***HALVING OF BITCOIN***

**Bitcoin** Blockchain is a decentralized network of nodes where transactions are stored in blocks.These transactions refer to transferring cryptocurrency from one account to another, executing a smart contract function or modifying data stored on this blockchain. Now , let’s say a transaction occurs in this blockchain, Miners validate that transaction, and a copy of the transaction is provided to every miner, then miners put this copy of the transaction in their own block, and for this they have to solve nonce for which required hash of the block is obtained. This hash depends on the protocol of that blockchain. The first miner to solve the hash of their own blocks get incentives/rewards in the form of **Bitcoin** for the effort they put in and use of computational power. Then the solved block is added to the blockchain after agreement of the majority of miners in that blockchain and then everyone on the blockchain is able to view the transaction history. This is proof of work consensus mechanism. Now, since miners are rewarded with Bitcoin, new bitcoins are issued in the blockchain due to which the total number of bitcoins in the blockchain increases. But, the predetermined number of bitcoins is 21 million according to bitcoin protocol. So, when this limit is reached (which would take a long time as of now.), Miners would be rewarded with a transaction fee after approving each transaction rather than bitcoins. The process by which circulation of bitcoin is controlled in the network is called ‘Halving’. Approximately every four years, the reward that miners receive for successfully mining a block is halved. Initially, when Bitcoin was launched in 2009, miners received 50 bitcoins as a block reward. Then, in November 2012, this reward was halved to 25 bitcoins per block. Subsequently, in July 2016, it halved again to 12.5 bitcoins per block. The most recent halving occurred in May 2020, reducing the block reward to 6.25 bitcoins per block. Currently, The total number of bitcoins in its blockchain is around 19 million.