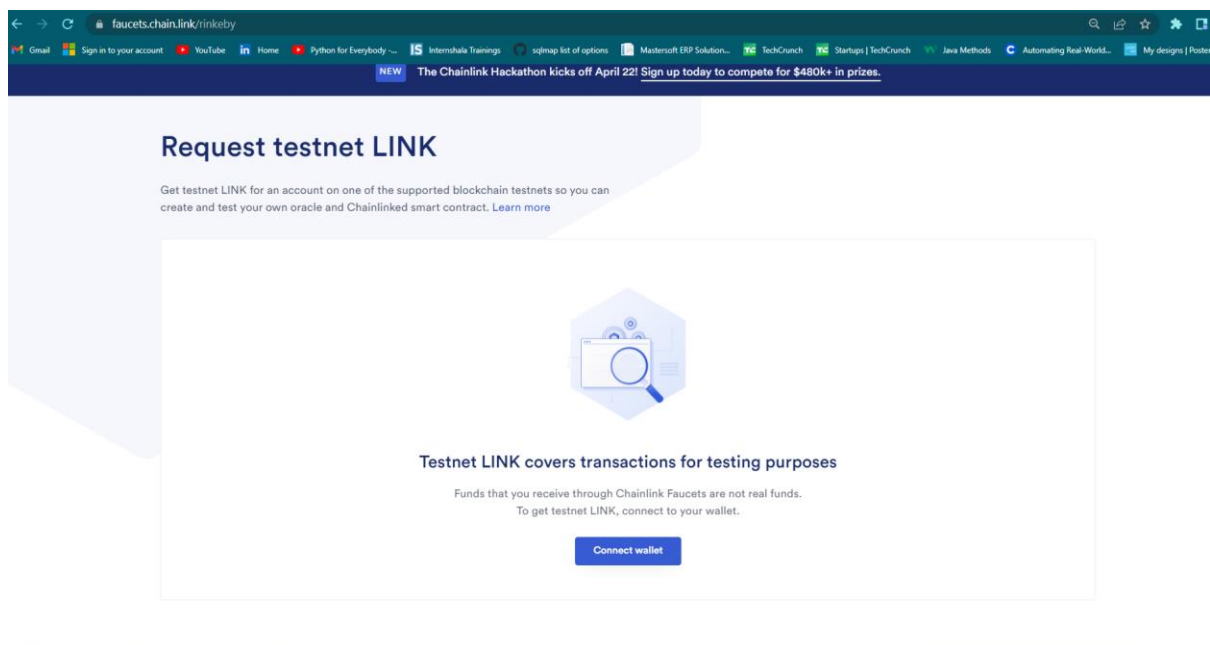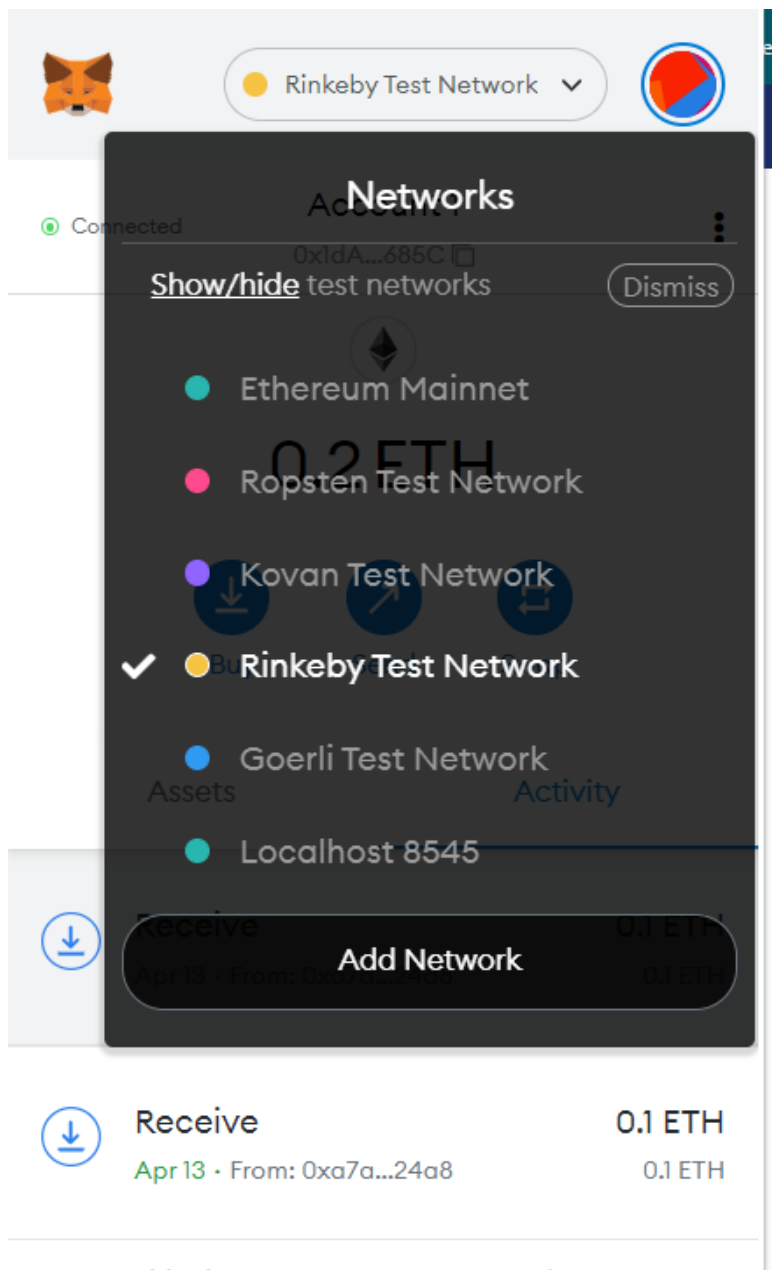Skill Development Program:

