School: .... Campus: ....

Academic Year: .... Subject Name: .... Subject Code: ....

Semester: .... Program: .... Branch: .... Specialization: ....

Date: ....

Applied and Action Learning
(Learning by Doing and Discovery)

Centurion
UNIVERSITY
Shaping Lives...
Empowering Communities...

Name of the Experiement :

* Coding Phase: Pseudo Code / Flow Chart / Algorithm


```solidity
// SPDX-License-Identifier: MIT
// Compatible with OpenZeppelin Contracts ^5.0.0
pragma solidity ^0.8.27;

import {ERC20} from "@openzeppelin/contracts@5.3.0/token/ERC20/ERC20.sol";

contract amitToken is ERC20 {

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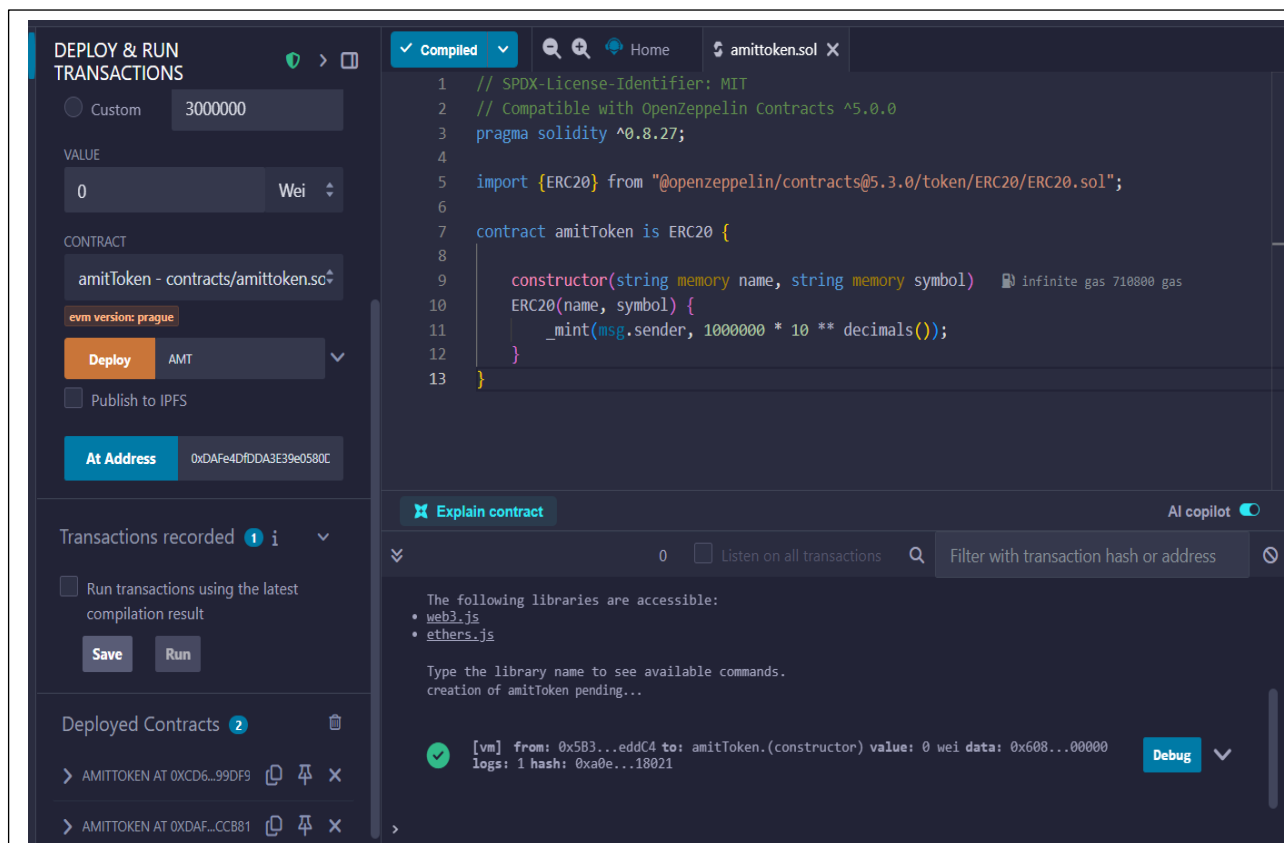
* Softwares used

- REMIX IDE

- METAMASK

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

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

* Implementation Phase: Final Output (no error)

Sent AMT ✕

Status	View on block explorer
Confirmed	Copy transaction ID

From **To**

🟢 0xDAFe4...C... → 🟢 **Account 1**

Transaction

Nonce	7
Amount	**–100 AMT**
Gas Limit (Units)	45427
Gas Used (Units)	27489
Base fee (GWEI)	0.000600251
Priority fee (GWEI)	1.5
Total gas fee	0.000041 SepoliaETH
Max fee per gas	0.000000002 SepoliaETH
Total	**0.00004125 SepoliaETH**

🔵 **Account 1** ⌄
0xDAFe4...CCb81 ⧉

0.0951 SepoliaETH 👁
+$0 (+0.00%) Portfolio ↗

Buy/Sell	Swap	Bridge	Send	Receive

MetaMask MISSIONS MetaMask Missions ✕
Complete missions for a chance to win rewards

● ○ ○ ○ ○ ○ ○

Tokens DeFi NFTs Activity

Sepolia ⌄

S	SepoliaETH	No conversion rate available
		0.09507 SepoliaETH
A	AMT	No conversion rate available
		1,000,000 AMT

* Implementation Phase: Final Output (no error)

Applied and Action Learning

* Observations

- Deploying a token locally is a crucial step for testing and development before launching on a public network.

- This process allows developers to verify the functionality of their smart contract without incurring real transaction costs or risking funds.

- This local setup is ideal for initial testing, enabling developers to interact with the token using a wallet like MetaMask connected to the local network.

- The local environment helps identify and fix issues such as reentrancy attacks or overflow problems before deployment on a testnet or mainnet.

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. :

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

Signature of the Faculty: