**public** **class** RectangleArea {

**private** **float** length,breadth;

**public** RectangleArea()

{

}

**public** RectangleArea(**float** a,**float** b)

{

length=a;

breadth=b;

}

**public** **float** getLength() {

**return** length;

}

**public** **float** getBreadth() {

**return** breadth;

}

**public** **float** rectangleArea(**float** a,**float** b)

{

**return** a\*b;

}

}

**public** **class** TriangleArea **extends** RectangleArea {

**private** **float** base,height;

**public** TriangleArea()

{

}

**public** TriangleArea(**float** x, **float** y,**float** a,**float** b)

{

**super**(x,y);

base=a;

height=b;

}

**public** **float** getBase() {

**return** base;

}

**public** **float** getHeight() {

**return** height;

}

**public** **float** triangleArea(**float** a,**float** b)

{

**return**(0.5f\*a\*b);

}

}

**import** java.util.Scanner;

**public** **class** AreaCal {

**public** **static** **void** main(String[] args) {

// **TODO** Auto-generated method stub

Scanner input = **new** Scanner(System.***in***);

System.***out***.println("Menu");

System.***out***.println("\*\*\*\*");

System.***out***.println("1.Area of Rectangle");

System.***out***.println("2.Area of Triangle");

System.***out***.print("\nPlease choose your option: ");

**int** choice=input.nextInt();

**switch**(choice)

{

**case** 1:{System.***out***.println("Please enter sides of Rectangle:");

System.***out***.print("Length:");

**float** a=input.nextFloat();

System.***out***.print("Breadth:");

**float** b=input.nextFloat();

TriangleArea objTA=**new** TriangleArea(a,b,0,0);

System.***out***.println("Area of Rectangle is: "+objTA.rectangleArea(objTA.getLength(),objTA.getBreadth()));

**break**;}

**case** 2:{System.***out***.println("Please enter sides of Triangle:");

System.***out***.print("Base:");

**float** base=input.nextInt();

System.***out***.print("Height:");

**float** height=input.nextInt();

TriangleArea objTA=**new** TriangleArea(0,0,base,height);

System.***out***.println("Area of Triangle is :"+objTA.triangleArea(objTA.getBase(),objTA.getHeight()));

**break**;}

**default**: System.***out***.println("Invalid choice!!!...");

}

}

}



