Day 1 Assignment

LetsUpgrade Blockchain

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**Q1. What is your understanding of Blockchain?**

Blockchain is a technology which allows users to add data and various information in blocks one after another. Once the block of data is added, another block adds up in a continues chain and so on and so forth, so that no one is able to go back and change the supplied information due to a very smart mathematical approach implemented in this technology and wide scattering of the blockchain across numerous “computers” serving to store this information.

**Q2. What is the core problem block chain is trying to solve?**

Blockchain Addresses the Problem of Data Security and Trust by Making the Ledger Public. Hardware and software errors are not the only data security issue. The blockchain has to also protect itself from willful fraud and theft.

**Q3. What are the few features that blockchain will give you?**

a. Immutable

b. Decentralized Technology

c. Enhanced security

d. distributed ledgers

e. verifiable

f. Tamper-proof

g. Data Transparency

**Q4. What all things does a Block contain?**

a. Block number

b. Transaction records

c. Previous block

d. Signature

e. Mining key

**Q5. How is the Verifiability of Blockchain is been attained?**

All blockchains are continuous chains starting from a genesis block up to the current block.

During the process of creating a new block, the transactions are hashed and a unique output or result is created. A hash function, takes input, and produces a specific output of a fixed size. It acts a digital fingerprint which cannot be modified.

The successive block in the chain contains a hash of the previous block and each block refers to its predecessor block for authentication. The transactions in a blockchain are referred to by their hash. For authentication of a transaction, all nodes must receive same output by running the hash. If different output is received then the transaction is considered invalid and is not verified.