FLOW CHART

Initialization of class Election

• Blockchain() initialized.



Blockchain.create_genesis_block()

- this method will be called in Blockchain()
- it will create genesis Block.



Blockchain.cast_vote()

- •it will create instance of Vote class.
- •Vote.encrypte() voteData will be encrypt using Authority Public Key.
- •Vote.sign() vote will be sign by private key of voter.



register_to_vote()

- it will create instance of voter
- assigned private-public key pair.
- hashed_id and public key pair will be stored in Election Data.



Vote.verify_vote()

- •verfying digital signature.
- •checking uniqueness of vote from the previous votes.
- •verified vote will be added to mempool of blockchain.



Blockchain.create_block()

- Block will be created if sufficient Vote in mempool.
- Block will have previous hash, votes, nonce, timestamp, height
- •Block.mine() Block will me mined to get required Hash with given difficulty.



Block Added on Blockchain.



Blockchain.add_block()

- Block.verify() it will check the proof of work of the block and previos hash.
- if valid, Block will be added to Blockchain, else will be discarded.