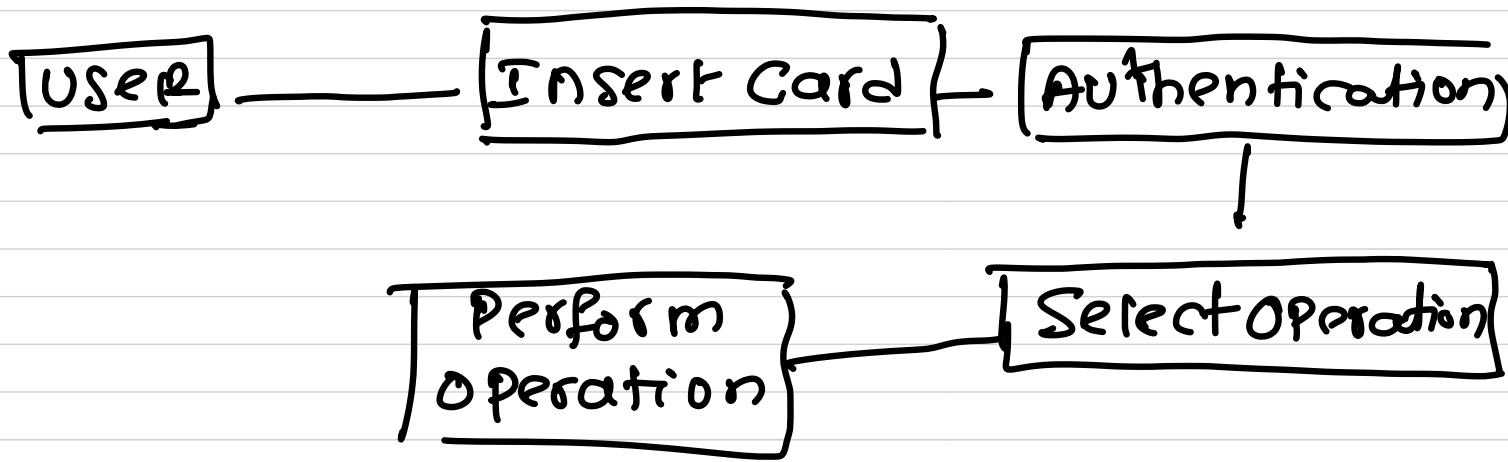


# ATM Machine

## (Low Level Design)



## Rough Flow:



## OBJECTS:

- 1) USER
- 2) Card
- 3) ATM machine
- 4) Bank Account
- 5) ATM Room

## List of Operations:

- 1) insertCard(c)
- 2) authenticate(c)
- 3) chooseOperations(c)
- 4) performCashWithdrawal()
- 5) checkCashBalance()

## States:

- 1) Idle
- 2) Card Inserted
- 3) selectOperation
- 4) perform operation
  - a) Cash Withdrawal State
  - b) check Balance State.

## Design Patterns Used???

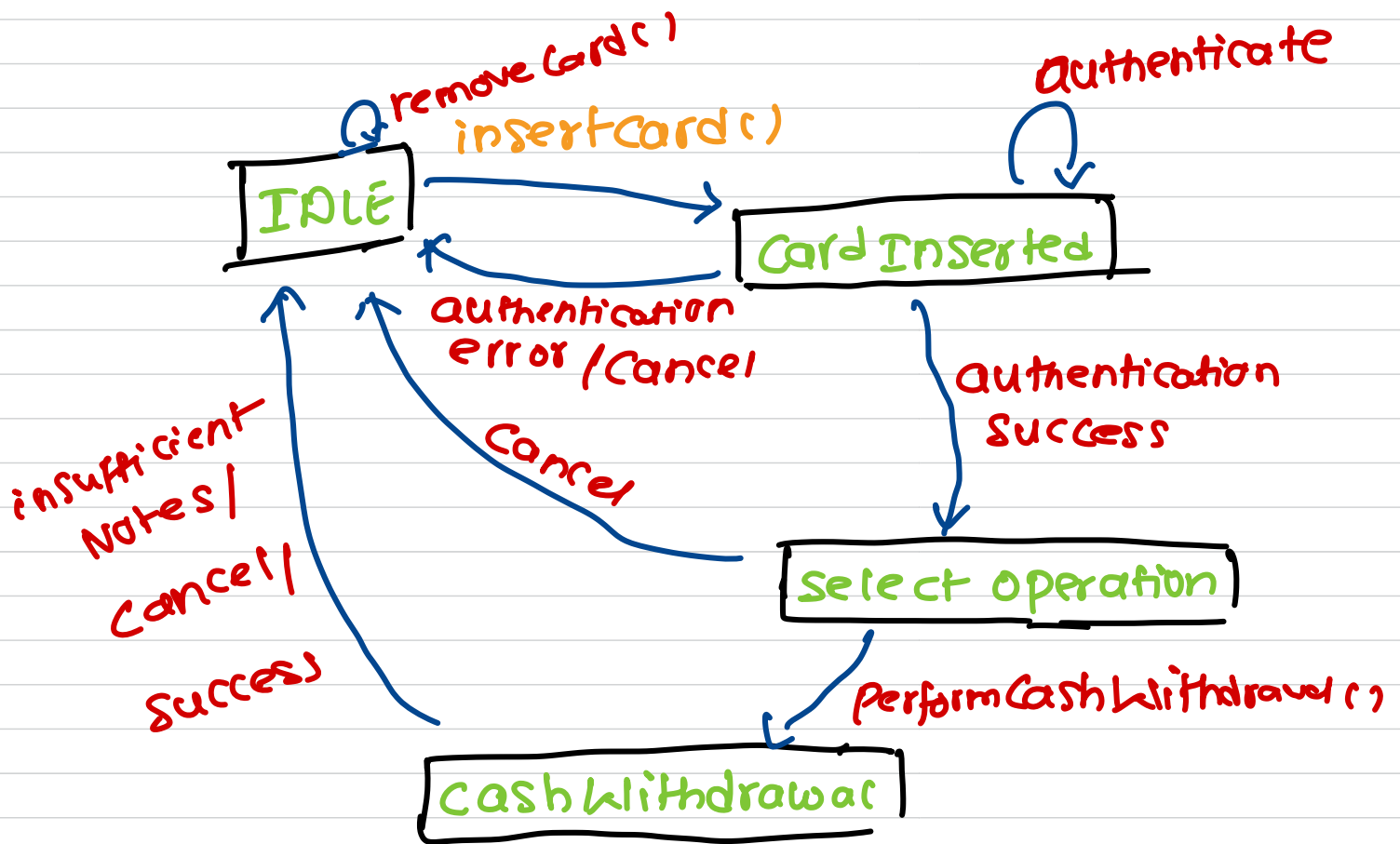
1) State Design Pattern :

