

## Design Pattern

### Command

---

```
public class Light {
    private boolean isOn;

    public void switchOn() {
        isOn = true;
    }

    public void switchOff() {
        isOn = false;
    }

    public String toString() {
        return "light " + hashCode() + " : " + isOn;
    }
}

public interface ICommand {
    void execute();
}

public class LightsOffCommand implements ICommand {
    private Light light;

    public LightsOffCommand(Light light) {
        this.light = light;
    }

    public void execute() {
        light.switchOff();
    }
}

public class LightsOnCommand implements ICommand {
    private Light light;

    public LightsOnCommand(Light light) {
        this.light = light;
    }

    public void execute() {
        light.switchOn();
    }
}

public class RemoteControl {
    private ICommand command;

    public void setCommand(ICommand command) {
        this.command = command;
    }

    public void pressButton() {
        System.out.println("--- pressButton");
        command.execute();
    }
}
```

```
public class Application {  
    public static void main(String... args) {  
        RemoteControl control = new RemoteControl();  
  
        Light light = new Light();  
  
        ICommand lightsOn = new LightsOnCommand(light);  
        ICommand lightsOff = new LightsOffCommand(light);  
  
        control.setCommand(lightsOn);  
        control.pressButton();  
        System.out.println(light);  
  
        System.out.println();  
  
        control.setCommand(lightsOff);  
        control.pressButton();  
        System.out.println(light);  
    }  
}
```