



Centurion  
UNIVERSITY  
Established 1970  
An Institute of Higher Education

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 : Token Launch – Deploying a Token Locally

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

#### 1. Set up Environment

- o Open Remix IDE and ensure Solidity is selected.

#### 2. Write Contract

- o Use OpenZeppelin's standard ERC-20 contract and name it accordingly (e.g., MyToken, DAIClone).

#### 3. Compile the Contract

- o Compile the .sol file using the compiler tab (select Solidity 0.8.x or compatible version).

#### 4. Connect MetaMask

- o Ensure MetaMask is set to Sepolia testnet (or your desired testnet).

#### 5. Deploy Contract

- o In Remix, choose "Injected Web3" under the Deploy tab and click "Deploy."
- o Approve the transaction in MetaMask.

#### 6. Get Contract Address

- o Copy the deployed contract address from Remix's "Deployed Contracts" panel.

#### 7. Add Token in MetaMask

- o In MetaMask, click "Import Tokens," paste the contract address, and add the token manually.

#### 8. Mint / Transfer Tokens

- o Use Remix to interact with contract functions like mint, transfer, or balanceOf.

#### 9. Use in DeFi (Swap)

- o Go to a DeFi platform (e.g., Uniswap on Sepolia), connect wallet, and swap ETH to the custom DAI token.

#### 10. Verify Transactions

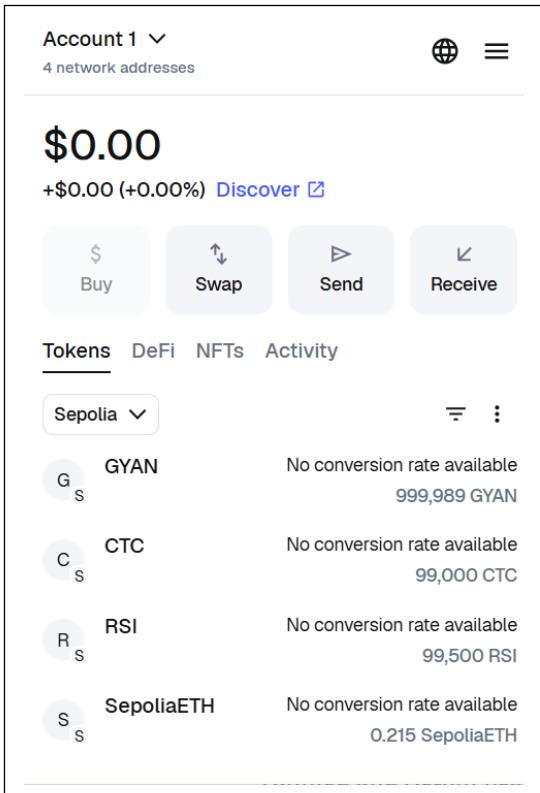
- Check the activity section in MetaMask or on Sepolia Etherscan for verification.

### Software used

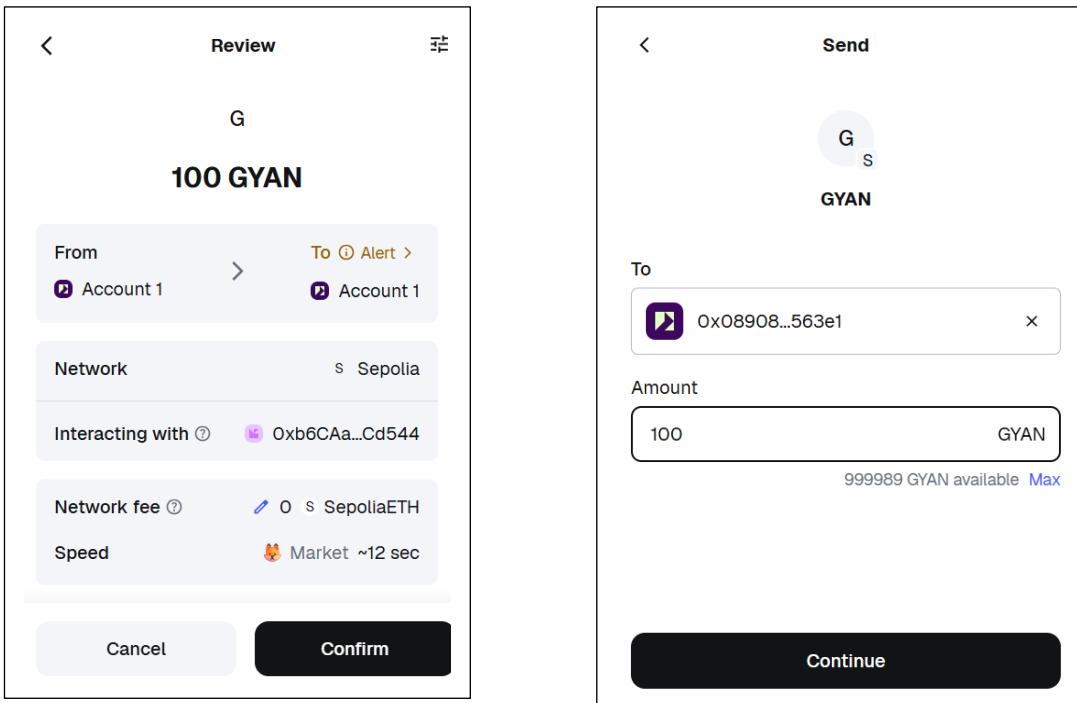
1. MetaMask Wallet
2. Remix IDE.
3. MS Word.
4. Brave for researching.

## \* Implementation Phase: Final Output (no error)

- Firstly go to home page of MetaMask, then go to where you stored DAI tokens;



- Then go to name of your token, tap on send option and add another one's wallet address;



## \* Implementation Phase: Final Output (no error)

3. Then transaction will complete within 12 sec;

Aug 7, 2025			
	Sent GYAN	-10 GYAN	
	Sent GYAN	-1 GYAN	
	Contract deployment	-0 SepoliaETH	-0 SepoliaETH
	Contract deployment	-0 SepoliaETH	-0 SepoliaETH
	Create Order	-0.01 SepoliaETH	-0.01 SepoliaETH
Aug 5, 2025			
	Contract deployment	-0 SepoliaETH	-0 SepoliaETH

### \* Observations:

- The deployed token only appears in MetaMask if manually added using the correct contract address.
- DeFi platforms can detect the token if it's listed or has standard ERC-20 functions.
- Swapping ETH to a custom token works only if there's enough liquidity in the pool.
- MetaMask records each transaction, including gas fee and token balance updates.
- Contract interaction via Remix is faster on testnets, and changes reflect instantly on MetaMask.

## 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		
<b>Total</b>	<b>50</b>		

*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.