



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 : Know Your TX – Dissecting a Transaction**

### Objective/Aim :

To analyze the internal structure and behavior of a blockchain transaction by using a transaction hash and exploring it through a blockchain explorer (Sepolia Testnet)

### Apparatus/Software Used:

- 🕒 MetaMask Wallet (Testnet enabled)
- 🕒 Sepolia Testnet ETH
- 🕒 Sepolia Etherscan
- 🕒 Web browser and internet
- 🕒 Ethereum test contract (for interaction)

### Theory/Concept:

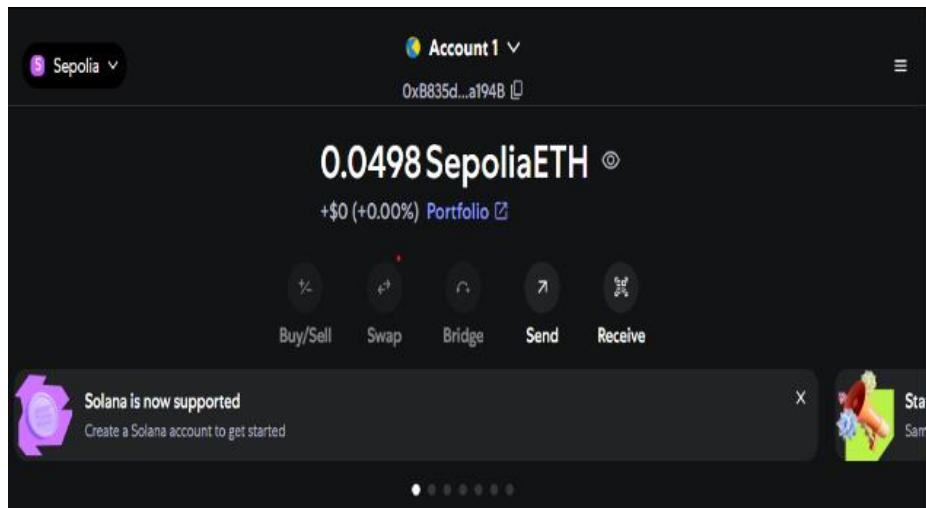
A **transaction (TX)** on the Ethereum blockchain represents an action initiated by an externally owned account (EOA). Transactions may transfer ETH or interact with smart contracts. Key parts of a transaction include:

- **TX Hash** – unique ID of the transaction
- **From** – sender address
- **To** – receiver or contract address
- **Value** – amount of ETH transferred
- **Gas Fee** – amount paid to miners/validators
- **Status** – success or failure
- **Block** – block number where TX was recorded

## Procedure:

### 1. Setup MetaMask for Sepolia Testnet:

- Open the **MetaMask** browser extension or mobile app.
- Enable **Sepolia Test Network** from the network list.
- Make sure you have some **test ETH** in your wallet.



## Ethereum Sepolia Faucet

BETA

Get free Sepolia ETH sent directly to your wallet. Brought to you by [Google Cloud for Web3](#).

### Drip complete

✓ Testnet tokens sent! Check your wallet address.

