CREATING A CLASS SHAPE USING INTERFACE.

PROGRAM:

import java.util.Scanner;

interface shape

{

double getarea();

}

class circle implements shape

{

double radius,pi=3.14;

public circle()

{

Scanner sc=new Scanner(System.in);

System.out.println("Enter the radius of circle");

radius=sc.nextDouble();

}

@Override

public double getarea()

{

return pi\*radius\*radius;

}

}

class triangle implements shape

{

double base,height;

public triangle()

{

Scanner sc=new Scanner(System.in);

System.out.println("Enter base of triangle");

base=sc.nextDouble();

System.out.println("enter height of triangle");

height=sc.nextDouble();

}

@Override

public double getarea()

{

return 1/2\*base\*height;

}

}

class rectangle implements shape

{

double width, length;

public rectangle()

{

Scanner sc=new Scanner(System.in);

System.out.println("Enter rectangle length");

length=sc.nextDouble();

System.out.println("enter rectangle width");

width=sc.nextDouble();

}

@Override

public double getarea()

{

return length\*width;

}

}

public class test

{

public static void main(String args[])

{

circle c=new circle();

triangle t=new triangle();

rectangle r=new rectangle();

System.out.println("Area of circle is "+c.getarea());

System.out.println("Area of triangle is :"+c.getarea());

System.out.println("Area of rectangle is "+r.getarea());

}

}

OUTPUT:

