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REG# FA22-BSE-042

CODE

```
class LightSensor {  
    String sensorId;  
    String lightLevel;  
  
    public LightSensor(String sensorId, String lightLevel) {  
        this.sensorId = sensorId;  
        this.lightLevel = lightLevel;  
    }  
}  
  
class CentralController {  
    void processSensorData() {  
        System.out.println("Processing sensor data...");  
    }  
}  
  
class LightningSystem {  
    String systemId;  
    String currentState;  
  
    public LightningSystem(String systemId, String currentState) {  
        this.systemId = systemId;  
        this.currentState = currentState;  
    }  
}
```

```
class Light {  
    String lightId;  
  
    public Light(String lightId) {  
        this.lightId = lightId;  
    }  
  
    void changeState(String state) {  
        System.out.println("Changing light state to: " + state);  
    }  
}  
  
public class Main {  
    public static void main(String[] args) {  
        LightSensor sensor = new LightSensor("Sensor1", "Bright");  
        CentralController controller = new CentralController();  
        LightningSystem system = new LightningSystem("System1", "ON");  
        Light light = new Light("Light1");  
  
        controller.processSensorData();  
        light.changeState("OFF");  
  
        System.out.println("Sensor ID: " + sensor.sensorId);  
        System.out.println("Light Level: " + sensor.lightLevel);  
        System.out.println("System ID: " + system.systemId);  
        System.out.println("Current State: " + system.currentState);  
    }  
}
```