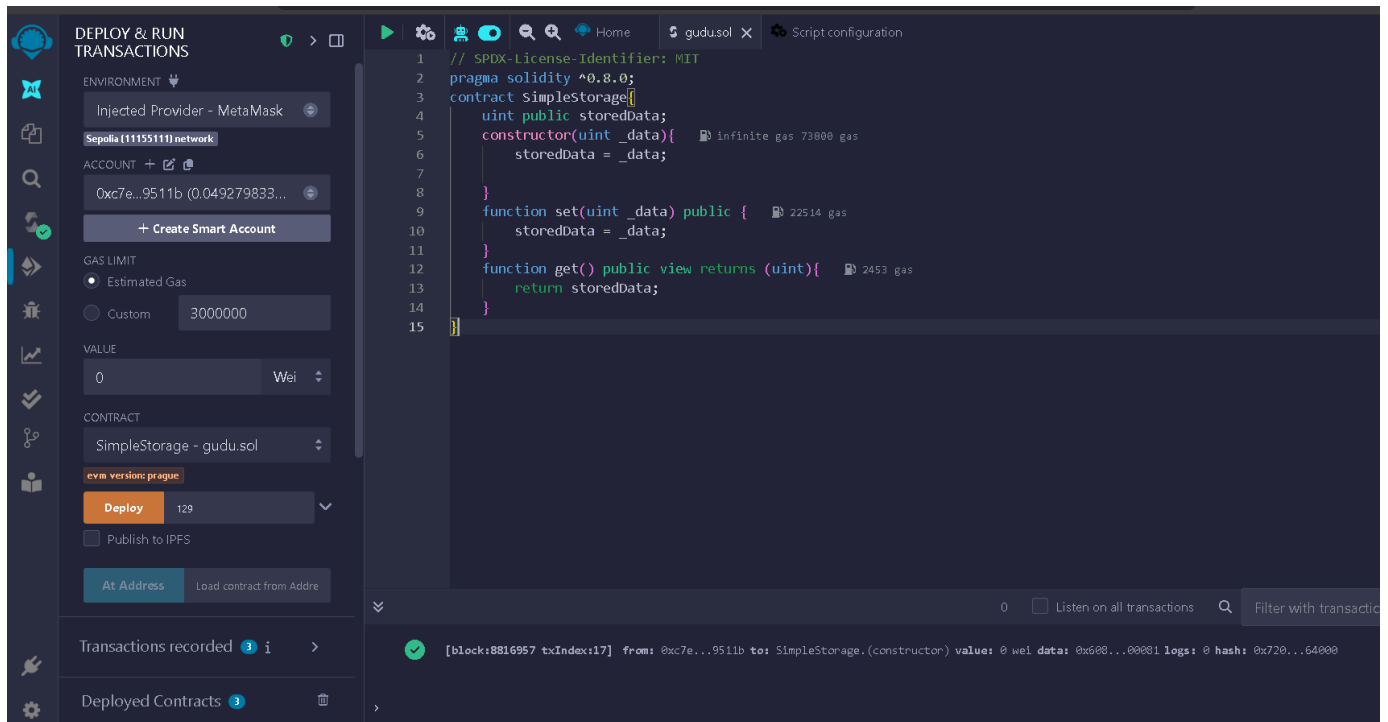
Network  
Ethereum Sepolia

Recipient  
0xc7e72E73c924058a28afDd1Bc27A30208379511b

Transaction hash  
[0x4af5fb4c190d4c20053114adf5810743690e835f98aceb8fc2c2e8226941b72c](#)

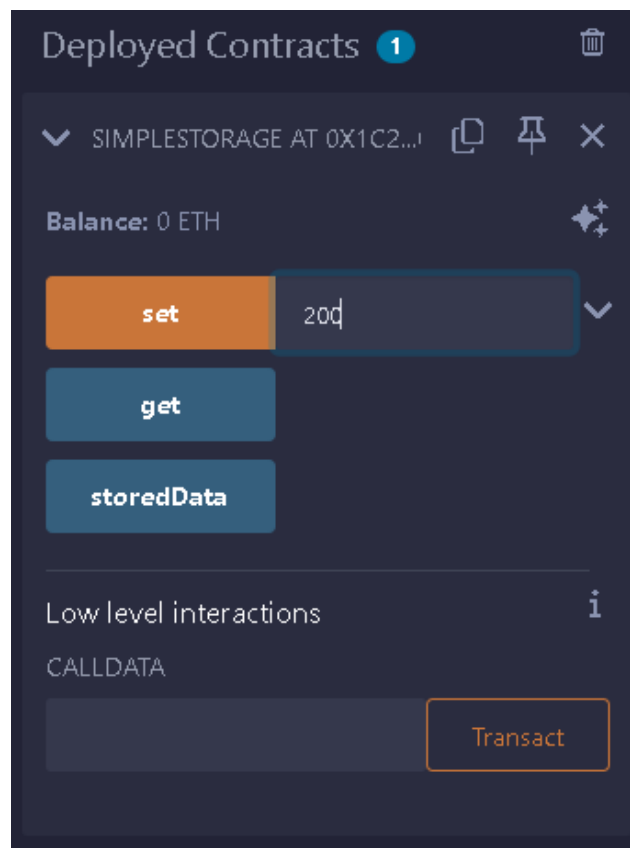
### 2. Interact with a Smart Contract:

- Visit a platform like **Remix IDE** or any dApp connected to Sepolia.
- Use MetaMask to **call a function** on a deployed **smart contract** (e.g., a counter contract or any public method).
- Submit the transaction



### 3. Copy the Transaction Hash (TX Hash):

- After sending the transaction, MetaMask will show a **TX hash** (a long alphanumeric string).
- This hash is a **unique identifier** for your transaction on the blockchain.



### 4. Open Sepolia Etherscan:

- Go to <https://sepolia.etherscan.io>.
- Paste the **transaction hash** in the search bar and hit **Enter**

Address 0xc7e72E73c924058a28afDd1Bc27A30208379511b

&lt;/&gt; API

## Overview

ETH BALANCE

0.04927983960156555 ETH

## More Info

TRANSACTIONS SENT

Latest: 1 hr ago First: 1 hr ago

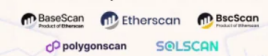
FUNDED BY

0x159cA92b...92618A555 | 2 hrs ago

## Multichain Info

N/A

Advertise your brand here!



## Transactions

## Token Transfers (ERC-20)

Latest 4 from a total of 4 transactions

Download Page Data

Transaction Hash	Method	Block	Age	From	To	Amount	Txn Fee
0xd0ba7f1082e...	0x60806040	8816957	43 mins ago	0xc7e72E73...08379511b	Contract Creation	0 ETH	0.00024066
0x3b798bd19cd...	0x60806040	8816890	58 mins ago	0xc7e72E73...08379511b	Contract Creation	0 ETH	0.00023985
0x3a74190850...	0x60806040	8816873	1 hr ago	0xc7e72E73...08379511b	Contract Creation	0 ETH	0.00023964

## 5. Analyze the Transaction Details:

On the transaction page, observe the following:

- Status:** Success or Failure of the transaction.
- Block Number:** The block that included your TX.
- Timestamp:** Exact time and date of confirmation.
- From & To Address:** Sender (your wallet) and receiver (wallet or contract).
- Value:** Amount of ETH transferred.
- Transaction Fee:** Calculated as Gas Used × Gas Price.
- Gas Price:** Fee per unit of gas set by the sender.
- To (Contract):** If the transaction is a contract call, it shows the contract address.

## Transaction Details

## Overview

## State



## TRANSACTION ACTION

Transfer 0.05 ETH to 0xc7e72E73c924058a28afDd1Bc27A30208379511b

[ This is a Sepolia Testnet transaction only ]

Transaction Hash:	0x4af5fb4c190d4c20053114adf5810743690e835f98aceb8fc2c2e8226941b72c
Status:	Success
Block:	8816694 3 Block Confirmations
Timestamp:	57 secs ago (Jul-22-2025 08:47:36 AM UTC)
From:	0x159cA92b12F67E5676d82C238f4906692618A555
To:	0xc7e72E73c924058a28afDd1Bc27A30208379511b
Value:	0.05 ETH
Transaction Fee:	0.000000139868694 ETH

## Observation:

A transaction was sent on the **Sepolia Testnet** and completed successfully. It was included in **block 8787597** and had over **29,000 confirmations**. The **sender address** was `0x80C0 . . .`, and the **receiver** was a smart contract at `0x7EF2 . . .`. No ETH was sent (value = 0), but a **transaction fee of 0.00003349 ETH** was paid. The **gas price** was **1.5 Gwei**, and the transaction status was **successful**.

## 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 :

Regn. No. :

Page No.....

**Signature of the Faculty:**

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