BLOCKCHAIN:

Assignment Day 2:

Creating DAO and tokens:

Using faucet to connect to wallet on Metamask (Funds that you receive through Chainlink Faucets are not real funds.)

In metamask- go to network and choose Rinkeby Test Network from the available networks.

Request for testnet link- here we get testnet link for requesting 0.1 test ETH for our account.

faucets.chain.link/rinkeby

Gmail   Sign in to your account   YouTube   Home   Python for Everybody -...   Internshala Trainings   sqlmap list of options   Mastersoft ERP Solution...   TechCrunch   Startups | TechCrunch   Java Metho

NEW The Chainlink Hackathon kicks off April 22! Sign up today to compete for $480k+ in prizes.

Request testnet LINK

Get testnet LINK for an account on one of the supported blockchain testnets so you can create and test your own oracle and Chainlinked smart contract. Learn more

Network

⬥ Ethereum Rinkeby   ∨

Wallet address

0×1da39ff463287c477468b1ab5ca8be8d5a16685c

Request type

☑ 10 test LINK   ☑ 0.1 test ETH

☐ I'm not a robot   reCAPTCHA
                     Privacy - Terms

Send request

[?] Need more testnet ETH? Get ETH from Ethereum Rinkeby Faucet

---

✓ Enter wallet address   ✓ Initiating   ○ Waiting for confirmation   ④ Tokens transferred

Waiting for confirmation

Transactions have been initiated. Waiting for confirmation.

Request type	Transaction hash
10 test LINK	0xb969c3b643b35000d834d62088be65a8f245f9d73b45ad6346cde7b09a9520fe

