Design a blockchain network as illustrated in the figure below. Every miner node is connected to each other (just like mesh topology), however, there should be a logical ring of all the miners i.e., who will create the block is depends on the ring. Every node gets the chance to create the block once one round is completed of the ring. The direction for processing block creation could be of clockwise or anticlockwise, i.e., either from M1, M2, M3...M8 or M8, M7,..M1. Accordingly, the first and last node changes. A consensus of the block depends that at least 51% node verifies the proposed block by the miner. Consider that every block contains 50-100 transactions.

Input: 1. Consider atleast 10-15 miner nodes.

2. text file (multiple transactions) also consider as transaction pool which contains many transactions. This transaction pool is accessible by all the nodes.

Output: Verified Blockchain (Every block is a file which contains essential information e.g., block number, nonce, hash, Merkle root along with the transactions. Use the Merkle root tree concept to store the transaction.

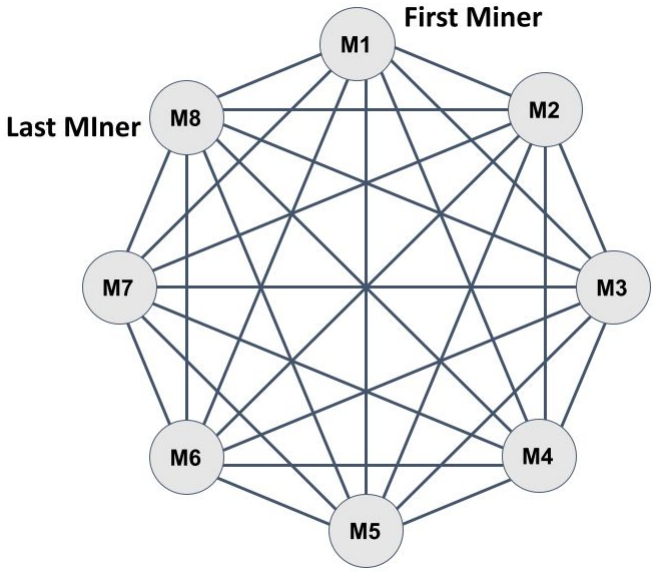

Figure 1: Blockchain network topology

Marks distribution:

1. Blockchain network: 5
2. Block creation: 5
3. Consensus: 5
4. Generating output: 5