Centurion University
Shaping Lives... Empowering Communities...

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 Experiement : 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

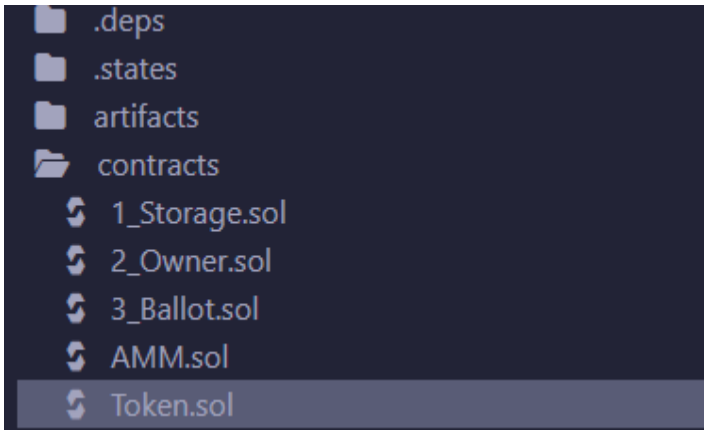
1. Remix IDE

2.Metamask wallet

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

* Testing Phase: Compilation of Code (error detection)

Creating file

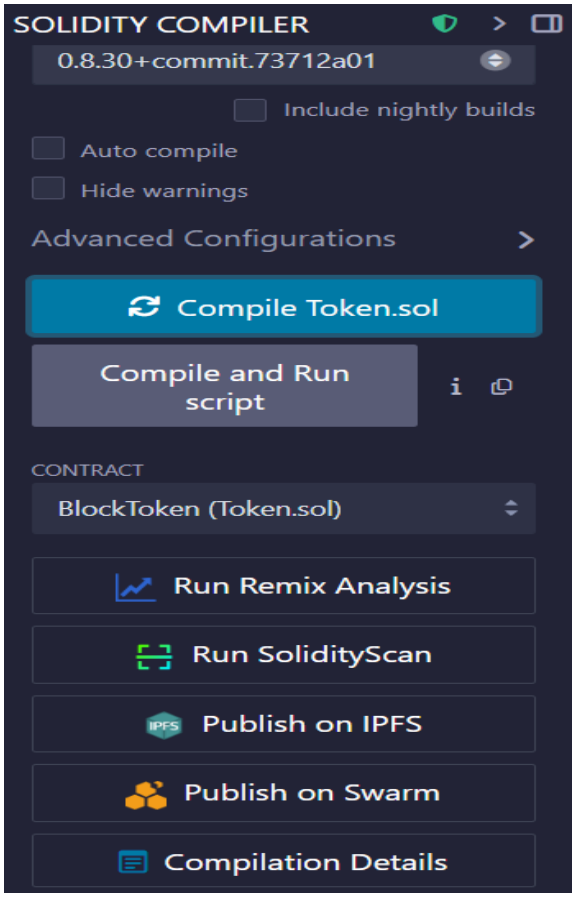


Writing solidity code

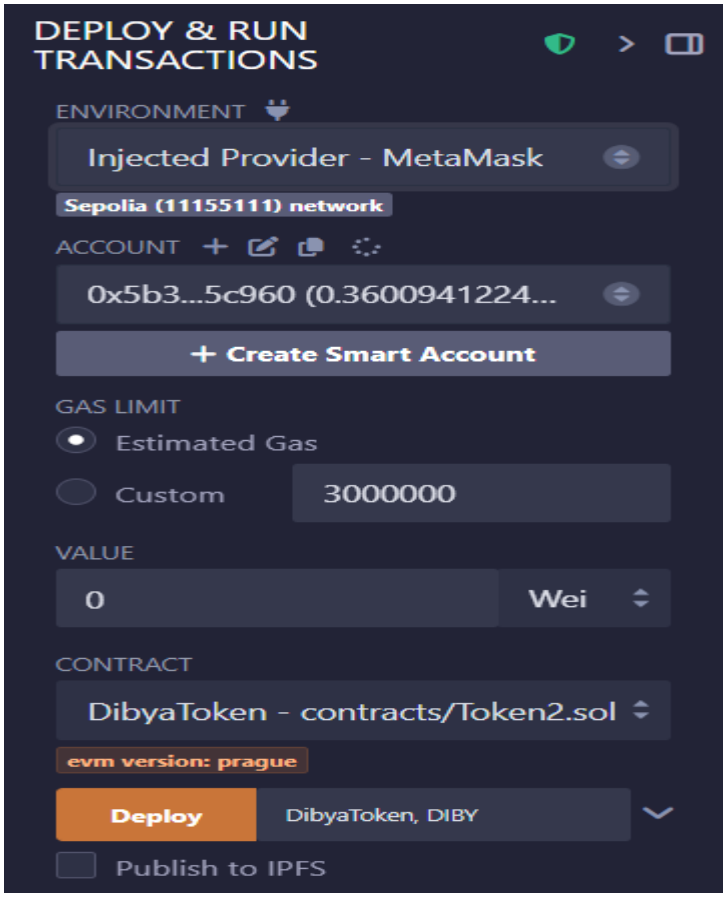
```
//SPDX-License-Identifier: MIT
pragma solidity ^0.8.20;

import "@openzeppelin/contracts/token/ERC20/ERC20.sol";
contract DibyaToken is ERC20 {
    constructor(string memory name, string memory symbol) ERC20(name, symbol){    infinite gas 710800 gas
        _mint(msg.sender, 1000000 * 10 ** decimals());
    }
}
```

