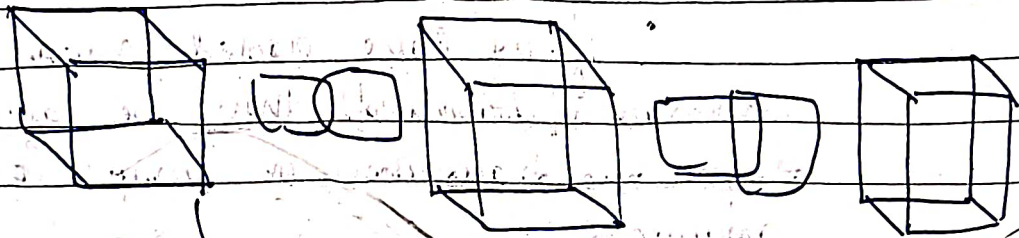


# Decentralised file storage system

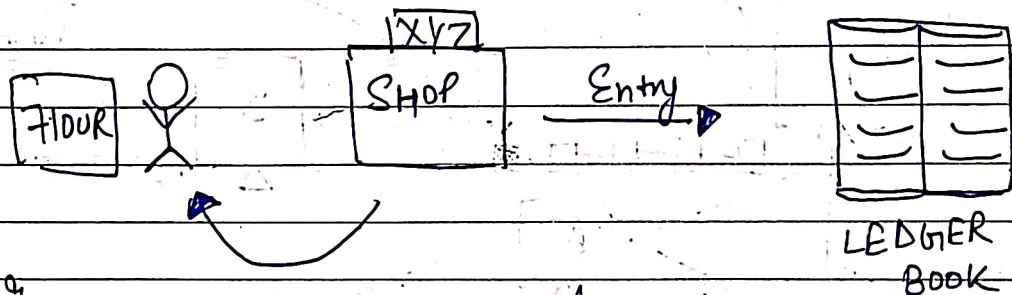
## # Blockchain

→ It is a distributed immutable ledger which is completely transparent.



Blocks

for ex

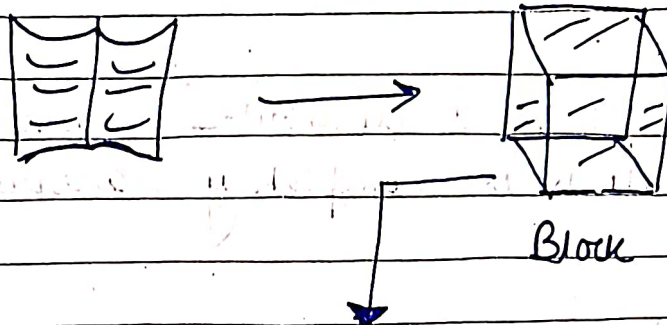


If a person bought some flour from a shop, and said that he will pay the money on next month.

Then, the shopkeeper added a new entry in the ledger book but he added the cost of Rs. 600 instead of the actual price (Rs. 500). This phenomenon is tampering the document or transaction.

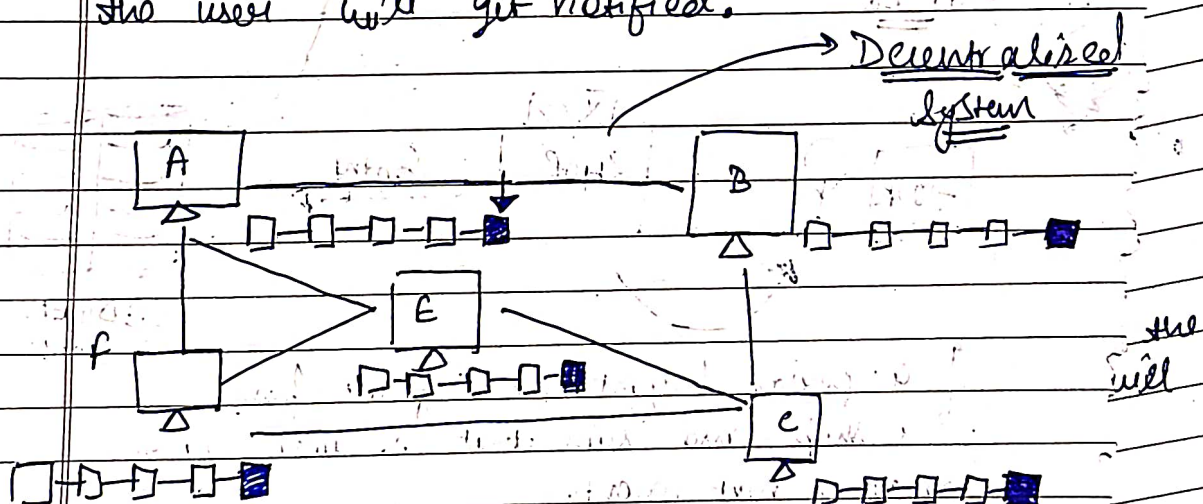
→ To handle these situations, using blockchain,

∴ The ledger book is represented as blocks



If we have added anything (transaction/document) then we can't tamper the transaction or remove it in any case!