we do have multiple states and corresponding operations

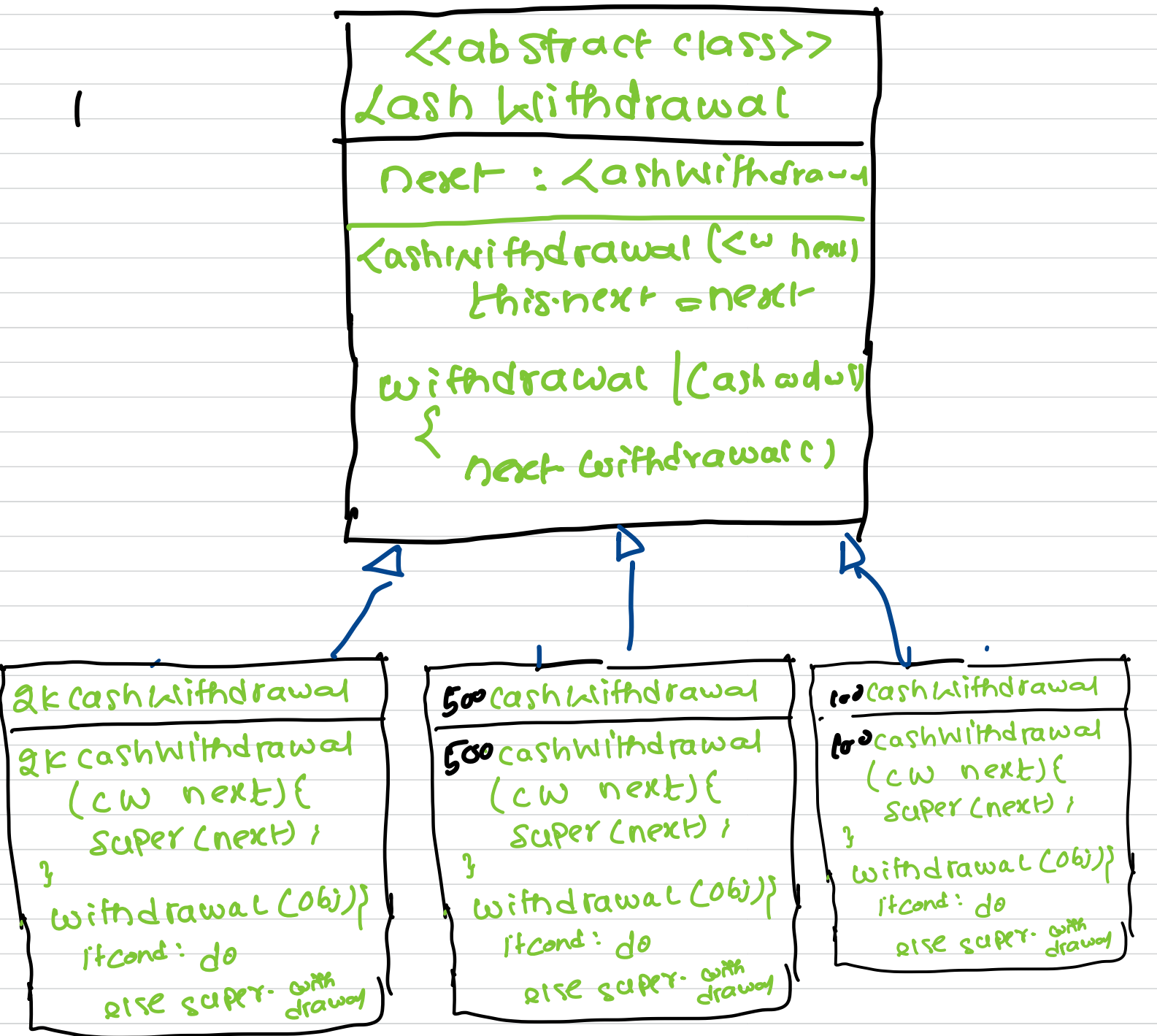
2) Chain of Responsibility :

To perform cash withdrawal, we need chain of responsibility.

## State Diagram:



# Cash Withdrawal: (Chain of Responsibility)



Descending order

Cash Withdrawal  
3000

→ 2k CashWithdrawal

3000 - 2000  
= 1000

11c - 500 = 500

→ 500 CashWithdrawal

100 CashWithdrawal

500 - 5 x 100  
= 500

# ATM Low Level Design:

