**What is mining pool?**

[- Mining Pool is the group of miners who combine their computational power to mine a block and then share reward based on contract (equal pay or pay according to the cpu power they provide)]

A mining pool is a collective group of miners who pool their computational resources (hash power) to increase their chances of successfully mining blocks and receiving block rewards in a more predictable and consistent manner. Mining pools are common in proof-of-work (PoW) blockchain networks, such as Bitcoin and Ethereum. Individual miners contribute their computational power (hash rate) to the mining pool. This collective effort increases the pool's total hash rate, enhancing its chances of successfully mining blocks. The mining pool's combined hash power is used to solve cryptographic puzzles and validate transactions on the blockchain. When a mining pool successfully mines a block, the block reward is distributed among the pool participants based on their contributed hash power. The block reward (consisting of newly minted cryptocurrency and transaction fees) is divided among the pool participants proportional to their contribution. This distribution method ensures that miners receive rewards based on their relative contribution to the pool's overall hash rate.

**What is a timestamp? How is it important for Blockchain.**

[- Timestamp is something that records the current date and accurate time of the transaction

- Importance: Keeping transaction record, Network synchronization]

A timestamp refers to a specific point in time recorded and appended to a block of transactions within the blockchain.

Timestamps serve several important purposes in blockchain systems:

1. Timestamps help establish the chronological order of transactions within the blockchain.

2. Once a block is added to the blockchain, its timestamp becomes immutable, meaning it cannot be altered or tampered with retroactively.

3. Timestamps play a role in various consensus mechanisms used in blockchain networks. The first miner to successfully mine a block includes a timestamp in the block header, indicating the time at which the block was mined. This timestamp, along with other parameters, helps determine the validity of the block and its eligibility for inclusion in the blockchain.

4. Timestamps facilitate network synchronization by providing a common reference point for nodes within the blockchain network.