Abstract Class

```java
import java.util.*;
abstract class shape
{
    abstract void area();
}

class circle extends shape
{
    int r;
    double area;
    public void accept()
    {
        Scanner sc=new Scanner(System.in);
        System.out.println("Enter radius of the Cirle");
        r=sc.nextInt();
    }

    public void area()
    {
        area=3.14*r*r;
        System.out.println("Area of Circle:"+area);
    }
}

class rectangle extends shape
{
    int l,b;
    double area;
    public void accept()
    {
        Scanner sc=new Scanner(System.in);
        System.out.println("Enter Length and Breadth of Rectangle");
        l=sc.nextInt();
        b=sc.nextInt();
    }
    public void area()
    {
        area=l*b;
        System.out.println("Area of Rectangle:"+area);
    }
}

class triangle extends shape
{
    int b,h;
    double area;
    public void accept()
    {
        Scanner sc=new Scanner(System.in);
```

```java
        System.out.println("Enter Base and Height of Triangle");
        b=sc.nextInt();
        h=sc.nextInt();
    }
    public void area()
    {
        area=0.5*b*h;
        System.out.println("Area of Triangle:"+area);
    }
}

class main
{
    public static void main(String args[])
    {
        circle c=new circle();
        c.accept();
        c.area();
        rectangle r=new rectangle();
        r.accept();
        r.area();
        triangle t=new triangle();
        t.accept();
        t.area();

    }
}
```



```
C:\Windows\System32\cmd.exe                                          —    □    ×

C:\Users\jaini\OneDrive\Desktop\Educational\COLLEGE\SE\Java\Abstract class>java main
Enter radius of the Cirle
5
Area of Circle:78.5
Enter Length and Breadth of Rectangle
10 20
Area of Rectangle:200.0
Enter Base and Height of Triangle
10 20
Area of Triangle:100.0

C:\Users\jaini\OneDrive\Desktop\Educational\COLLEGE\SE\Java\Abstract class>
```