



School: Campus:

Academic Year: Subject Name: Subject Code:

..... Semester: Program: Branch:

Specialization:

Date:

Applied and Action Learning(Learning by Doing and Discovery)

Name of the Experiment : ERC-20 Basics – Tokenization Concepts

*** Coding Phase: Pseudo Code / Flow Chart / Algorithm**

ALGORITHM:

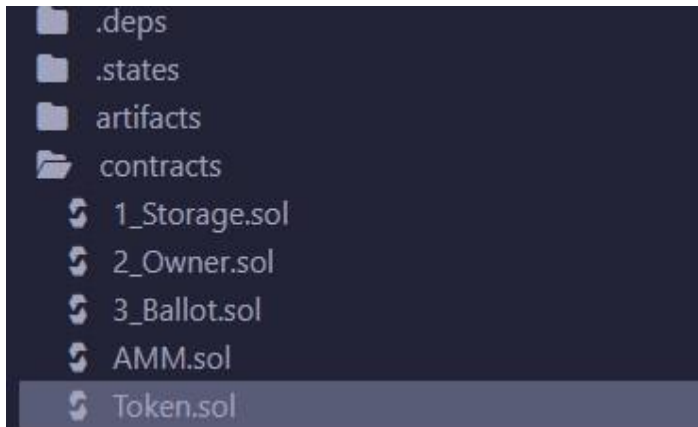
- 1.Start
- 2.Open your remix IDE and create a new file named as Token.sol
- 3.Write the solidity code in Token.sol file
- 4.Now compile the file
- 5.Then go to deploy and transactions and write token name and symbol and deploy it
- 6.Now we will get an address in deployed contracts copy that address
- 7.Now open your metamask wallet and import tokens
- 8.Paste the copied address in token contract address and click on confirm
- 9.Finally your created token will be shown in the wallet
- 10.End

*** Software used**

1. Remix IDE
- 2.Metamask wallet

* Testing Phase: Compilation of Code (error detection)

Creating file



Writing solidity code

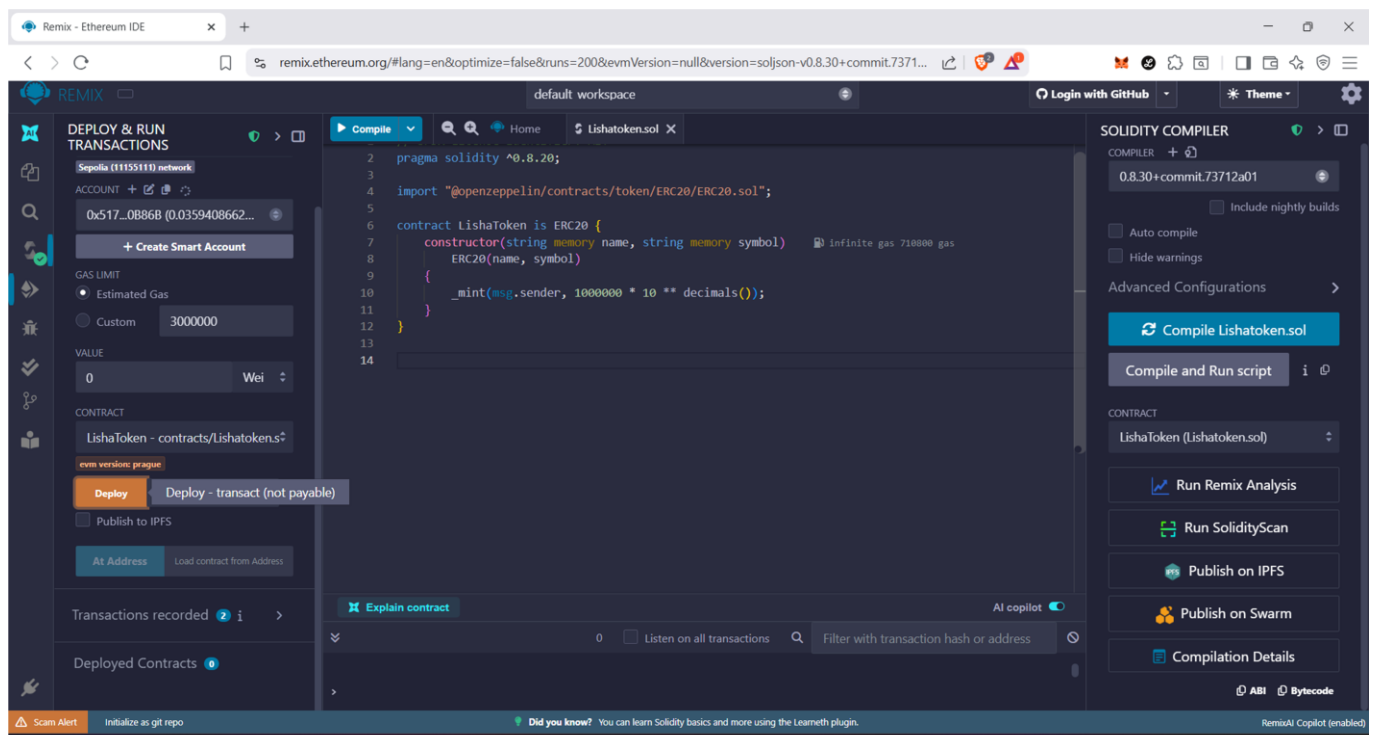
```
//SPDX-License-Identifier: MIT
pragma solidity ^0.8.20;

import "@openzeppelin/contracts/token/ERC20/ERC20.sol";

contract DityaToken is ERC20 {
    constructor(string memory name, string memory symbol) ERC20(name, symbol){
        _mint(msg.sender, 1000000 * 10 ** decimals());
    }
}
```

