

MemPool

#key

private Key \rightarrow [function] \rightarrow [Public Key]

1 Way mapping
 \Downarrow

example

fuel + ignition (O_2) \rightarrow ($O_2 \dots$ gas + H_2)

\rightarrow

#

Signatures

let person A message send to B

Sender [A] [] \rightarrow B Sender

C/D/E (no one else read message only A & B read)

① Sign

message \rightarrow [Private Key] \rightarrow [Message Signature]

② Verify

message \rightarrow [Public Key] \rightarrow [Signature]

this is match

2

1/1

Transaction

1) Sign

Message \$ ☐ From ☐ → To ☐

private key

Message signature

2) Verify

Same

Message \$ ☐ From ☐ → To ☐

Signature

Blockchain

peer A

Reward

#1

#2

#3

#4

peer B

peer C

SHA (block number + prev hash)

Nonce hash

③

only know as owner private key

Two Step Verification

- 1) Signature
- 2) signature along address

A send \rightarrow 10 BTC \rightarrow B

After 5 years

~~#javascrip~~

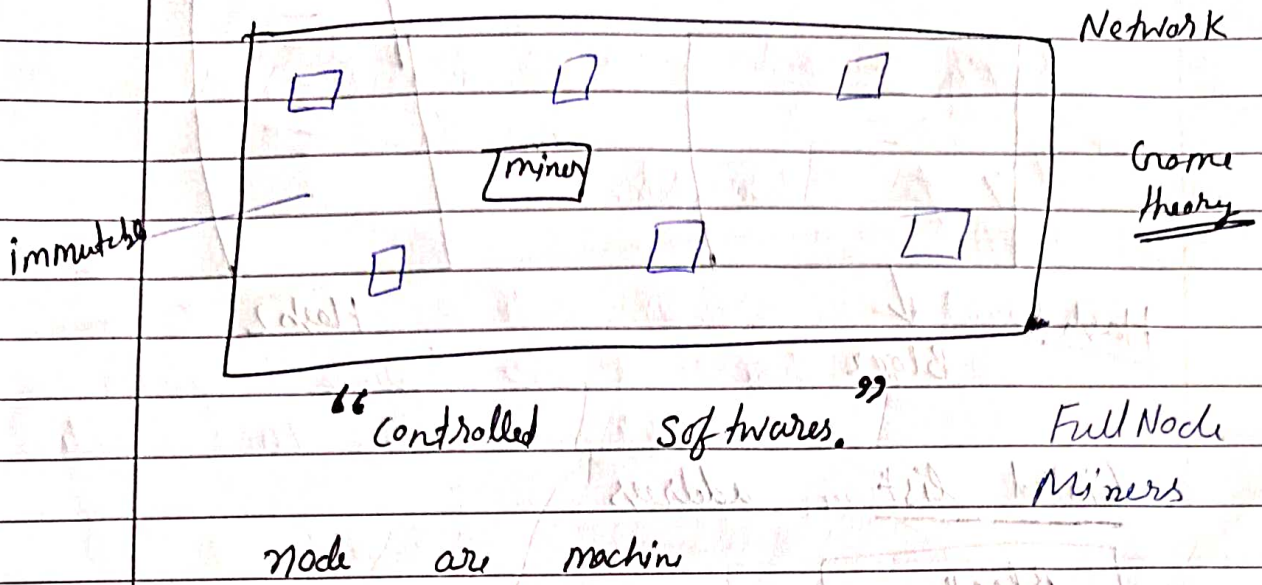
Blockchain (Block+chain)

