java.util.*;
class ass6prg13
{
    public static void main(String args[])
    {
        Scanner in =new Scanner(System.in);
        int n,d;
        double s= 0.0;
        System.out.println("Enter a number");
        n =in.nextInt();
        while(n>0)
        {
            d =n%10;
            s =s+d;
            n =n/10;
        }
        System.out.println("sum is "+s);
    }
}
```

#14

```
import java.util.*;
class ass6prg14
{
    public static void main(String args[])
    {
        Scanner in =new Scanner(System.in);
        int n,i;
        System.out.println("enter n");
            n =in.nextInt();
        int a[] =new int[n];
        for(i=0;i<n;i++)
        {
            System.out.println("enter the values");
            a[i] =in.nextInt();

        }
        for(i=0;i<5;i++)
        {
            System.out.print(a[i]);

        }

    }
}
```

