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2311104021

TP13

```
[Running] node "d:\kevinjonson\KPL_KevinJonson_2311104021\13_Design_Pattern\TP\main.js"
Subject mengirim data: Perubahan #1
Observer A menerima update: Perubahan #1
Observer B menerima update: Perubahan #1
Subject mengirim data: Perubahan #2
Observer A menerima update: Perubahan #2
```

```
13_Design_Pattern > TP > JS main.js > ...
1  import { subject } from './subject.js';
2  import { ConcreteObserver } from './observer.js';
3
4  const mySubject = new subject();
5
6  const observer1 = new ConcreteObserver("Observer A");
7  const observer2 = new ConcreteObserver("Observer B");
8
9  mySubject.subscribe(observer1);
10 mySubject.subscribe(observer2);
11
12 console.log("Subject mengirim data: Perubahan #1");
13 mySubject.notify("Perubahan #1");
14
15 mySubject.unsubscribe(observer2);
16
17 console.log("Subject mengirim data: Perubahan #2");
18 mySubject.notify("Perubahan #2");
```

13_Design_Pattern > TP > JS observer.js > ConcreteObserver

```
1 export class ConcreteObserver {
2   constructor(name) {
3     this.name = name;
4   }
5
6   update(data) {
7     console.log(`${this.name} menerima update: ${data}`);
8   }
9 }
```

13_Design_Pattern > TP > JS subject.js > subject

```
1 export class subject {
2   constructor() {
3     this.observers = [];
4   }
5
6   subscribe(observer) {
7     this.observers.push(observer);
8   }
9
10  unsubscribe(observer) {
11    this.observers = this.observers.filter(obs => obs !== observer);
12  }
13
14  notify(data) {
15    this.observers.forEach(observer => observer.update(data));
16  }
17 }
```