

```
import java.util.ArrayList;
```

```
import java.util.List;
```

```
// Subject
```

```
interface WeatherStation {
```

```
    void addObserver(WeatherObserver observer);
```

```
    void removeObserver(WeatherObserver observer);
```

```
    void notifyObservers();
```

```
}
```

```
// Concrete Subject
```

```
class WeatherStationImpl implements WeatherStation {
```

```
    private List<WeatherObserver> observers = new ArrayList<>();
```

```
    private int temperature;
```

```
    public void setTemperature(int temperature) {
```

```
        this.temperature = temperature;
```

```
        notifyObservers();
```

```
}
```

```
@Override
```

```
public void addObserver(WeatherObserver observer) {
```

```
    observers.add(observer);
```

```
}
```

```
@Override
```

```
public void removeObserver(WeatherObserver observer) {

    observers.remove(observer);

}


@Override

public void notifyObservers() {

    for (WeatherObserver observer : observers) {

        observer.update(temperature);

    }

}

}


// Observer

interface WeatherObserver {

    void update(int temperature);

}


// Concrete Observer

class Display implements WeatherObserver {

    @Override

    public void update(int temperature) {

        System.out.println("Temperature updated: " + temperature + "°C");

    }

}


// Usage

public class ObserverPatternDemo {

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

```
WeatherStation station = new WeatherStationImpl();

WeatherObserver display = new Display();


station.addObserver(display);

station.setTemperature(25);

station.setTemperature(30);

}

}
```