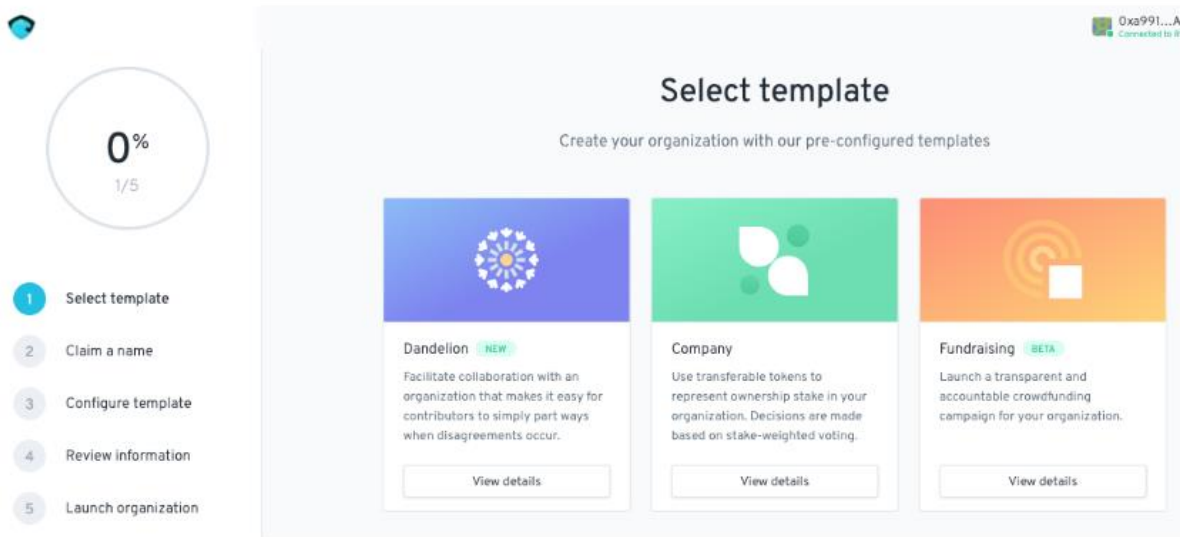| Request type	Transaction hash
0.1 test ETH	0xa74610b3c5c5e72225a55453c6f1c1533490b68687d0af583eceafab98979ddf

Close
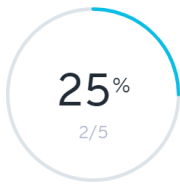
Upon request completion 0.1 ETH (fake) will be transferred to the linked wallet
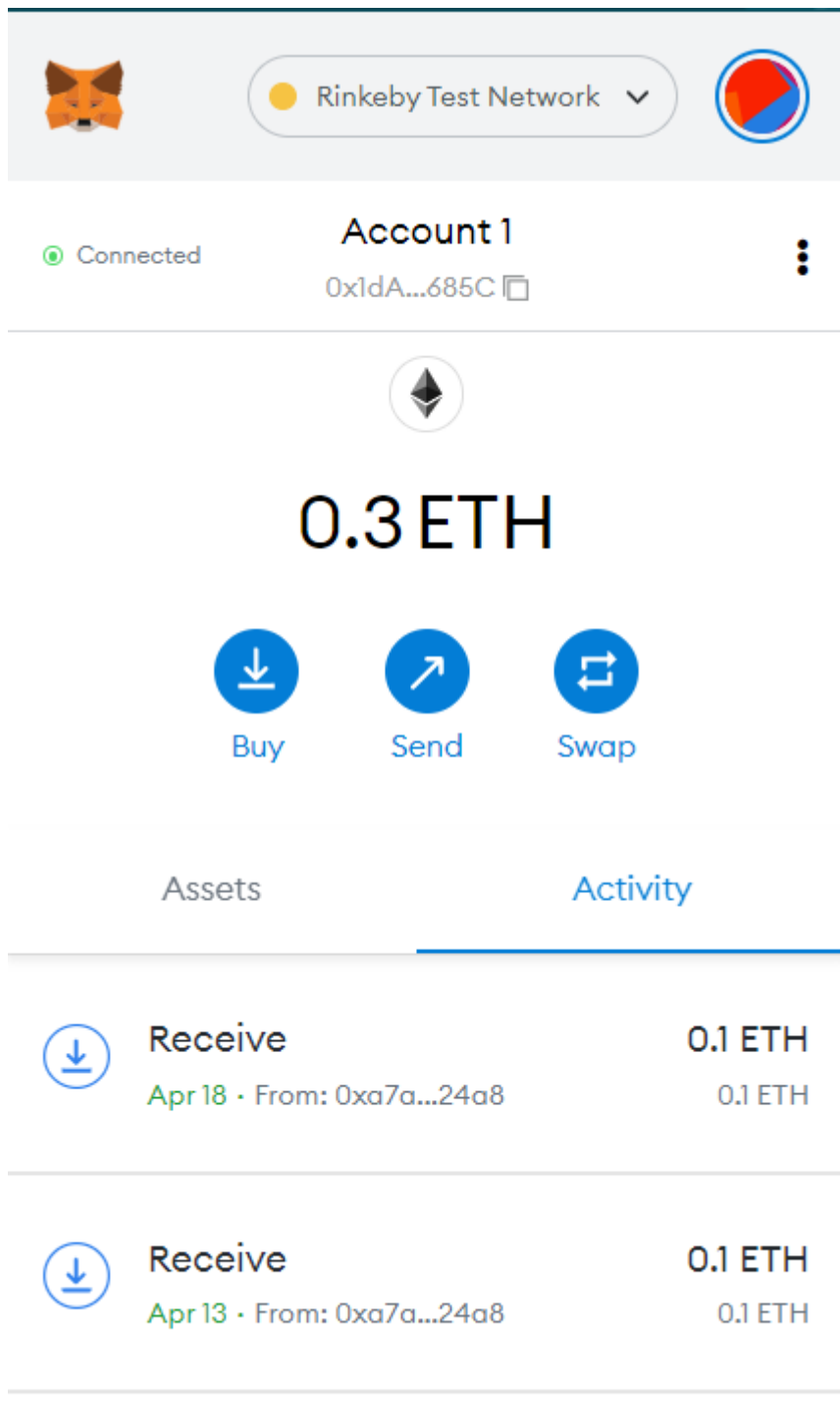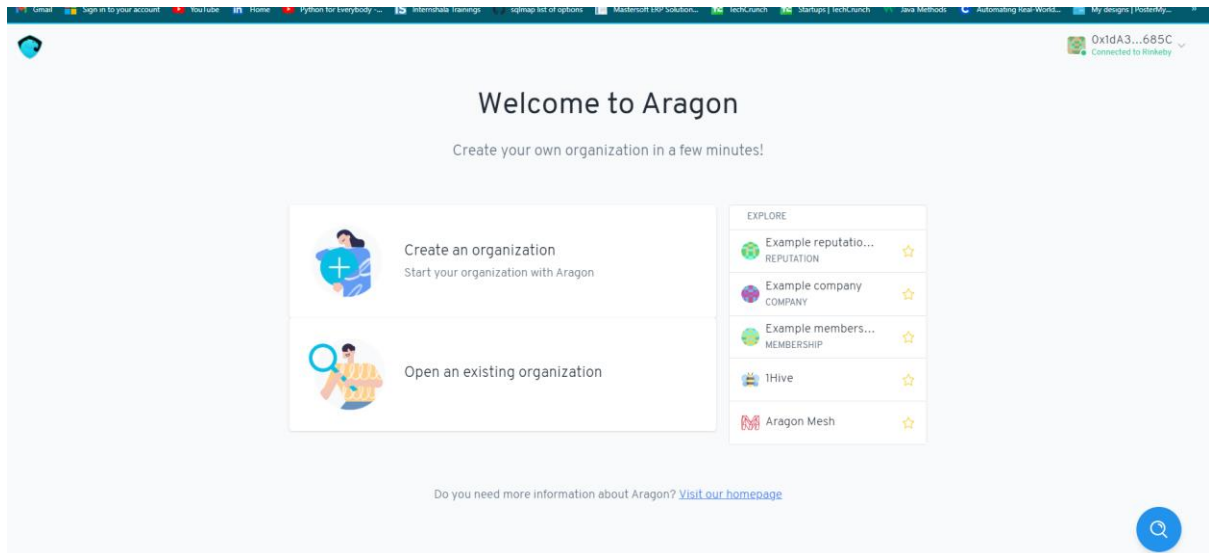
Choose any template (company template)

Claim a name

ORGANIZATION'S NAME

odessy   .aragonid.eth ✓

Aragon uses the Ethereum Name Service (ENS) to assign names to organizations. The name you choose will be mapped to your organization's Ethereum address and cannot be changed after you launch your organization.

← Back   Next: Configure template

25%
2/5

✓ Company
2 Claim domain
3 Configure template
4 Review information
5 Launch organization

Configure template

Choose your 🗳 Voting settings below.

SUPPORT % ❓

20 %

MINIMUM APPROVAL % ❓

6 %

VOTE DURATION ❓

0   Days   0   Hours   5   Minutes

The support and minimum approval thresholds are strict requirements, such that votes will only pass if they achieve approval percentages greater than these thresholds.

← Back   Next: Configure template

50%
3/5

✓ Company
✓ odessy.aragonid.eth
3 Configure template
4 Review information
5 Launch organization

Pick some token names and issue wallet address

Configure template

Choose your 🔷 Tokens settings below.

TOKEN NAME ❓

DC

TOKEN SYMBOL ❓

DC

TOKEN HOLDERS

🐢 0x1dA39fF463287c477468b1ab5CA8BE8D5A16685C 🗑

BALANCES

20

🟪 0xd3138f55c0150910471b274ac54e6abb33f089e1 🗑

20

＋ Add more

These settings will determine the name and symbol of the token that will be created for your organization. Add members to define the initial distribution of this token.

← Back

Next: Review information

50%
3/5

✓ Company

✓ odessy.aragonid.eth

3 Configure template

4 Review information

5 Launch organization

Token is created in metamask and sent to Aragon to launch an organization.

Account 1 → 0xA38...6A7b

New address detected! Click here to add to your address book.

https://client.aragon.org

0xA38...6A7b : NEW TOKEN ⓘ

DETAILS   DATA   HEX

EDIT

Estimated gas fee ⓘ

0.00486091

0.004861 ETH

Site suggested

Very likely in < 15 seconds

Max fee: 0.00486091 ETH

0.00486091

Total

0.00486091 ETH

Amount + gas fee   **Max amount:** 0.00486091 ETH

MetaMask Notification   — □ ✕

Rinkeby Test Network

Account 1 → 0xA38...6A7b

New address detected! Click here to add to your address book.

https://client.aragon.org

0xA38...6A7b : NEW INSTANCE ⓘ

DETAILS   DATA   HEX

EDIT

Estimated gas fee ⓘ   0.01276269 **0.012763 ETH**

Site suggested
Very likely in < 15 seconds   **Max fee:** 0.01276269 ETH

Total   0.01276269 **0.01276269 ETH**

Amount + gas fee   **Max amount:** 0.01276269 ETH

Reject   Confirm
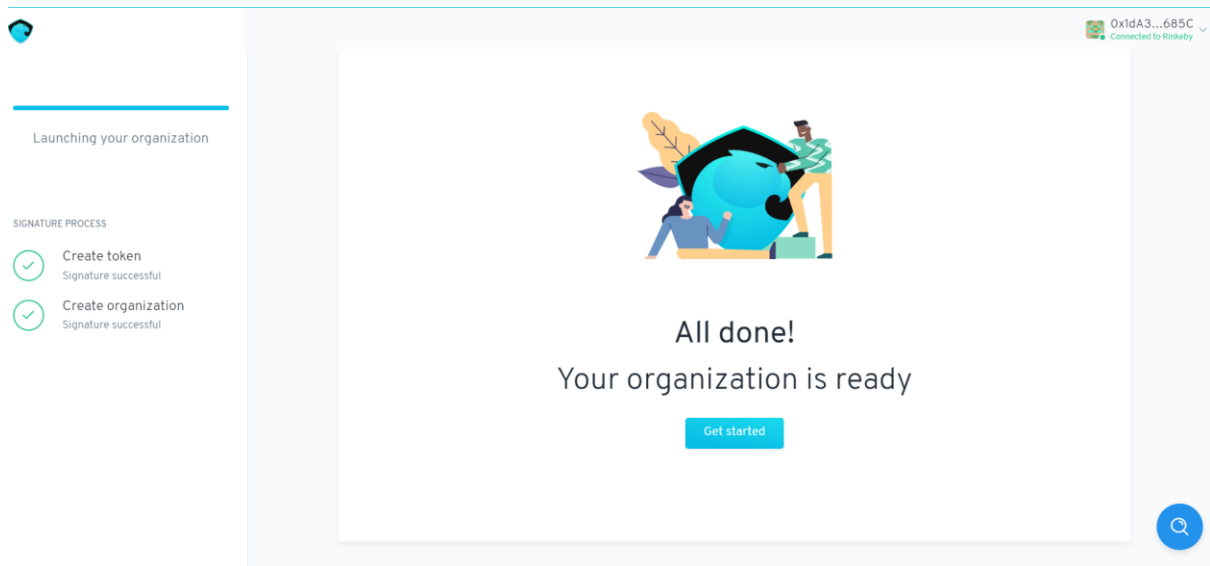
Now a DAO in Aragon Is created using Metamask, the test ETH can be sent to anyone using the Send , to anyone whose wallet address is known. The same way even real cryptocurrencies are traded.