Compiling the file



Write you token name and symbol and deploy it



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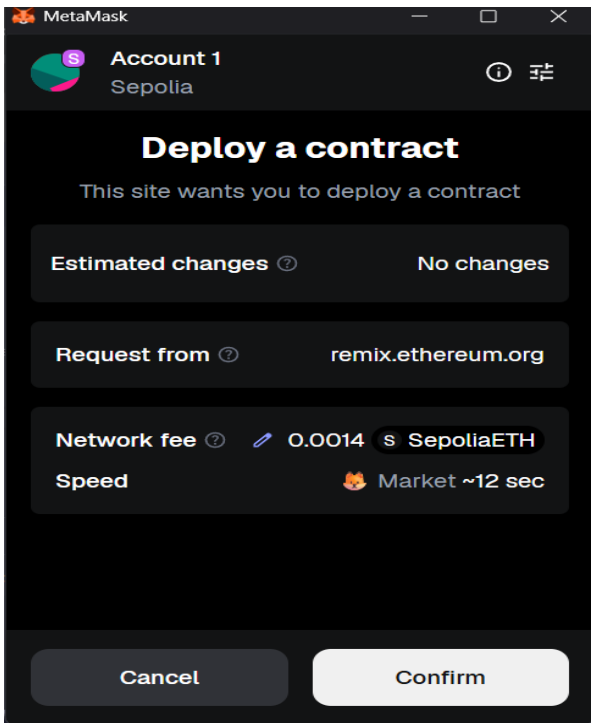
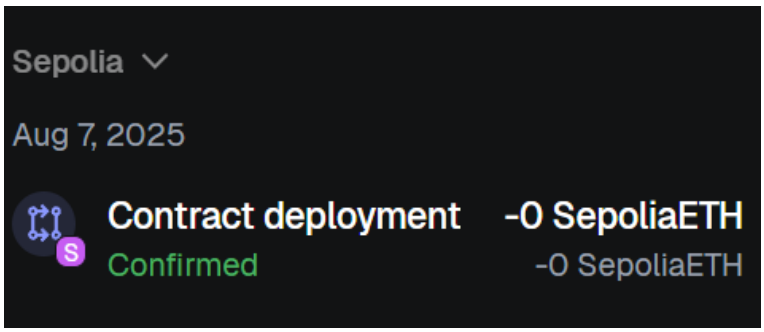
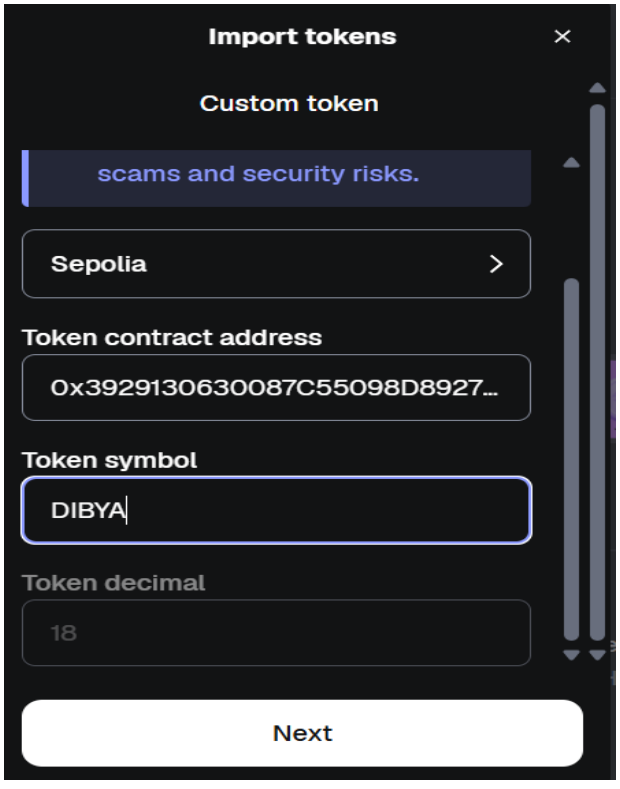
Deployed Contracts

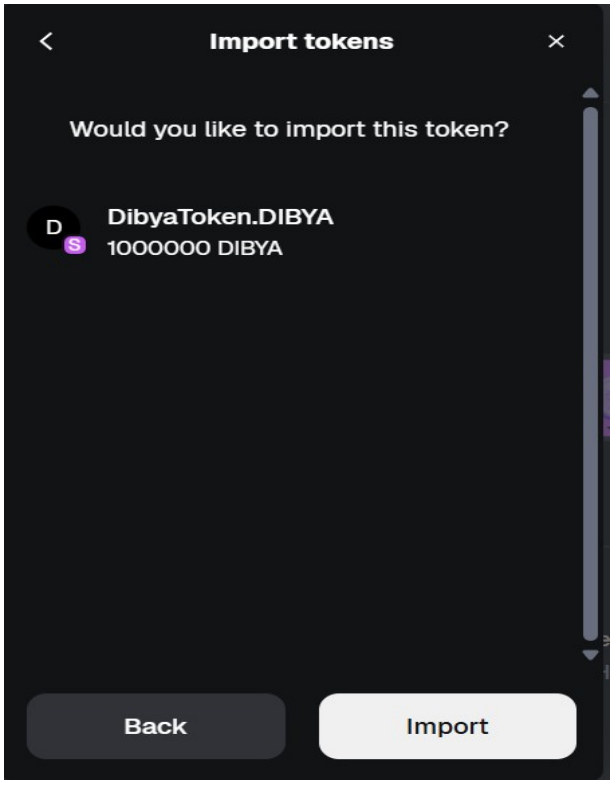




*Implementation Phase: Final Output (no error)

Import tokens





*As applicable according to the experiment.
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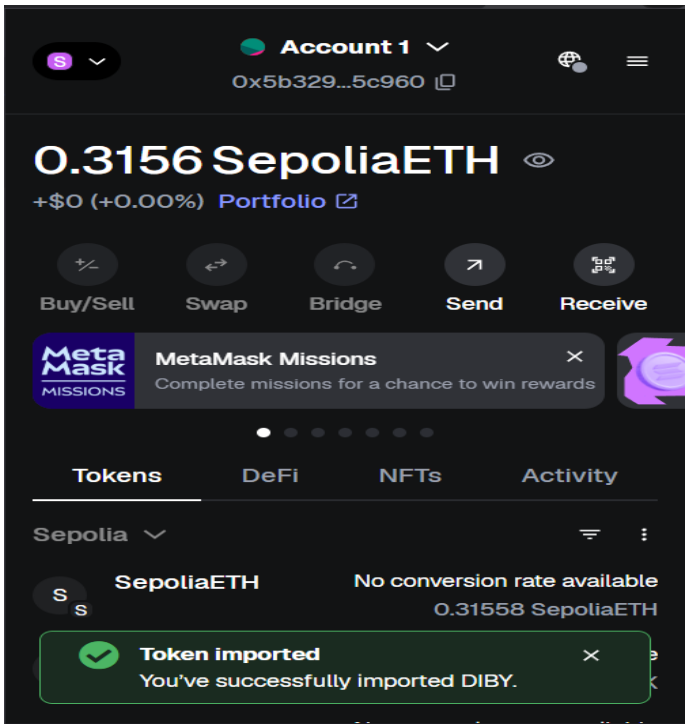
* Implementation Phase: Final Output (no error)

Imported tokens



* 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:

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