

Lab 5

Day1

Lecturer

```
package com.mycompany.practical02;

public class Lecturer implements Speaker
{
    @Override
    public void speak(String phrase)
    {
        System.out.println("Lecturer: "+phrase);
    }
}
```

Politician

```
package com.mycompany.practical02;

public class Politician implements Speaker
{
    @Override
    public void speak(String phrase)
    {
        System.out.println("Politician: "+phrase);
    }
}
```

practical02

```
package com.mycompany.practical02;

public class Practical02
{
    public static void main(String[] args)
    {
        Speaker speaker1 = new Priest();
    }
}
```

```
speaker1.speak("Bless You!");
```

```
Speaker speaker2 = new Politician();
```

```
speaker2.speak("Vote me!");
```

```
Speaker speaker3 = new Lecturer();
```

```
speaker3.speak("Today we are going to learn Java!");
```

```
}
```

```
}
```

Priest

```
package com.mycompany.practical02;
```

```
public class Priest implements Speaker
```

```
{
```

```
    @Override
```

```
    public void speak(String phrase)
```

```
    {
```

```
        System.out.println("Priest: "+phrase);
```

```
    }
```

```
}
```

Speaker

```
package com.mycompany.practical02;
```

```
public interface Speaker
```

```
{
```

```
    int i = 100;
```

```
    void speak(String Line);
```

```
}
```

Day2

Circle

```
package com.mycompany.shape01;

public class Circle extends Shape
{
    private double radius;

    Circle(double r)
    {
        radius =r;
    }

    double calculateArea()
    {
        return Math.PI*radius*radius;
    }
}
```

Rectangle

```
package com.mycompany.shape01;

public class Rectangle extends Shape
{
    private double height,width;

    Rectangle(double h,double w)
    {
        height =h;
        width=w;
    }

    double calculateArea()
    {
        return height*width;
    }
}
```

Shape

```
package com.mycompany.shape01;
```

```
abstract class Shape
```

```
{
```

```
    abstract double calculateArea();
```

```
    void display()
```

```
{
```

```
    System.out.println("Shape ");
```

```
}
```

```
}
```

Shape01

```
package com.mycompany.shape01;
```

```
public class Shape01
```

```
{
```

```
    public static void main(String[] args)
```

```
{
```

```
        Circle c = new Circle(10);
```

```
        double circleArea = c.calculateArea();
```

```
        c.display();
```

```
        System.out.println("Area of the circle: "+c.calculateArea());
```

```
        Rectangle r = new Rectangle(10,20);
```

```
        double rectangleArea = r.calculateArea();
```

```
        r.display();
```

```
        System.out.println("Area of the rectangle: "+r.calculateArea());
```

```
}
```

```
}
```