

Lab Session 04

Use Façade Design Pattern to simplify a complex software system

EXERCISES

1. Implement the façade design pattern for the diagram given below:

Shape.java

```
1 package lab4_q1;
2 public interface Shape {
3     void draw();
4 }
5
6
```

Circle.java

```
1 package lab4_q1;
2
3 public class Circle implements Shape {
4     @Override
5     public void draw() {
6         System.out.println("draw Circle");
7     }
8 }
```

Rectangle.java

```
package lab4_q1;

public class Rectangle implements Shape {
    @Override
    public void draw() {
        System.out.println("draw Rectangle");
    }
}
```

Square.java

```
1 package lab4_q1;
2
3 public class Square implements Shape {
4     @Override
5     public void draw() {
6         System.out.println("draw Square");
7     }
8 }
```

ShapeMaker.java

```
1 package lab4_q1;
2 public class ShapeMaker {
3     public void draw() {
4         Shape circleShape = new Circle();
5         circleShape.draw();
6         Shape rectangleShape = new Rectangle();
7         rectangleShape.draw();
8         Shape squareShape = new Square();
9         squareShape.draw();
10    }
11 }
```

FacadeDemoPattern.java

```
1 package lab4_q1;
2 public class FacadePatternDemo {
3     public static void main(String[] args){
4         ShapeMaker shapeMaker = new ShapeMaker();
5         shapeMaker.draw();
6         System.out.println();
7     }
8 }
9
```

Output:

```
draw Circle
draw Rectangle
draw Square
```