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

1. First we need to open Remix IDE
2. In the  contracts folder create a Mytoken.sol file
3. Within .sol file we need to write our ERC-20 smart contract code
4. Then compile the code
5. Upon successful compilation choose Injected  Provider-MetaMask as deployment environment
6. Then deploy the contract through metamask by confirming the transaction
7. Under deployed contracts section copy the contract address
8. Then through metamask wallet go to token section and select the deployed token
9. Then choose import tokens, under this section select sepolia network and paste the contract address in respective block and click next
10. Then click on import and our token will be imported successfully.
11. Then click on token section and select the imported token
12. Then click on send and enter the public address or domain name and click continue
13. Our token will be sent successfully

## *software used:

➤ Laptop

➤ Web Browser

➤ Remix IDE

➤ MetaMask Wallet

➤ Sepolia faucet

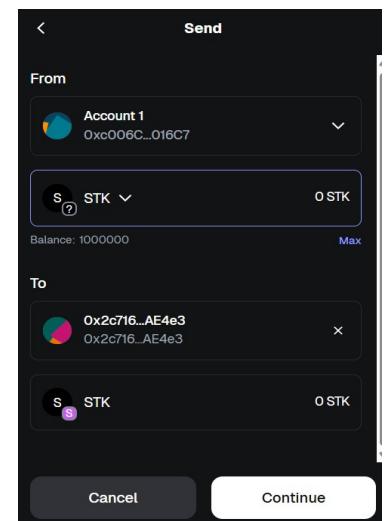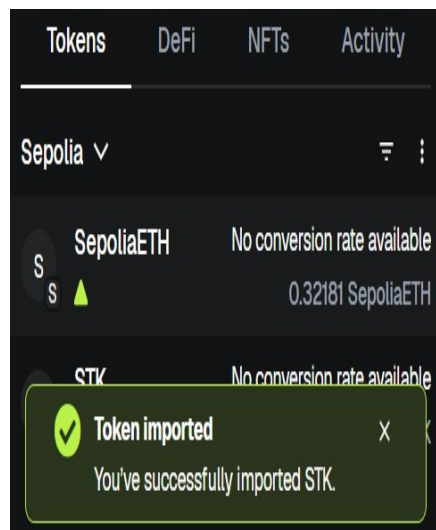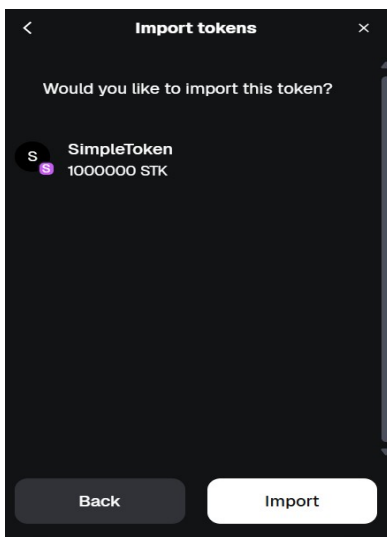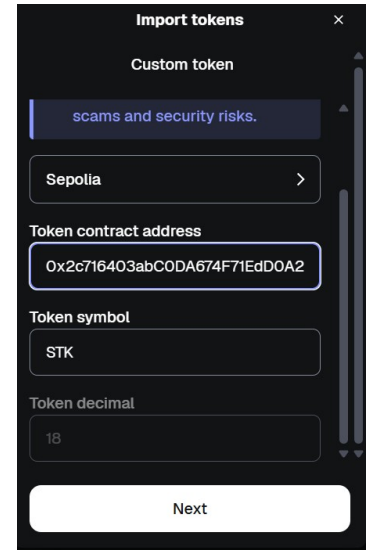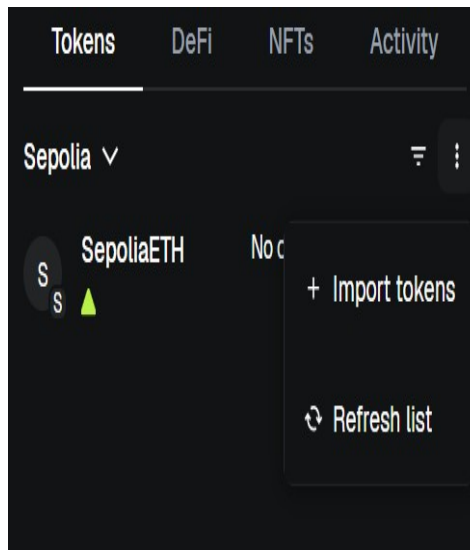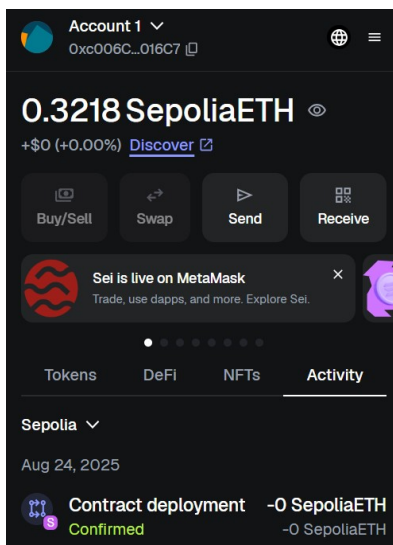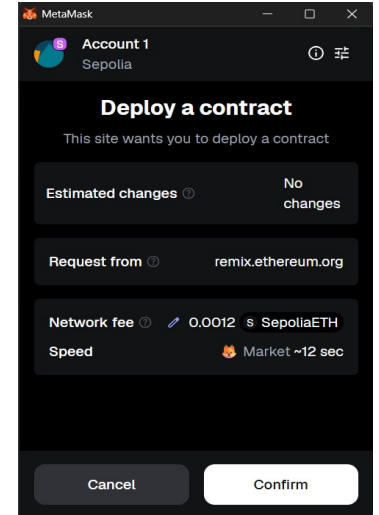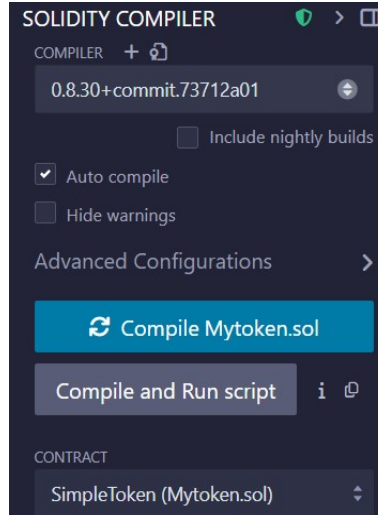*As applicable according to the experiment.*
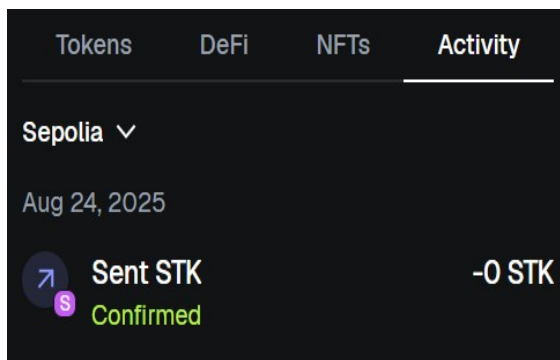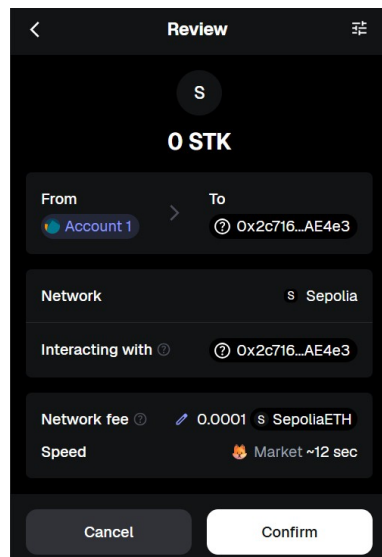*Two sheets per experiment (10-20) to be used.*

# * Testing Phase: Compilation of Code (error detection)

**NO ERROR**

# * Implementation Phase: Final Output (no error)

## *Observation:

➤ ERC-20 defines a standard interface for fungible tokens on the Ethereum blockchain, ensuring compatibility across wallets and dApps.

➤ Each ERC-20 token includes key functions like transfer, approve, and transferFrom for secure and standardized token interactions.

➤ Tokenization allows real-world and digital assets to be represented as ERC-20 tokens, enabling easy trading and ownership on blockchain.

➤ Deploying ERC-20 tokens requires smart contract knowledge and a wallet like MetaMask to interact with Ethereum networks.

# 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 :*

*Signature of the Faculty :*

*Regn. No. :*

Page No…………….

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