Smart Contract:

```solidity
// SPDX-License-Identifier: MIT
pragma solidity ^0.8.5;

import 'https://github.com/OpenZeppelin/openzeppelin-contracts/blob/master/contracts/token/ERC20/ERC20.sol';

contract MyToken is ERC20 {
    address public admin;
    constructor() ERC20('My Token', 'MTN') {
        _mint(msg.sender, 10000 * 10 ** 18);
        admin = msg.sender;
    }
    function mint(address to, uint amount) external {
        require(msg.sender == admin, 'only admin');
        _mint(to, amount);
    }
    function burn(uint amount) external{
        _burn(msg.sender, amount);
    }
```

```
}
```

The above is a smart contract which helps in creating a token and the same code in remix helps in simulating the transfer of token (wallet money) from one virtual account to another.
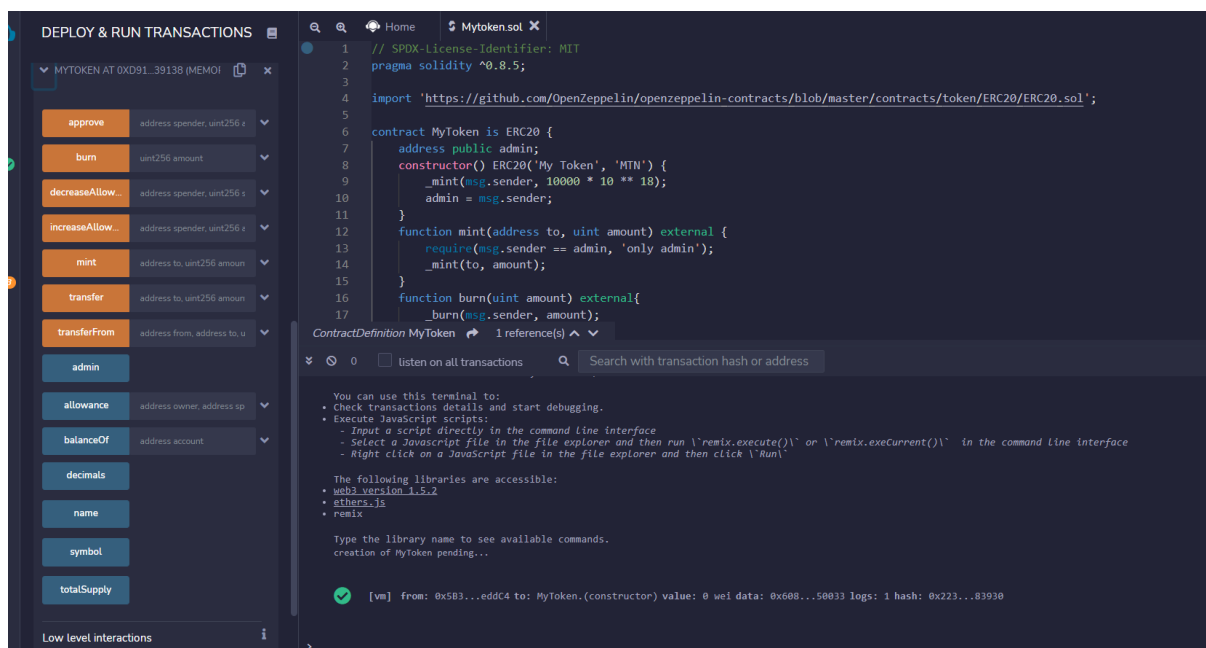
On deploying the contract, it gives various options such as: Approve, burn, decrease allowance, increase allowance, etc.

