import java.util.\*;

abstract class Shape {

public int x,y;

public abstract void printArea();

}

class Rectangle1 extends Shape {

public void printArea() {

float area;

area= x \* y;

System.out.println("Area of Rectangle is " +area);

}

}

class Triangle extends Shape {

public void printArea() {

float area;

area= (x \* y) / 2.0f;

System.out.println("Area of Triangle is " + area);

}

}

class Circle extends Shape {

public void printArea() {

float area;

area=(22 \* x \* x) / 7.0f;

System.out.println("Area of Circle is " + area);

}

}

public class AreaOfShapes {

public static void main(String[] args) {

int choice;

Scanner sc=new Scanner(System.in);

System.out.println("Menu \n 1.Area of Rectangle \n 2.Area of Traingle \n 3.Area of Circle ");

System.out.print("Enter your choice : ");

choice=sc.nextInt();

switch(choice) {

case 1: System.out.println("Enter length and breadth for area of rectangle : ");

Rectangle1 r = new Rectangle1();

r.x=sc.nextInt();

r.y=sc.nextInt();

r.printArea();

break;

case 2: System.out.println("Enter bredth and height for area of traingle : ");

Triangle t = new Triangle();

t.x=sc.nextInt();

t.y=sc.nextInt();

t.printArea();

break;

case 3: System.out.println("Enter radius for area of circle : ");

Circle c = new Circle();

c.x = sc.nextInt();

c.printArea();

break;

default:System.out.println("Enter correct choice");

}

}

}

