

Design Pattern

State

```
public interface IDocumentState {
    void promote(Document document);
    void print();
}

public class Document {
    private IDocumentState state;

    public IDocumentState getState() {
        return state;
    }

    public void setState(IDocumentState state) {
        this.state = state;
    }

    public void promote() {
        state.promote(this);
    }

    public String toString() {
        return "{ Document : state = " + state + " }";
    }
}

public class Approved implements IDocumentState {
    public void promote(Document document) {
        System.out.println("approved document");
    }

    public void print() {
        System.out.println("--- printing document based on business
                               rules for status approved");
    }

    public String toString() {
        return "Approved";
    }
}

public class Draft implements IDocumentState {
    public void promote(Document document) {
        System.out.println("promoting draft -> verified");
        document.setState(new Verified());
    }

    public void print() {
        System.out.println("--- printing document based on business
                               rules for status draft");
    }

    public String toString() {
        return "Draft";
    }
}
```

```

public class Verified implements IDocumentState {
    public void promote(Document document) {
        System.out.println("promoting verified -> approved");
        document.setState(new Approved());
    }

    public void print() {
        System.out.println("--- printing document based on business
                               rules for status verified");
    }

    public String toString() {
        return "Verified";
    }
}

public class Application {
    public static void main(String... args) {
        Document document = new Document();
        document.setState(new Draft());
        System.out.println(document);

        System.out.println();

        document.promote();
        System.out.println(document);

        System.out.println();

        document.promote();
        System.out.println(document);
    }
}

```