Here balanceOf function indicates the balance in the current deployed accounts wallet. (It takes the account number of the user and returns balance)
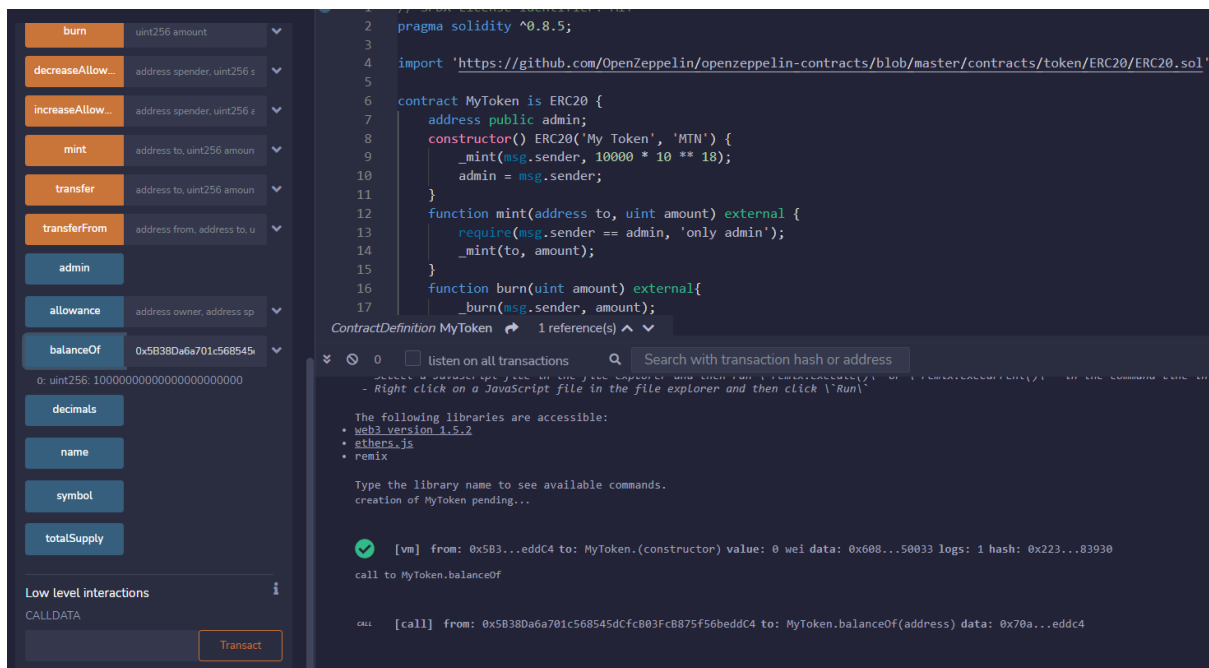
The transfer and transferFrom, either of them can be used to transfer money from one wallet to another.

Transfer requires only sender wallets address and amount to transfer.

TransferFrom requires both sender and receiver wallets address and then the amount to be transferred.
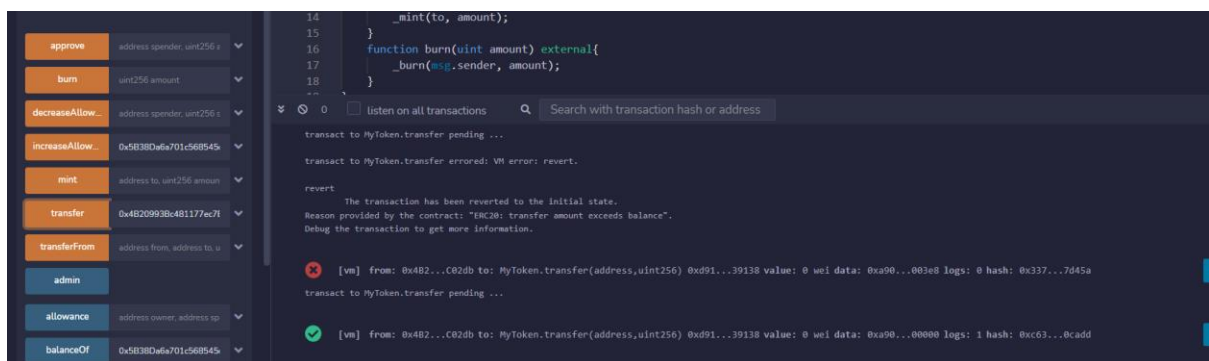
Increase allowance function increases wallet amount:

```solidity
import 'https://github.com/OpenZeppelin/openzeppelin-contracts/blob/master/contracts/token/ERC20/ERC20.sol';

contract MyToken is ERC20 {
    address public admin;
    constructor() ERC20('My Token', 'MTN') {
        _mint(msg.sender, 10000 * 10 ** 18);
        admin = msg.sender;
    }
    function mint(address to, uint amount) external {
        require(msg.sender == admin, 'only admin');
        _mint(to, amount);
    }
    function burn(uint amount) external{
        _burn(msg.sender, amount);
```

