import java.util.\*;

abstract class Shape{

int a,b;

Shape(int a,int b){

this.a=a;

this.b=b;

}

abstract void printArea();

}

class Rectangle extends Shape{

Rectangle(int len,int bre){

super(len,bre);

}

void printArea(){

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

}

}

class Triangle extends Shape{

Triangle(int base,int heig){

super(base,heig);

}

void printArea(){

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

}

}

class Circle extends Shape{

Circle(int rad){

super(rad,0);

}

void printArea(){

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

}

}

public class Main{

public static void main(String[] args){

Scanner sc=new Scanner(System.in);

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

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

int bre=sc.nextInt();

shape=new Rectangle(len,bre);

break;

case 2:

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

int base=sc.nextInt();

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

int heig=sc.nextInt();

shape=new Triangle(base,heig);

break;

case 3:

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

int rad=sc.nextInt();

shape=new Circle(rad);

break;

default:

System.out.println("Invalid choice");

return;

}

shape.printArea();

}

}

output:

