



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 :** Try DeFi – Using Uniswap or Aave Testnets

### **Objective/Aim:**

Perform basic DeFi operations on testnets: connect MetaMask, swap tokens on Uniswap testnet, and lend/borrow on Aave testnet. Record transactions and observations.

### **Apparatus/Software Used:**

1. MetaMask Wallet
2. Brave Web Browser
3. Aave Website -<https://aave.com>
4. Ethereum Sepolia Testnet

### **Theory/Concept:**

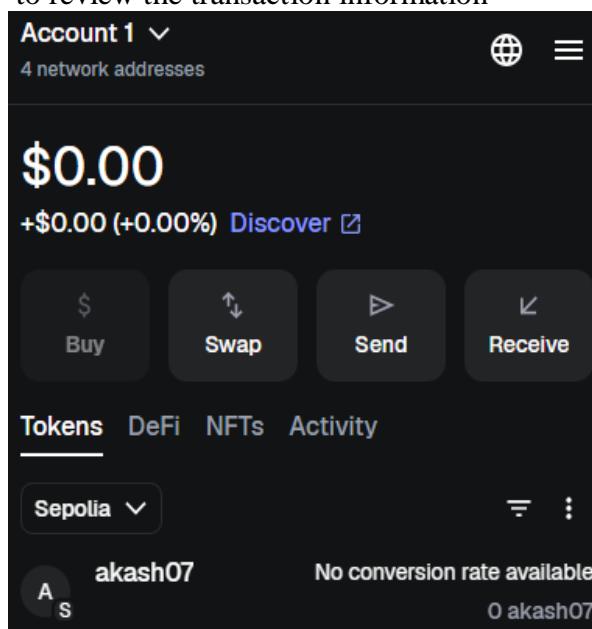
- **Uniswap (AMM):** Automated market maker allowing token swaps using liquidity pools. Users can swap tokens and optionally provide liquidity to earn fees.
- **Aave (Lending protocol):** Users can deposit assets to earn interest and borrow against collateral. On testnets, flows are the same but use test tokens and test ETH.

### **Safety & Pre-lab Checklist**

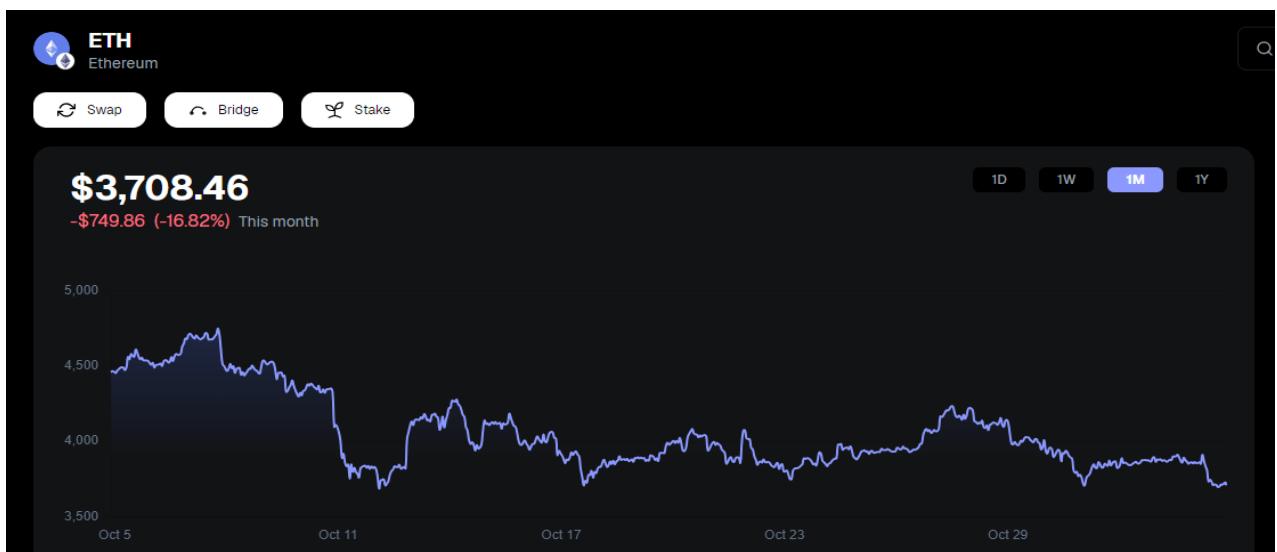
1. Use testnets only — do **not** use mainnet or real funds.
2. Ensure MetaMask network is switched to the testnet you will use. Popular choices: Sepolia (Ethereum) or other chains where the test deployments exist.
3. Obtain testnet ETH from a faucet to pay gas.

