DAY 1 ASSIGNMENT

1. What is your Understanding of BlockChain?

A blockchain is a time-stamped series of immutable records of data that is managed by a cluster of computers not owned by any single entity. Each of these blocks of data (i.e. block) is secured and bound to each other using cryptographic principles (i.e. chain).

2. What is the Core problem blockchain trying to solve?

Core Problems:

- Data Transparency
- Prevent Fraud
- Verifiability
- Huge security boast
- Decentralization

3. What are the few features which block will give you?

With all its blockchain features and applications, we can safely assume that it's here to stay. All the blockchain important features are making a whole another level of impact on the web.

Key features of block chain technology:

- Cannot be Corrupted
- Decentralized Technology
- Enhanced Security
- Distributed Ledgers
- Consensus
- Faster Settlement

4. What all things does a block contain?

Block contains all transactions that are confirmed with the block. The transactions in a block are not just in a list, but in a so-called Merkle Tree.

Each block contains:

- Block number
- A cryptographic hash of the previous block
- A timestamp
- Transaction data
- Mining key

5. How is the verifiability of block chain attained?

One of the key features of the blockchain is its verifiability meaning the records in the blockchain can be verified by independent machines.

Formula:

```
Current block signature = Previous block signature + Data of the current block
Blockdata = Fingerprint 1
Newdata1 + previous Fingerprint1 = Fingerprint2
Newdata 2 + previous Fingerprint2 = Fingerprint3
Newdata3 + previous Fingerprint13 = Fingerprint4
.
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Newdata n + previous Fingerprint(n-1) = Fingerprint n