Aossignment 5

Aim :-

Write a survey report on types of blockchain and its real time use cases.

Objectives:-

1) Understand the types of blockchain.
2) Understand blockchain's real time use cases.

Requirements:-

Report on types of blockchain.

Theory:-

Blockchain concept was introduced with the Bitcoin white-paper to solve the double-spending problem, when executing a transaction over a communication medium without relying on a trusted third party like a financial institution or a bank. First public blockchain behind Bitcoin was developed with a specific set of functionality in mind, namely decentralized currency and peer-to-peer electronic cash applications.

Therefore, Bitcoin blockchain was practically difficult to customize and had very low programmable support using a scripting system called Script for other purposes. Vitalik Bunerin noticed this difficulty and introduced Ethereum blockchain platform with a built-in turing complete

programming language, allowing anyone to write programs called smart contracts can run decentralized applications.

Types of Blockchain :-

1) Public Blockchain:
Public blockchains are permissionless in nature, allow anyone to join, and are completely decentralized.
Public blockchains allow all nodes of the blockchain to have equal rights to access the blockchain, create new blocks of data and validate blocks of data.

2) Private Blockchain:
Private blockchains, which may also be referred to as managed blockchains, are permissioned blockchains controlled by a single organization. In a private blockchain, the central authority determines who can be a node.

3) Consortium Blockchain:
Consortium blockchains are permissioned blockchains governed by a group of organizations, rather than one entity, as in the case of private blockchain.
More decentralization is there.

4) Hybrid Blockchain:

Hybrid blockchains are blockchains that are controlled by a single organization, but with a level of oversight performed by the public blockchain.

Public
No central authority

Hybrid

Private
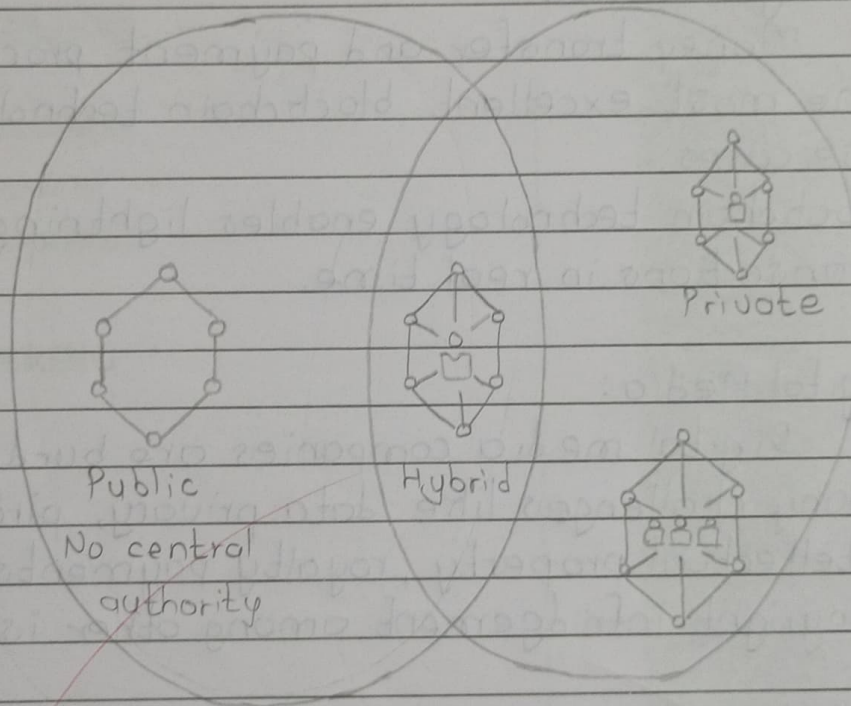
Use Cases :-

1) Smart Contracts:

Smart contracts are blockchain-based contracts enforced in real time.

They are created as an agreement between two or more parties without the involvement of any intermediary.

Use cases:-

i) Burst IQ (health care)

ii) Propy (real estate).

2) Internet of Things (IoT):
   The IoT industry is growing rapidly with billions of connected devices.
   The latest forecasts suggest that by 2030, there'll be 50 billion devices in use globally.

3) Money Transfer:
   Money transfer and payment processing are the most excellent blockchain technology use cases.
   Blockchain technology enables lightning-fast transactions in real time.

4) Digital Media:
   Digital media companies are burdened with many challenges like data privacy, piracy of intellectual property, royalty payments and copyright infridgement among other issues.

Conclusion:-
   Hence, we studied about the types of blockchain and its real time use cases.