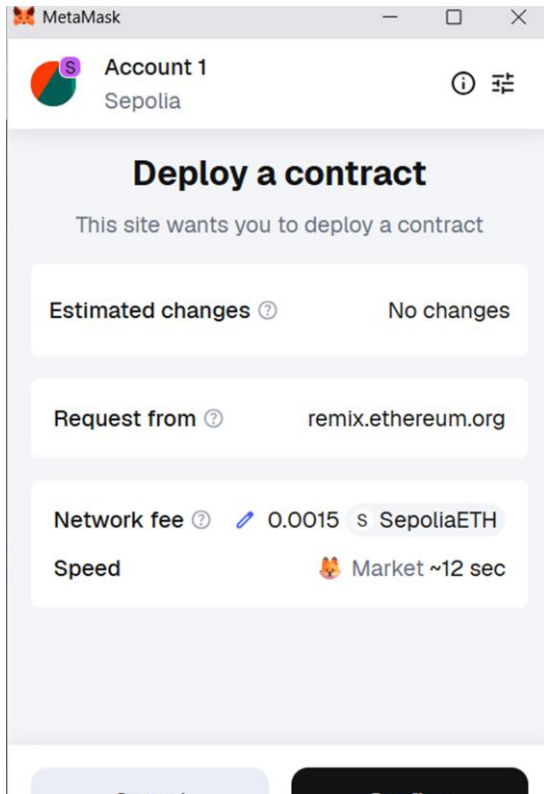
Compiling the file

Write you token name and symbol and deploy it



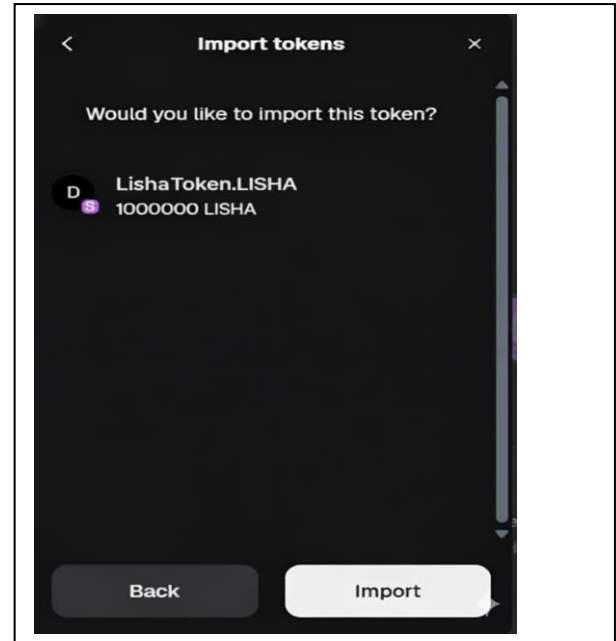
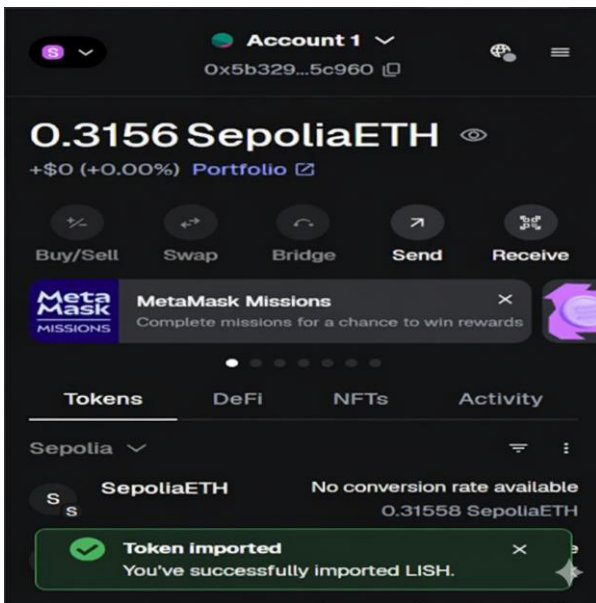
* Testing Phase: Compilation of Code (error detection)

Deployed Contracts



*Implementation Phase: Final Output (no error)

Imported tokens



* Implementation Phase: Final Output (no error)

* Observations

- 1.To understand the ERC-20 standard and its role in creating fungible tokens on Ethereum.
- 2.To implement, deploy, and interact with an ERC-20 token smart contract on a blockchain network.

ASSESSMENT

Rubrics	Full Mark	Marks Obtained	Remarks
Concept	10		
Planning and Execution/ Practical Simulation/ Programming	10		
Result and Interpretation	10		
Record of Applied and Action Learning	10		
Viva	10		
Total	50		

Signature of the Student:

Name :

Regn. No. :

Signature of the Faculty:

Page No.....

* Two sheets per experiment (10-20) to be used.As applicable according to the experiment.