→ Blockchain provides a system in which whenever a person tries to tamper the transaction, the user will get notified.



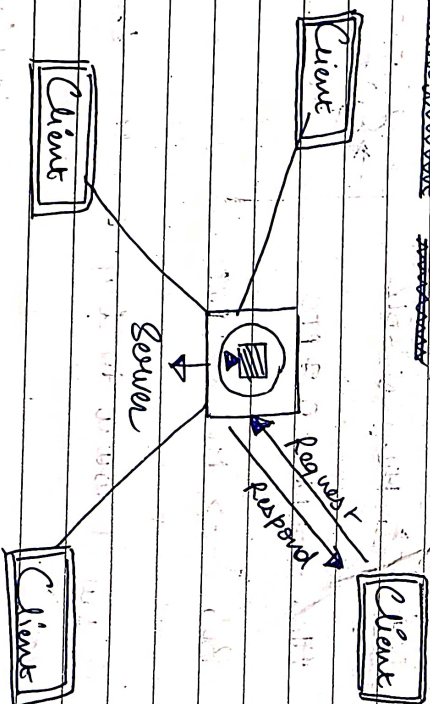
→ Once, a computer saves the transactional data, all the connected peer-to-peer systems will store the distributed ledger in their systems.

→ This also helps in security as well. If a user's computer get hack by a hacker then he will only receive the partial or nominal data of the original transaction or ledger.

### ⇒ Applications of Blockchain

- Product tracking
- Smart Contracts
- Healthcare system
- International wire transfer

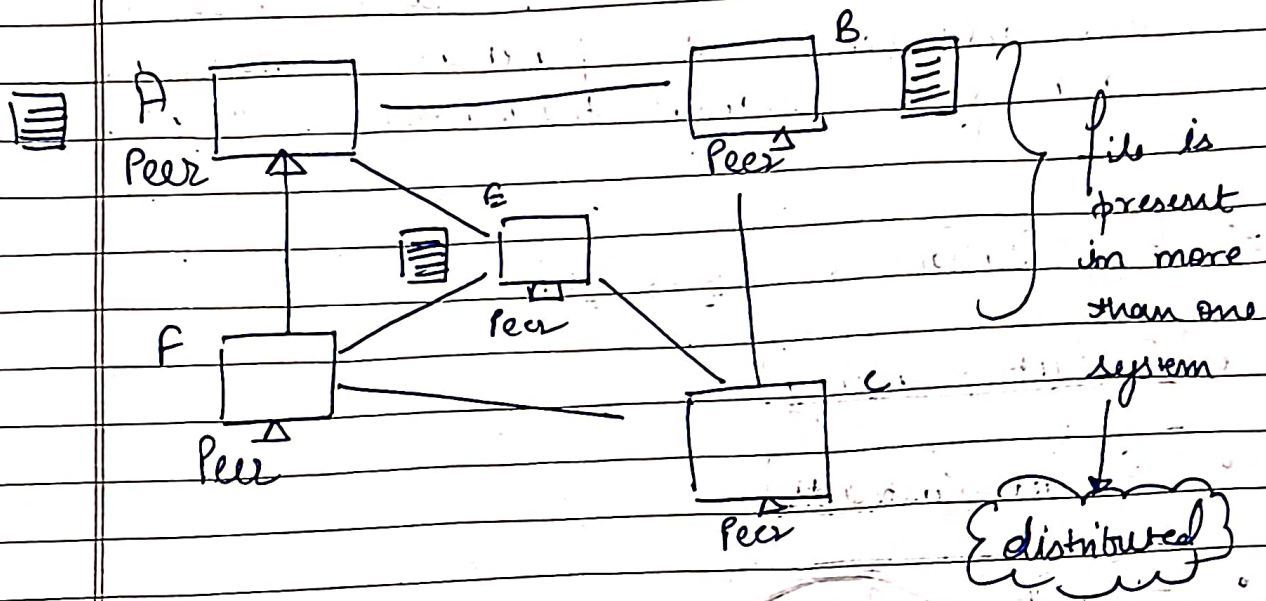
### # Centralized Network



Q. Someone even tries to hack the data from the server, the whole data from the server will be in threat.



Date \_\_\_\_/\_\_\_\_/\_\_\_\_

# Distributed P2P network# Transaction and UTXOs

Unspent transaction output

Arjun → Me 0.4 BTC

Raj → Me 0.3 BTC

Alicia → Me 0.7 BTC

Bob → Me 0.1 BTC

→ {UTXOs}

- Let's say I want to buy a coffee for 0.5 BTC.

