



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 : Hello Solidity – Writing First Smart Contract

Objective/Aim:

To introduce students to Solidity and teach them how to write, compile, and deploy a basic smart contract using the Remix IDE.

Apparatus/Software Used:

Laptop or PC
Browser with Internet
Remix IDE
MetaMask wallet (connected to a test network like Sepolia)

Theory/Concept:

Solidity is a high-level, contract-oriented programming language used for developing smart contracts on the Ethereum blockchain.

Smart Contract: A self-executing contract with the terms directly written into code.

Remix IDE: A browser-based tool to write, compile, deploy, and debug Solidity contracts.

Procedure:

Step 1: Open a web browser and go to <https://remix.ethereum.org>.

Step 2: In Remix IDE, click on the “**File Explorer**” tab and create a new file named simple storage.sol.

Step 3: Type the Solidity code into the file:

Step 4: Click on the “**Solidity Compiler**” tab from the left sidebar.

Step 5: Select compiler version 0.8.x and click “**Compile simple storage.sol**”.

Step 6: Click on the “**Deploy & Run Transactions**” tab.

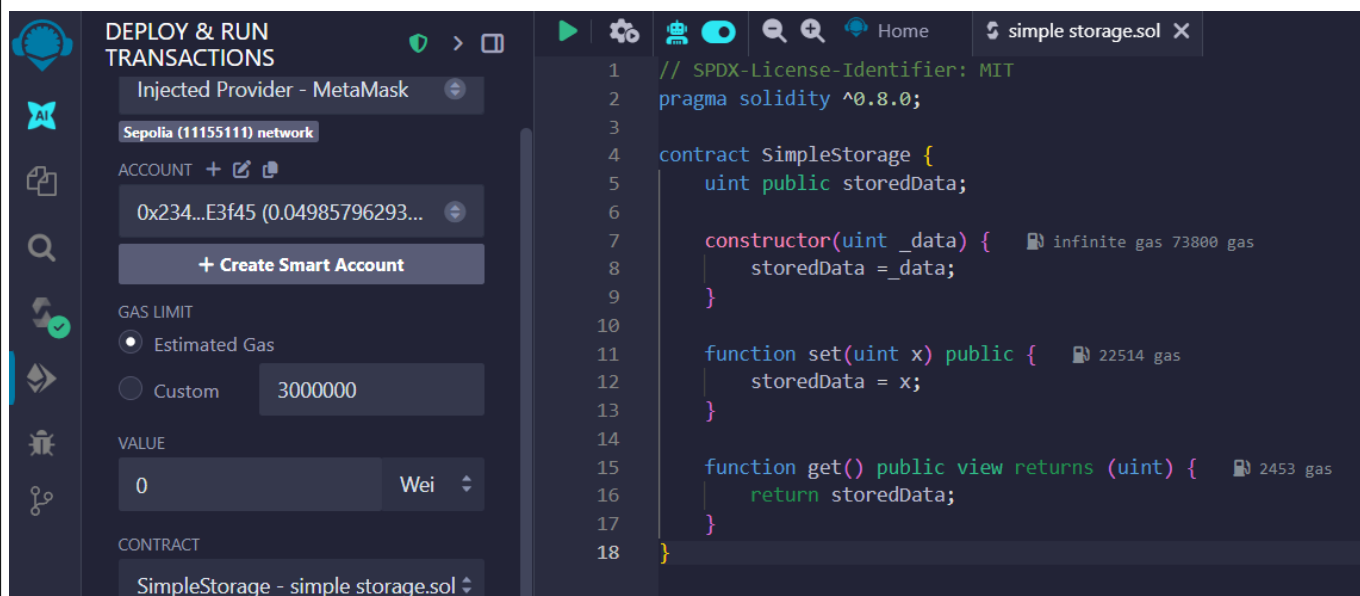


Fig: -code

Observation

File Created : - simple. Sol written in Remix

Contract Compiled : -No errors on compilation

Contract Deployed : -Visible in Deployed Contracts panel

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:

Signature of the Faculty:

Name :

Regn. No.