DAY 1. ASSIGNMENT

**1,Q)What is your understanding of block chain?**

A blockchain is a growing list of records, called blocks, that are linked using cryptography.By design, a blockchain is resistant to modification of the data. It is "an open, distributed ledger that can record transactions between two parties efficiently and in a verifiable and permanent way".It is "an open, [distributed ledger](https://en.wikipedia.org/wiki/Distributed_ledger) that can record transactions between two parties efficiently and in a verifiable and permanent way".Blockchain was invented by [Satoshi Nakamoto](https://en.wikipedia.org/wiki/Satoshi_Nakamoto)

**2)What is the core problem blockchain trying to solve?**

The three core problems block-chain is trying to solve are:  
1.Authenticity  
[2.Security](http://2.Security)  
3.Need of trust on third party.

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

1.Verifiable  
2.Unchanged  
3.Tamper-Proof  
4.Immutable.

**4)What all things does a block contain?**

Block contains;

1.Block Number  
2.Transaction records  
3.Previous Block Signature  
4.Mining Key

**5)How is the verifiability of the blockchain is being attained?**

The same copy of data is stored distributed across many devices and if the data is changed in one place then other places in a network can be identified. Hence, the verifiability of the blockchain is achieved.  
Block 1: 0 + B = C  
Block 2: C + D = E  
B & D are Data to be Stored.  
Every block contains the previous block’s hash and own block’s hash and because of that we can create the chain of block and link the every block to whole chain. This hash gives the digital signature of block and it is same for the other who are connected with the network. Because of the digital signature we can verify the blockchain.