

Assignment – 1

(Day - 1 Saturday 18/07/2020)

Question 1 : What is your understanding of blockchain?

Answer :

Blockchain is mixture of two techniques, one is Distributed Database and another one is Cryptography which overcome or resolve drawbacks of internet.

Drawbacks of internet is below –

- 1) Internet doesn't provide verifiable feature that means it doesn't verify any data which upload through it. Anybody can upload any data without verifying it i.e. whether it is true or not.
- 2) It contains loopholes for hackers to hack data and stole it which arise security issue.

Above issues overcome using Blockchain concept.

Blockchain provide following features –

- 1) Verifiable –

Blockchain is combination of two techniques and one of them is distributed database which stores many replicas of data in many systems. If data in one of the system has been changed then due to mismatch of the data other systems provide that data to the remote system. Because of that, incorrect data get replaced by appropriate data or valid data.

- 2) Unchangeable / Immutable –

We can't change data in system due to replicas of that data available and if data get change then that data can replace with valid data using replicas of data in another data.

- 3) Tamper-proof –

No one can change or tamper any data because here second technology Cryptography takes place. Due to encryption of data create

unique fingerprint that's why nobody temper data therefor it's temper-proof.

Question 2: What is core problem blockchain trying to solve?

Answer :

Blockchain trying to solve following problems –

- 1) Authentication - Internet doesn't provide verifiable feature that means it doesn't verify any data which upload through it. Anybody can upload any data without verifying it i.e. whether it is true or not.
- 2) Security - It contains loopholes for hackers to hack data and stole it which arise security issue.
- 3) Decentralization of Data – In blockchain, the data is not centralized it's distributed over multiple systems.

Above issues overcome using Blockchain.

Question 3: What are the few feature which Blockchain will give you?

Answer :

Blockchain provide following features –

- 1) Verifiable –

Blockchain is combination of two techniques and one of them is distributed database which stores many replicas of data in many systems. If data in one of the system has been changed then due to mismatch of the data other systems provide that data to the remote system. Because of that, incorrect data get replaced by appropriate data or valid data.

- 2) Unchangeable / Immutable –

We can't change data in system due to replicas of that data available and if data get change then that data can replace with valid data using replicas of data in another data.

3) Tamper-proof –

No one can change or tamper any data because here second technology Cryptography takes place. Due to encryption of data create unique fingerprint that's why nobody temper data therefor it's temper-proof.

Question 4: What all things does a Block contain?

Answer :

Following things block contain –

- 1) Current block hash
- 2) Data record of current block
- 3) Previous block hash
- 4) Signature
- 5) Mining Key

Question 5: How is verifiability of blockchain is been achieved?

Answer :

Blockchain is combination of two techniques and one of them is distributed database which stores many replicas of data in many systems. If data in one of the system has been changed then due to mismatch of the data other systems provide that data to the remote system. Because of that, incorrect data get replaced by appropriate data or valid data. So using distributed database, we can achieve verifiability.