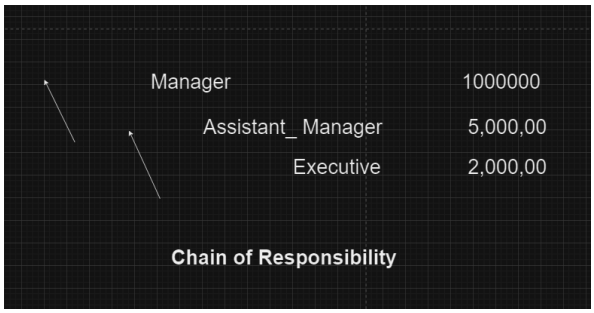
Behavior Design Pattern: Chain Of Responsibility



In the above scenario, we take loanAmount from the controller and decide which user will process that.

If loanAmount<=200000 , Executive can process the loan

If loanAmount<=500000 , AsstManager can process the loan

If loanAmount<=1000000 , Manager can process the loan

Else: above 10 lakh, loan is not permitted

We fist create a LoanHandler class that gives the method to define loan handlers for these classes.

```
public abstract class LoanHandler {

     LoanHandler loanHandler;

    public void forwardHandler(LoanHandler loanHandler){ //this allows controller to define handlers
        this.loanHandler = loanHandler;
    }

    public abstract void applyLoan(String acctNumber,double loanAmount);
}
```

This is how controller defines handlers

```
//rules of forward handling
executive.forwardHandler(assistantManager); //AsstManager is Handler of executive
assistantManager.forwardHandler(manager); //Manager is handler of AsstManager
```

In any class, check for the amount and then apply loan if amount is more than permissible.

```
public class Executive extends LoanHandler{ // AssistantManager is executives loanHandler
    @Override
        public void applyLoan(String acctNumber, double loanAmount) {
            if(loanAmount <=200000) {
                System.out.println("Loan processed by executive ");
            }
            else
                loanHandler.applyLoan(acctNumber,loanAmount); //assiMan.loanHandler()
        }
}
```

Mediator: LoanHandler is a Mediator
Observer : All the classes Executive, Manager , AsstManager are observers