Department of Computer Engineering

Academic Term: Jan-May 23-24

Class: B.E Computer Sem -VII **Subject:**

Blockchain Technology Lab**Subject**

Code : CSDL7022

Practical No:	2
Title:	**Creating the Smart Contract**
Date of Performance:	
Date of Submission:	
Roll No:	**9427**
Name of the Student:	**Atharva Prashant Pawar**

Evaluation:

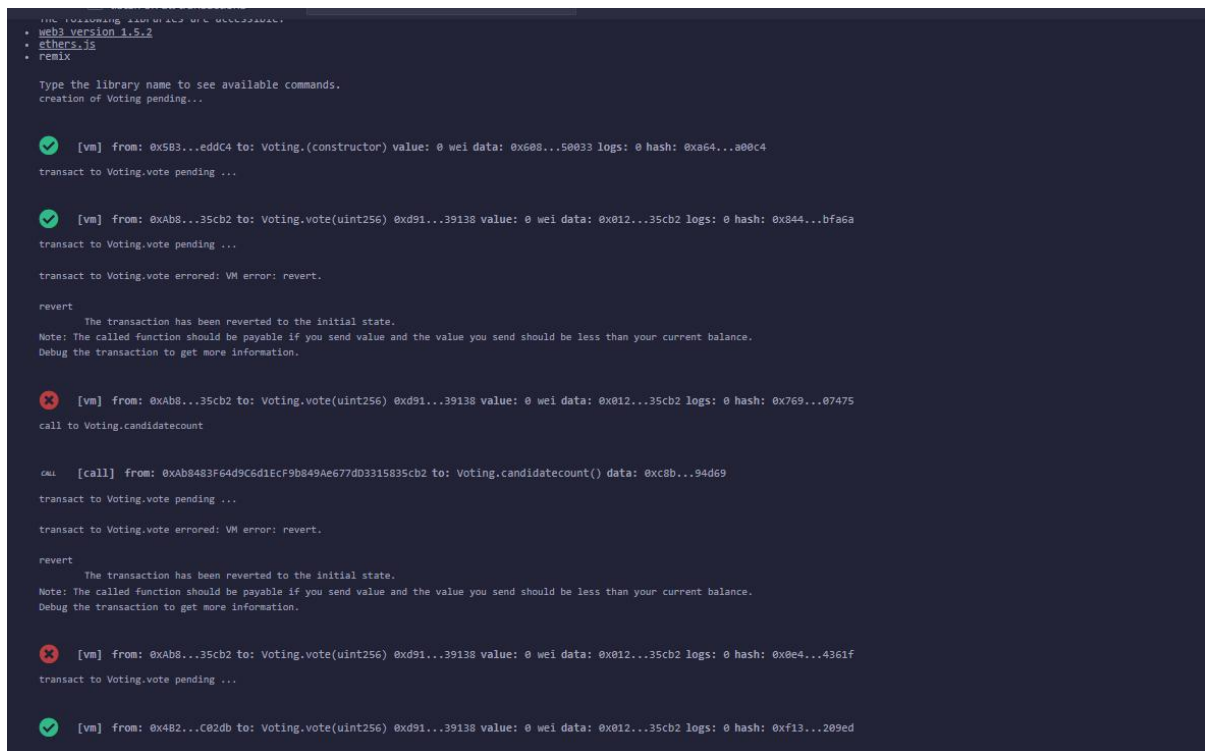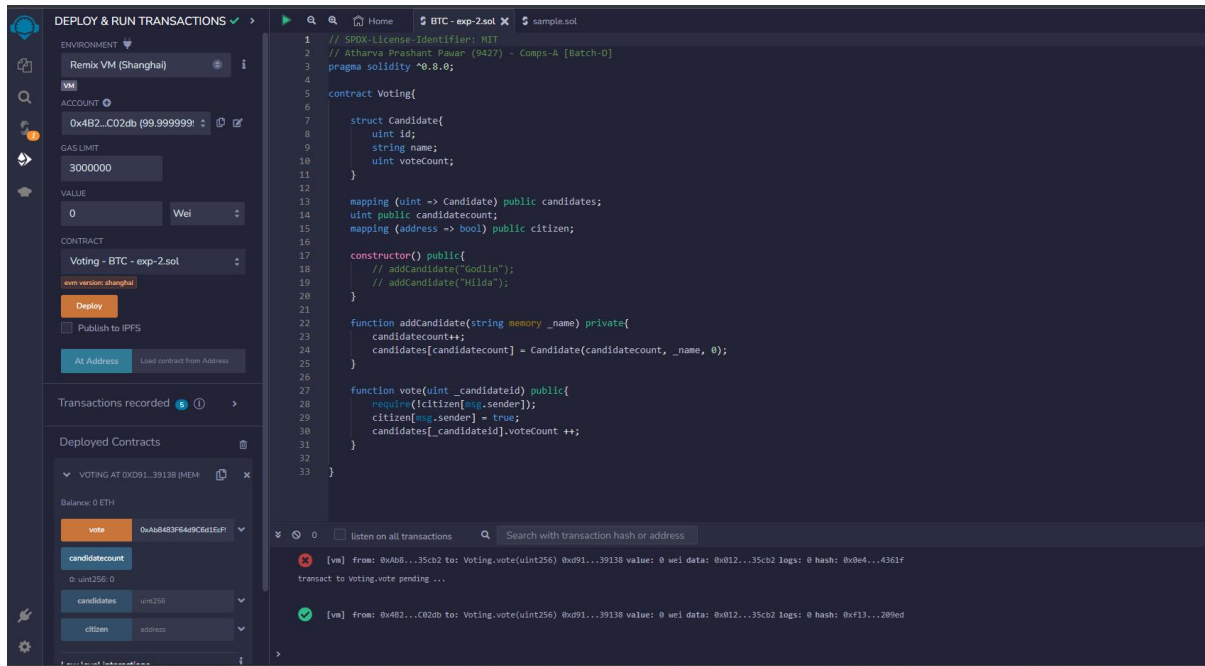| Sr. No	Rubric	Grade
1	**Time Line (2)**	
2	**Output (3)**	
3	**Code optimization (2)**	
4	**Post lab (3)**	

