Solution Day 1 Assignment

Question 1:

What is your understanding of Blockchain?

The blockchain is a simple yet ingenious way of passing information from A to B in a fully automated and safe manner.

Question 2:

What is the core problem Blockchain trying to solve?

The core problem we are trying to solve is to create a system which will provide a safe, immutable transaction from A to B.

Let's take a ticketing system (may be bus ticket booking) as a blockchain.

We buy tickets on an app or the web. The payment gateway takes a cut for processing the transaction. Blockchains, not only can the bus operator save on payment gateway fees, it can move the entire ticketing process to the blockchain. The two parties in the transaction are the bus company and the passenger. The ticket is a block, which will be added to a ticket blockchain. Just as a monetary transaction on the blockchain is a unique, independently verifiable and unfalsifiable record (like Bitcoin), so can our ticket be.

Question 3:

What are the few features which Blockchain will give you?

Key features of Blockchain are as follows

1.Cannot be Corrupted (Immutable)

2. Decentralized Technology

3. Enhanced Security

4. Distributed Ledgers

5. Consensus

6. Faster Settlement

Question 4:

What all things does a Block contain?

A block is a container data structure. It has following features

1. Block Header (a cryptographic hash of the previous block)
2. Block Identifiers (a timestamp)
3. Merkle Trees (transaction data)

Question 5:

How is the verifiability of Blockchain has been attained?

As public ledgers, Bitcoin blockchain and Ethereum require transactions to be visible by default. Ethereum network offers pseudo-anonymity; for example, transactions are linked to addresses that correspond to public keys derived by user-held private keys, not by username or password.

By pseudo-anonymity, it means that a person will be linked to a public Blockchain address, but no one will get to know the actual name or address.