**Assignment-1**

**1. What is your understanding of blockchain?**  
Ans: The Blockchain is a chain of blocks, Each block contains a Data, Previous Key and current key in it.  
The Data cannot be changed it is immutable, Data is distributed to peer systems also. If we want to change the data in one system the link is broken in the next block and also after correcting that link the information is not in sync with peer system, Because we have changed the data in only one system.  
There fore it is very difficult and immutable to change the data of block chain  
  
**2. What is the core problem Blockchain trying to solve?**  
Ans: It is remove the dependency of storing data in a centralized system.  
It removes this dependency and make the data to be de-centalized.

There are 3 core problems:  
i. Authenticity  
ii. Security  
iii. Need of third party trust  
 **3. What are the few features which blockchain will give you?**  
Ans: 1. The de-centalized data  
2. Immutable  
3. Verifiable  
4. Tamper proof  
5. Secured  
  
**4. What all things does a Block contain?**Ans: i. Block Number  
ii. Transaction Record  
iii. Previous Block  
iv. Signature  
v. Mining Key  
  
**5. How is the verifiability of Blockchain is been attained?**  
Ans: Blockchain data is immutable, but if the data is changed in one system and we can verify the data is correct or not in the peer system.

Verifiability can be attained by  
Block 1  
0 + new data = Key1  
Block2  
Key1 + new data = Key2  
& so on.