

Program 4:

```
import java.util.Scanner;

abstract class Shape{

    abstract public void printArea();

    int i1,i2;

}

class Rectangle extends Shape{

    public void printArea(){

        Scanner sx = new Scanner(System.in);

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

        System.out.print("enter length : ");

        i1 = sx.nextInt();

        System.out.print("enter bredth : ");

        i2 = sx.nextInt();

        System.out.println("area of rectangle : "+(i1*i2)+"\n");

    }

}

class Triangle extends Shape{

    public void printArea(){

        Scanner sx = new Scanner(System.in);

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

        System.out.print("enter length : ");

        i1 = sx.nextInt();

        System.out.print("enter bredth : ");

        i2 = sx.nextInt();

        System.out.println("area of Triangle : "+(0.5*i1*i2)+"\n");

    }

}

class Circle extends Shape{
```

```

    public void printArea(){
        Scanner sx = new Scanner(System.in);
        System.out.println("Area of Circle");
        System.out.print("enter radius : ");
        i1 = sx.nextInt();
        System.out.println("area of Circle : "+(3.14*i1*i1)+"\n");
    }
}

class lab4{
    public static void main(String args[]){
        Shape s = new Rectangle();
        s.printArea();
        s = new Triangle();
        s.printArea();
        s = new Circle();
        s.printArea();
    }
}

```

O/P :

```

Area of Rectangle
enter length : 3
enter bredth : 2
area of rectangle : 6

Area of Triangle
enter length : 3
enter bredth : 2
area of Triangle : 3.0

Area of Circle
enter radius : 3
area of Circle : 28.259999999999998

```