

## OOJ LAB WEEK 4

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```
import java.util.Scanner;

abstract class Shape{
    int a,b;
    Shape(int x,int y)
    {
        a=x;
        b=y;
    }
    abstract void printArea();
}

class rectangle extends Shape{
    rectangle(int x,int y)
    {
        super(x,y);
    }
    void printArea()
    {
        System.out.println("Area of rectangle =" +(a*b));
    }
}

class triangle extends Shape{
    triangle(int x,int y)
    {
        super(x,y);
    }
    void printArea()
```

```

{
System.out.println("Area of triangle =" + (0.5*a*b));
}
}

class circle extends Shape{
circle(int x)
{
super(x,x);
}
void printArea()
{
System.out.println("Area of circle =" + (3.14*a*a));
}
}

class week4{
public static void main(String args[])
{
Shape s;
rectangle r1=new rectangle(20,40);
triangle t1=new triangle(20,30);
circle c1=new circle(20);
s=r1;
s.printArea();
s=t1;
s.printArea();
s=c1;
s.printArea();
}
}

```

## OUTPUT

```
C:\Users\Admin\Desktop>javac week4.java  
C:\Users\Admin\Desktop>java week4  
Area of rectangle =800  
Area of triangle =300.0  
Area of circle =1256.0
```