- Cryptography
- Distributed System
- Network
- Database

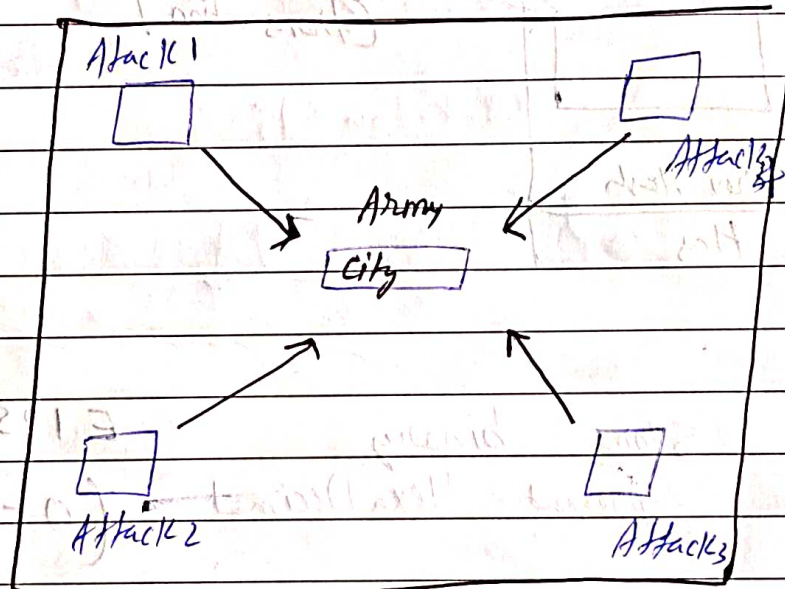
Why famous blockchain \Rightarrow Trust

④

1/1



* # Byzantine Generals problem

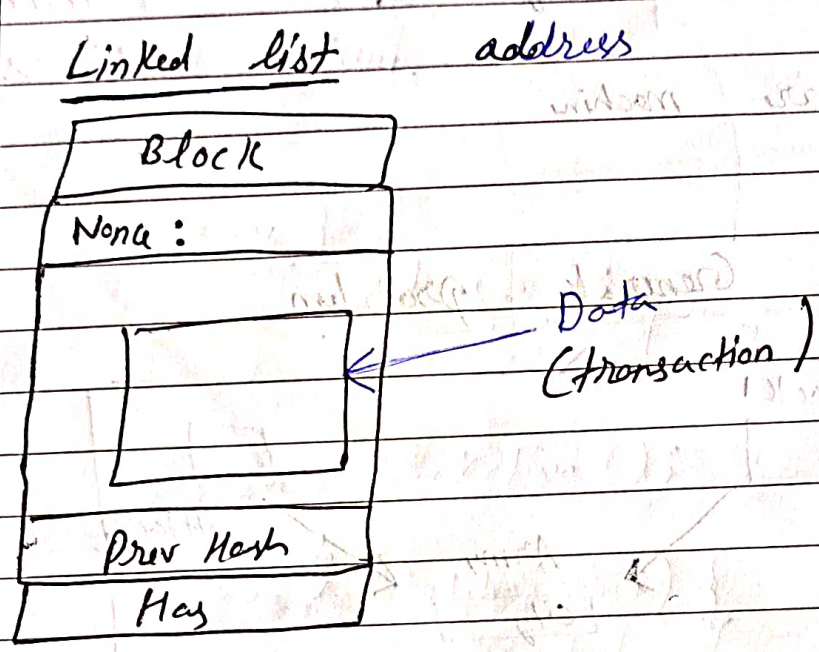
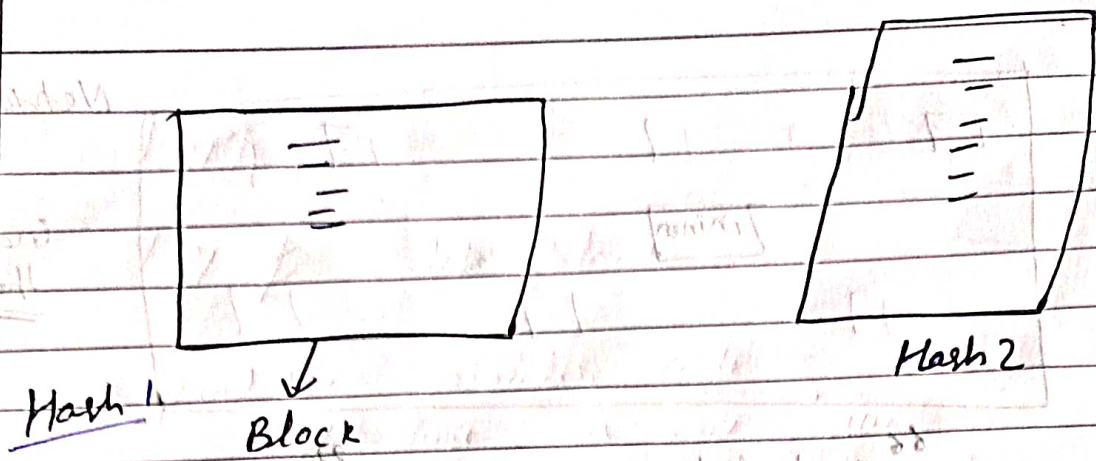


How attack some time in 17th century

- All communicate & attack
- Messengers
- Sending message everyone
- General say this time attack

⑤

1/1



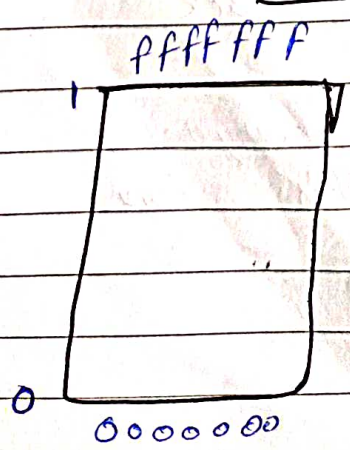
Store binary
represent Hexa Decimal

E125FAC9

(0-9 A-F) (16)

10-16 total

Difficulty Level



Real World Mining channel

// JavaScript

issue deal

Exception Handling

Try catch

Exception — on unexpected issue.

```

let a = 'hello';
if (a !== undefined) {
    throw new Error("This is not undefined  
txt");
}
else {
    console.log("this is undefined");
}

```

throw — error handling

⑧

11

~~try~~ {

try & catch block

part 1 - regular code

if there is some issue in regular code, create a code to handle issue.

try {

let a = 5;

console.log

("we are inside the try block");

blockchain();

}

catch (error) {

console.log

("Some thing went wrong");

X

X