Develop a java program that can create an abstract class named Shape that contains 2 integers and an empty method printArea().Provide 3 classes Triangle Rectangle and circle such that each one extends class shape. Each one contains only method printArea() that prints the area of given shape.

import java.util.Scanner;

abstract class shape{

int a,b;

shape(int x, int y){

a=x;

b=y;

}

shape(int x){

a=x;

}

public void printArea(){

}

}

class Rectangle extends shape{

Rectangle(int x,int y){

super(x,y);

}

public void printArea(){

System.out.println("The area of Rectangle is: "+(b\*a));

}

}

class Triangle extends shape{

Triangle(int x,int y){

super(x,y);

}

public void printArea(){

System.out.println("The area of Triangle is: "+(b\*a\*0.5));

}

}

class Circle extends shape{

Circle(int x){

super(x);

}

public void printArea(){

System.out.println("The area of Circle is: "+(a\*a\*3.14));

}

}

public class exp4 {

public static void main(String args[]){

Triangle t1=new Triangle(30, 40);

Rectangle r1=new Rectangle(40, 50);

Circle c1=new Circle(10);

t1.printArea();

r1.printArea();

c1.printArea();

}

}

**Sample Output**

