```
import java.util.Scanner;
import java.lang.Math;
abstract class Shape {
int a1;
int a2;
Shape ( int a, int b) {
a1 = a;
a2 = b;
}
abstract void printArea ();
}
class Rectangle extends Shape {
Rectangle ( int a, int b) {
super (a, b);
```

```
}
void printArea(){
System.out.println("Area of reactangle
is :"+(a1*a2));
}}
class Triangle extends Shape{
Triangle(int a, int b){
super(a,b);
}
void printArea(){
System.out.println("Area of triangle is:"
+((a1*a2)/2));
}}
class Circle extends Shape{
Circle(int a, int b){
super(a,a);
}
void printArea(){
System.out.printf("The area of circle
is:%.2f",(a1*Math.PI*a1));
}}
class ShapeMain{
Public static void main(String args[]){
Rectangle r=new Rectangle(15,10);
Triangle t=new Triangle(20,9);
```

```
Circle c = new Circle(4, 0);
    r.printArea();
t.printArea();
c.printArea();
    }
}
```