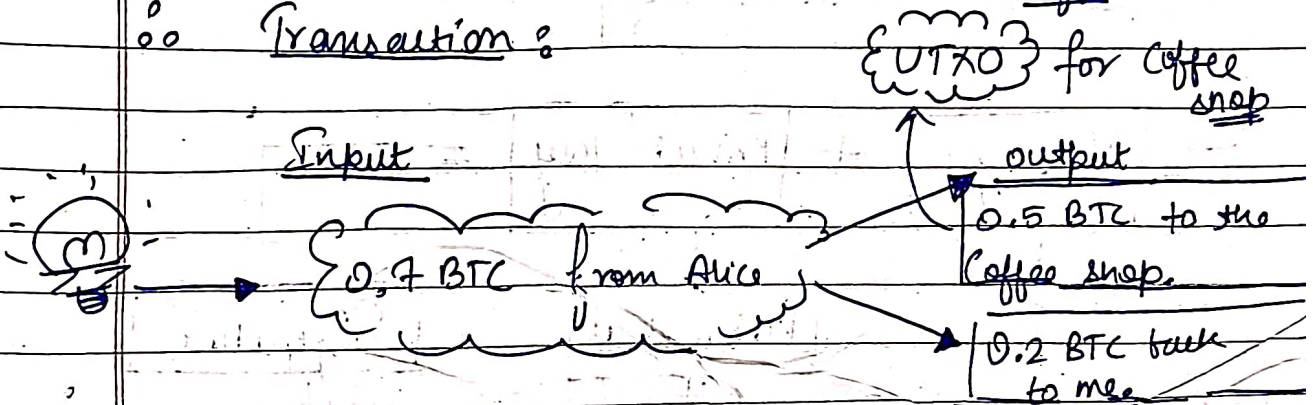
In normal banking transactions, the added up amount will serve as balance then transaction will happen.

But in blockchain,

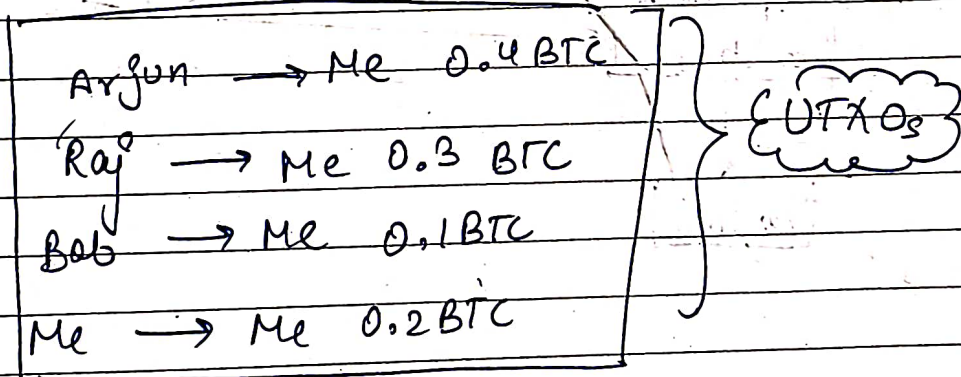
→ The amount needed, will search amount of transaction equal to it, or more than that.

for ex - Alice → Me 0.7 BTC > 0.5 BTC  
needed for Coffee

∴ Transaction :

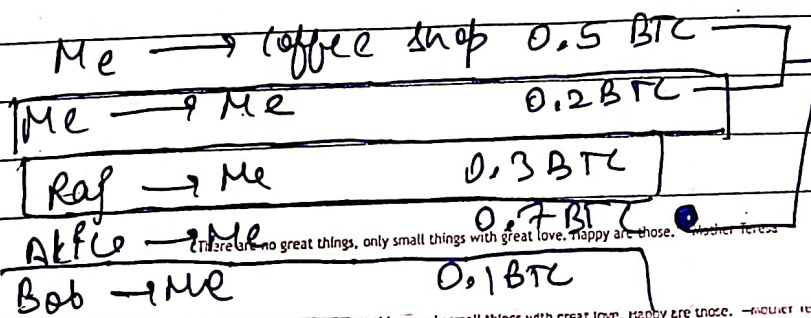


now, the transactions will be



## # Cryptocurrency wallets

→ Records transaction in a different way as-





→ The wallets will store those transactions -

→ which are not used

→ The transactions which are done to me

\* Private and Public Key  $\rightsquigarrow$  for verification