ContractDefinition MyToken   1 reference(s)

listen on all transactions   Search with transaction hash or address

[vm] from: 0xAb8...35cb2 to: MyToken.transfer(address,uint256) 0xd91...39138 value: 0 wei data: 0xa90...00000 logs: 0 hash: 0x6b1...f2a0c

call to MyToken.balanceOf

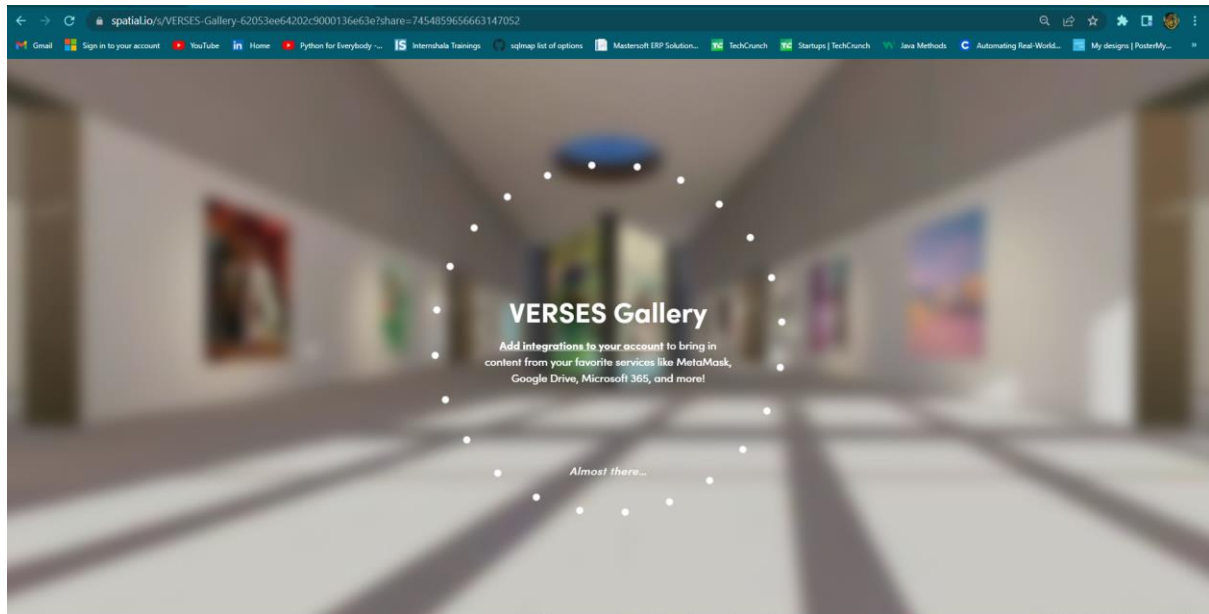[call] from: 0xAb8483F64d9C6d1EcF9b849Ae677dD3315835cb2 to: MyToken.balanceOf(address) data: 0x70a...eddc4

transact to MyToken.increaseAllowance pending ...

[vm] from: 0xAb8...35cb2 to: MyToken.increaseAllowance(address,uint256) 0xd91...39138 value: 0 wei data: 0x395...02710 logs: 1 hash: 0x65a...e73b8

call to MyToken.balanceOf

[call] from: 0xAb8483F64d9C6d1EcF9b849Ae677dD3315835cb2 to: MyToken.balanceOf(address) data: 0x70a...eddc4

transfer   0x4B20993Bc481177ec7E

transferFrom   address from, address to, u

admin

allowance   address owner, address sp

balanceOf   0x5B38Da6a701c568545

0: uint256: 1000000000000000000000

decimals

0: uint8: 18

name

0: string: My Token

symbol

0: string: MTN

totalSupply

0: uint256: 10000000000000000000000

Spatial.io

Exploring art gallery in 3D

Video in github as spatial_video

Spatial offers many such 3D exploring rooms.