

Day 1 Assignment

Letsupgrade Blockchain Assignment

1) What is your Understanding of Blockchain?

Ans: A blockchain is similar to a chain of blocks where the data is divided and stored into blocks and these blocks are interlinked to and also several copies of these blocks exist. This is a type of peer to peer based computing. In other words, blockchain is a ledger of facts. It helps one achieve verifiability, data transparency, data integrity and decentralisation.

2) What is the core problem that the Blockchain is trying to solve?

Ans: The core problems that blockchain is trying to solve are:

- i) Security
- ii) Verifiability
- iii) Authenticity

3) What are the few features that blockchain will give you ?

Ans:

- i) Verifiability
- ii) Tamper Proof
- iii) Decentralisation
- iv) Immutable

4) What all things does blockchain contain ?

Ans:

- i) The block number
- ii) Transaction records (data or content)
- iii) Signature of the previous block (SHA-256)
- iv) Mining key

5) How is verifiability of blockchain achieved ?

Ans: The verifiability of blockchain can be achieved by the fingerprint of the block which is generated by the combination of data and the previous-block fingerprint, which is stored in the distributed systems.

Ex:-

```
Fingerprint(0) + Genesis Block = Fingerprint 1
Fingerprint 1 + Block_Data_2 = Fingerprint 2
Fingerprint 2 + Block_Data_3 = Fingerprint 3
Fingerprint 3 + Block_Data_4 = Fingerprint 4 and so on..
```