# atato

# Task-1

- to identify the wallet address with given seed phrase, we could use any of the wallets such as "myetherWallet" or "metamask"
- I used "myetherWallet" and with the help of seed phrase I could find the wallet address in account info section,
- I also sent test eths to this address using one of the faucets
- wallet address is written in file called "task1.pdf" in the current folder.

# Task-2

- goerli.etherscan.io exposes APIs to fetch block details.
- I made use of requests library available in python to make http get request to api to fetch latest block
- api_endpoint used is : "https://api-goerli.etherscan.io/api?module=proxy&action=eth_blockNumber" (with appropriate query params to fetch latest block)
- install dependencies using below command: python3 -m pip install -r requirements.txt

- script is present in current folder with name: "task2_get_latest_block.py"
- script could be run as below: python3 task2_get_latest_block.py

# Task-3

- code for task#3 is contained inside folder : "task3" available in current folder

- folder structure is as below:

- task3/app/booking.py. => this is a python file which contains a class called Booking which represents Booking object, it has methods such as create_booking, get_booking, delete_booking. It makes use of "requests" library of python to call http requests.

- task3/test/conftest.py. => this is conftest file which contains setup before test and teardown after test.

- task3/test/test_booking.py. => this is actual test file which contains a test class and test functions inside which verifies creation of booking, getting booking, deletion of booking, deleted booking can not be fetched etc. tests are written using "pytest" framework.

- to run the tests, execute below command from current folder: python3 -m pytest

- Output: plugins: dependency-0.5.1, web3-5.31.3, anyio-3.6.2 collected 3 items

task3/test/test_booking.py ... [100%]

```
==================================================
======== 3 passed in 10.30s
==================================================
========
```

# Task-4

- test cases for task-4(search service ui) can be found in a file "task4.pdf" in the current folder.

# Task-5

- I have written a javascript code to fetch the oldest mined block of "goerli testnet chain" using "web3.js" library
- making a connection to Web3 using url : ""https://goerli.infura.io/v3/"", where project ID can be fetched from infura projects
- once we get the connection handle, we are recursively trying to get blocks starting from block_num 1, using web3.eth.getBlock(block_num) function
- and checking transactions length for each block, if we get a block where length of transaction is greater than zero, exit the infinite loop and that's the oldest block which is mined(having transaction.)
- this code is put inside folder task5 present in the current folder.
- to execute the code, goto folder task5 cd task5

- install dependencies, npm install

- once dependencies are installed, execute below command to run: npde index.js