import hashlib

def hashGenerator(data):

    result = hashlib.sha256(data.encode())

    return result.hexdigest()

class Block:

    def \_\_init\_\_(self, data, hash, prev\_hash):

        self.data = data

        self.hash = hash

        self.prev\_hash = prev\_hash

class Blockchain:

    def \_\_init\_\_(self):

        hashLast=hashGenerator('gen\_last')

        hashStart=hashGenerator('gen\_hash')

        genesis=Block('TOKENS',hashStart,hashLast)

        self.chain=[genesis]

    def add\_block(self,data):

        prev\_hash=self.chain[-1].hash

        hash=hashGenerator(data+prev\_hash)

        block=Block(data,hash,prev\_hash)

        self.chain.append(block)

bc=Blockchain()

bc.add\_block('IRONMAN TOKEN')

bc.add\_block('SPPDERMAN TOKEN')

bc.add\_block('1 USING ETHEREUM')

bc.add\_block('2 USING BINANCE')

for blocks in bc.chain:

    print(blocks.\_\_dict\_\_)

***OUTPUT***

PS C:\Users\Wipro\Documents\GitHub\SarfrajBagwan> python -u "c:\Users\Wipro\Desktop\python\hash.py"

{'data': 'TOKENS', 'hash': '0a87388e67f16d830a9a3323dad0fdfa4c4044a6a6389cab1a0a37b651a5717b', 'prev\_hash': 'bd6fecc16d509c74d23b04f00f936705e3eaa907b04b78872044607665018477'}

{'data': 'IRONMAN TOKEN', 'hash': '197868e6433ff5d60811f8d12370c78b532921b9a699fe24045bdf436ec42762', 'prev\_hash': '0a87388e67f16d830a9a3323dad0fdfa4c4044a6a6389cab1a0a37b651a5717b'}

{'data': 'SPPDERMAN TOKEN', 'hash': '4e948a5f10d1ac3ec2312d4cc4649e2897c8a3cbdbc9717c528fdb1ad473f8e5', 'prev\_hash': '197868e6433ff5d60811f8d12370c78b532921b9a699fe24045bdf436ec42762'}

{'data': '1 USING ETHEREUM', 'hash': '2e549335130cb94559bcdc5645225787ce2dd6b8b8ceb33c35371e42d39ac940', 'prev\_hash': '4e948a5f10d1ac3ec2312d4cc4649e2897c8a3cbdbc9717c528fdb1ad473f8e5'}

{'data': '2 USING BINANCE', 'hash': 'ccfa2d00f8cc137f0a15de7f32fbacaff0c46f36050c1de6c6e4d2fa2acd0157', 'prev\_hash': '2e549335130cb94559bcdc5645225787ce2dd6b8b8ceb33c35371e42d39ac940'}