



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:

The objective is to create a simple "Hello World" contract that demonstrates the basic structure and functionality of a smart contract on the Ethereum blockchain.

Apparatus/Software Used:

- Laptop/PC
- Brave
- Remix-Ethereum IDE

Theory/Concept:

SOLIDITY:

- It is a programming language developed specifically for creating and implementing smart contracts on blockchain development platforms like Ethereum.
- Solidity actually uses ECMAScript-like syntax, similar to JavaScript. However, it is a compiled language that is executed on the Ethereum Virtual Machine (EVM), not an interpreted language. The language is statically typed, supports inheritance, libraries, and complex-user-defined types.

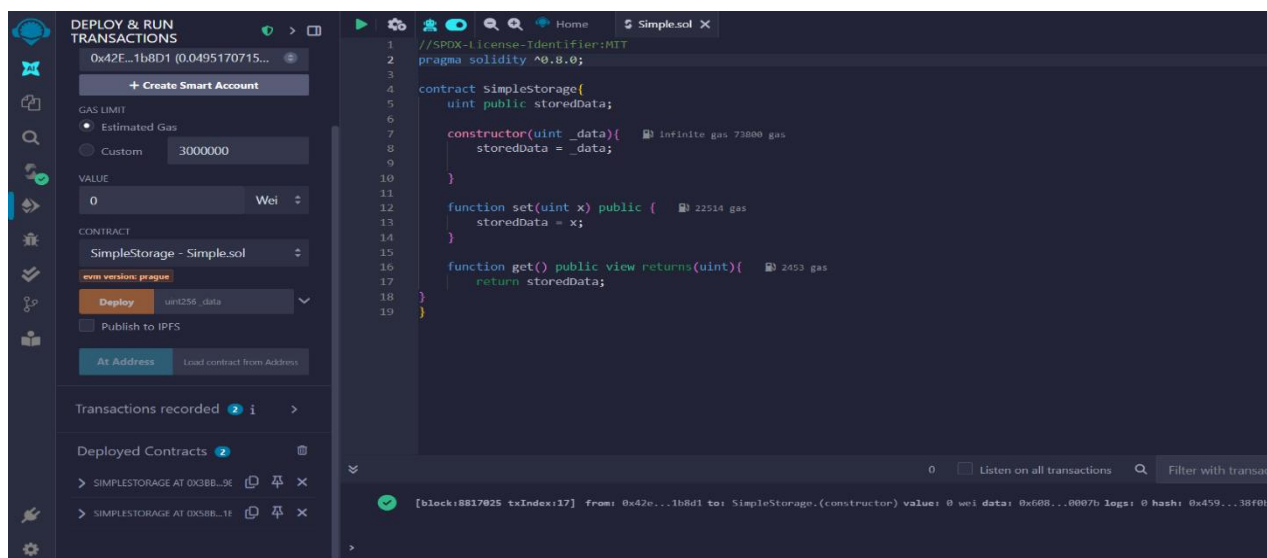
SMART CONTRACT:

- Smart contracts, also known as crypto-contracts, are digital, self-executing contracts that help verify a transaction's credibility without the involvement of third parties.
- They are typically used to automatically execute the terms of an agreement so that all participants can be immediately sure of the outcome. In this sense, they specify the rules and behavior for transferring digital assets.

Procedure:

To write your first smart contract in Solidity, you can follow these steps:

- First we use an online IDE like Remix, which is a browser-based IDE that allows you to write, compile, and deploy smart contracts.
- Then we create a new file and name it something like helloworld.sol. Then, write the code.
- After that use the Remix IDE to compile our contract. This will check for any syntax errors.
- Once compiled, we can deploy the contract to a local Ethereum blockchain or a testnet.



Observation Table:

Here we observe that how we can write solidity code in remix and how we deploy it.

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:

Page No.....

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