Blockchain_Explanation

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0.1 Problem statement

Implement a block chain as a linked list storing the hash of previous block and each block having its hash,timestamp and data

0.1.1 Design considerations

Decided to generate random strings as data for each block. The hash for each block was prepared by SHA256 algorithm found in python's `hashlib` library. Hash was generated from data,timestamp and previous block's hash.

0.1.2 Space and Time complexity

Adding blocks to chain is a constant time operation hence it's $O(1)$.

Space is $O(n)$ since it depends on the number of blocks in the chain.