

## 5-BlockChain

### **Block class**

I used hashlib a secure hash in python. use sha256() to create a SHA-256 hash object. I feed this object with bytes (utf-8) using the update() method. then digest of the concatenation of the data fed using the hexdigest() methods. Feeding string objects into update() is not supported, as hashes work on bytes, not on characters so I encode data with utf-8.

### **BlockChain class**

I used a linkedList to store values in nodes with time, data, previous\_has and hash

### **Time and space compexity**

$O(n)$  -> n is the length of data in the block