

## Solution 4 – Chain of Responsibility

```
package chain;

interface Chain {
    public void send(String msg);
}

class Filter implements Chain {
    Chain next;
    String match;
    Filter(String s, Chain c) {match=s; next = c;}

    public void send(String msg) {
        if (next!=null) {
            if (!msg.equals(match)) next.send(msg);
        }
    }
}

class Gen {
    Gen(Chain c) {
        c.send("Design");
        c.send("Patterns");
        c.send("are");
        c.send("not");
        c.send("very");
        c.send("difficult");
    }
}

class Printer implements Chain {
    public void send(String msg) {
        System.out.println(msg);
    }
}

public class MainChain {

    public static void main (String [] args ) {
        new Gen(
            new Filter("very",
                new Filter("not",
                    new Printer())));
    }
}
```