Signature of the Teacher :

Experiment No. 2

Creating the Smart Contract

Atharva Prashant Pawar - (9427) [Batch - D]

Aim: Creating and deploying Smart Contract using Solidity and Remix IDE.

Conclusion: We have successfully created and deployed the smart contract.

Review Questions

Q. 1 What is Remix IDE?

Q. 2 How smart contract is created using Remix IDE?

Q. 3 How the smart contract is deployed using Remix IDE?

Q. 4 What is Gas?

Q. 5 What is account in Remix IDE?

Atharva Prashant Pawar (9142A) - Batch - D

BCT : Exp 2 Postlab

DATE:

Q.1 What is Remix IDE?

=> Remix IDE is an Integrated development environment (IDE) designed for building & deploying smart contracts on the Ethereum blockchain. It offers a user friendly interface that allows developers to write, test & debug Solidity smart smart contracts efficiently. Remix IDE is entirely web-based & requires no installation, making it accessible from any modern browser.

Q2. How smart contract is created using Remix IDE?

=> 1. Open the Remix IDE in your web browser.
2. Create a new Solidity file or .sol
3. Write the smart contract code using solidity program lang.
4. Use the built-in editor features for code completion & syntax highlighting.
5. Click the compiler button to check for any compilation errors.
6. Once the code compiles successfully, click the Deploy & Run Transactions.
7. Test the deployment on test network.

Q3. How the smart contract is deployed using Remix IDE?

1. Open Remix IDE.
2. Open or create Solidity smart contract.
3. Click the 'compile' button to check compilation errors.
4. Go to the "Deploy & Run Transaction" tab in Remix IDE.
5. Connect IDE to an Eth n/w (eg : JS VM (JVM))
6. Click the Deploy button
7. Confirm the transaction details in the popup window that appears.
8. Wait for the transaction to be mined, & once its successfully mined, your smart contract is deployed & ready to use on Eth n/w.

DATE:

Q4. What is GAS?

=> Gas is the context of Blockchain refers to the unit of computational effort required to execute operations or smart contracts on the n/w. It acts as a measure of computational resources consumed during transaction or contract interactions.
each operation on the BCT consumes specific amount of GAS.

Q5. What is account in Remix IDE?

=> An account represents a user's identity or address on the Eth BCT. It is associated with a private key that allows the user to sign transactions & interact with the Blockchain. Remix IDE provides a list of accounts that you can use to deploy & interact with smart contracts during development & testing.