Blockchain

What is it? What is Wyoming doing?

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Who Am I?

What is Blockchain?

Definitions

- Ledger - a list of transactions
- Blockchain - a decentralized, distributed and public digital ledger that is used to record transactions across many computers so that any involved record cannot be altered retroactively, without the alteration of all subsequent blocks
- Bitcoin - a decentralized digital currency without a central bank or single administrator that can be sent from user to user on the peer-to-peer bitcoin network without the need for intermediaries (many other cryptocurrencies fit under this definition, but Bitcoin is the original). It is the origin of blockchain technology and is an implementation of the technology.
- Hash function - a function can be used to map data of arbitrary size into data of a fixed size.
- Public key cryptography - how most security on the Internet works today and a large basis of how blockchain is secured -- This is used in crafting transactions that get recorded on to a block.

How Encryption Works

Symmetric Encryption

phhw ph
lq wkh
jdughq

3

p-3 h-3 h-3 w-3 --> Meet
p-3 h-3 --> me
l-3 q-3 --> in
w-3 k-3 h-3 --> the
j-3 d-3 u-3 g-3 h-3 q-3 --> garden

Meet me in the garden

Public Key Cryptography (asymmetric)

encrypted using
César's public key

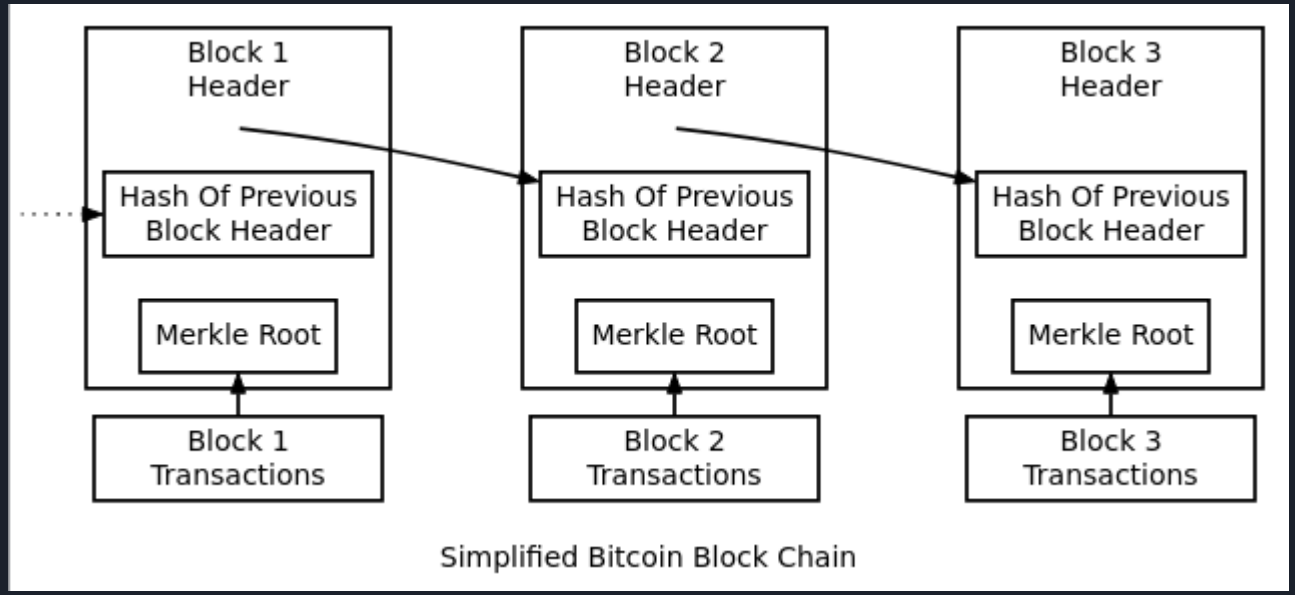
decrypted using
César's private key

Meet me in the garden

https://ssd.eff.org/en/module/deep-dive-end-end-encryption-how-do-public-key-encryption-systems-work

So uh... Blockchain?

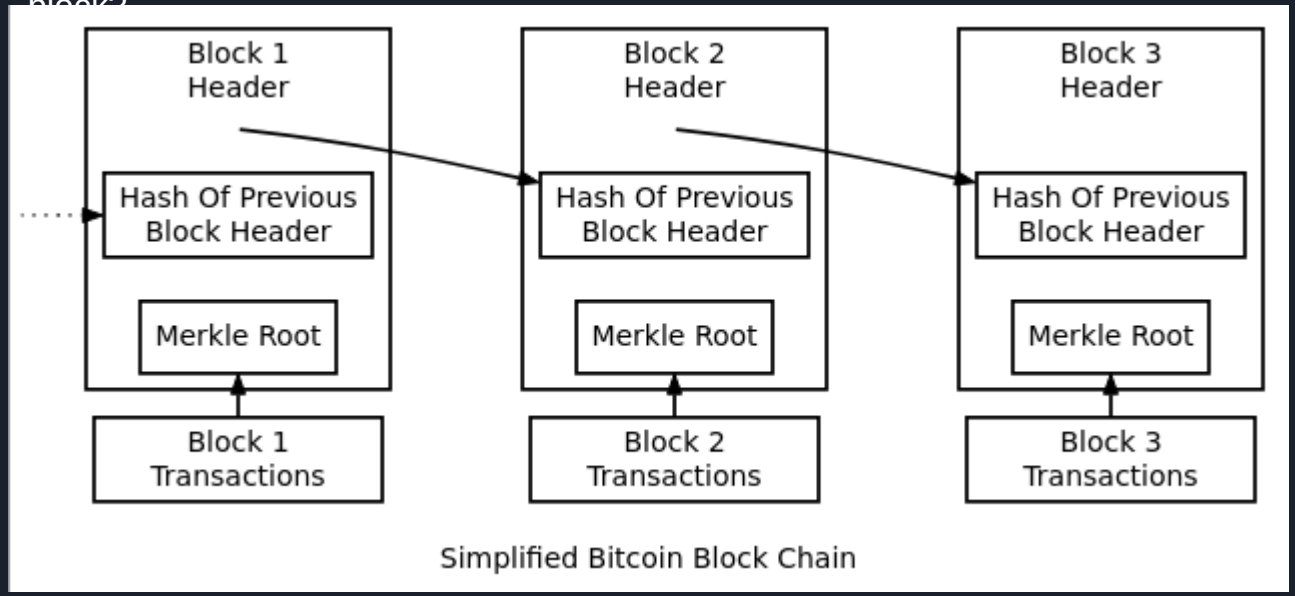
How Bitcoin is implemented



https://bitcoin.org/en/blockchain-guide#introduction

So how does the network add to the chain?

How does the network agree on what transactions get recorded and what goes in each block?



What is Wyoming doing?

- SF125 - Digital Assets
- HB62 - Utility Tokens
- HB57 - Fintech Sandbox
- HB74 - Special Depository
- HB185 - Certificated Shares on Blockchain

Questions?

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