

```

abstract class Shape{
    int dim1, dim2;
    Shape(int dim1, int dim2){
        this.dim1=dim1;
        this.dim2=dim2;
    }
    public abstract void printarea();
}

class Rectangle extends Shape{
    Rectangle(int length, int width){
        super(length,width);
    }
    public void printarea(){
        int area=dim1*dim2;
        System.out.println("Rectangle area : = "+ area);
    }
}

class Triangle extends Shape{
    Triangle(int base, int height){
        super(base, height);
    }

    public void printarea(){
        double area=0.5*dim1*dim2;
        System.out.println("Triangle area : "+ area);
    }
}

class Circle extends Shape{
    Circle(int radius){
        super(radius,radius);
    }
    public void printarea(){
        double area=Math.PI*dim1*dim2;
        System.out.println("Circle area : "+ area);
    }
}

public class Abstract{
    public static void main(String args[]){
        Rectangle r= new Rectangle(5,10);
        Triangle t= new Triangle(3,8);
        Circle c = new Circle(4);

        r.printarea();
        t.printarea();
        c.printarea();
    }
}

```

```

(base) madhupandey@Madhus-MacBook-Air javalab % c
zsh: command not found: c
(base) madhupandey@Madhus-MacBook-Air javalab % javac Abstract.
java
(base) madhupandey@Madhus-MacBook-Air javalab % java Abstract
Rectangle area : = 50
Triangle area : 12.0
Circle area : 50.26548245743669
(base) madhupandey@Madhus-MacBook-Air javalab %

```