## Procedure:

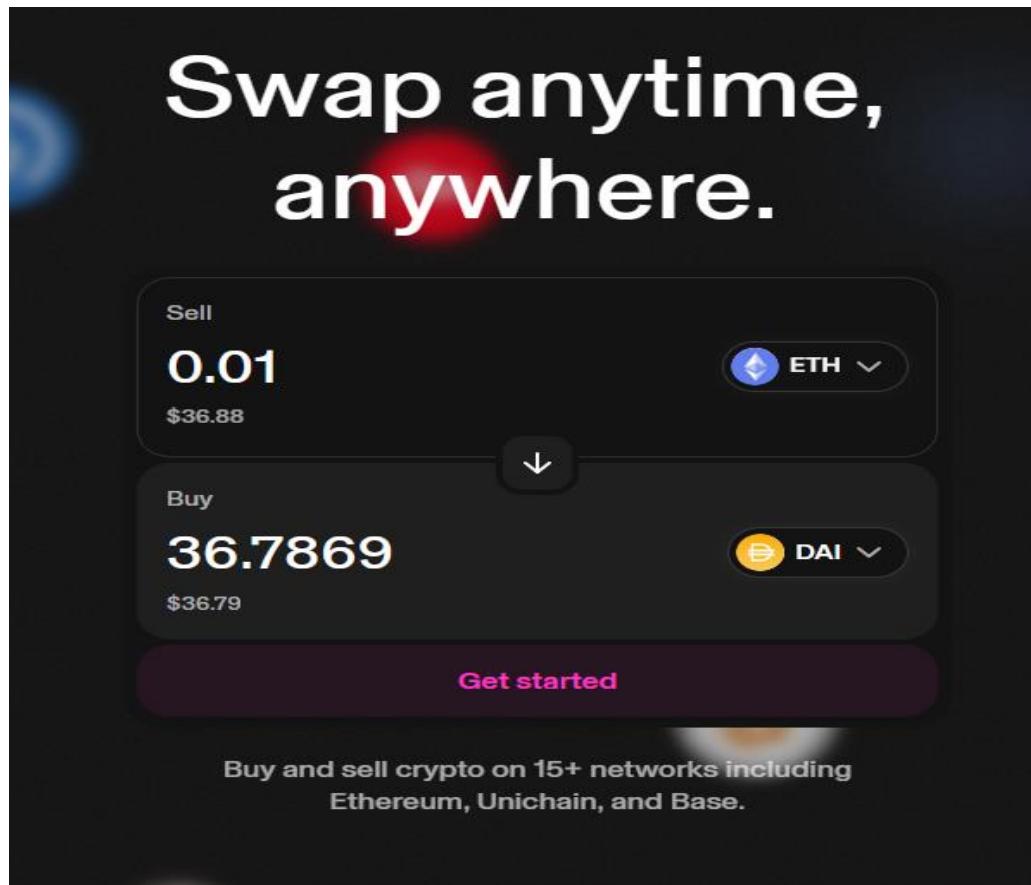
1. Open MetaMask and switch to the **Sepolia testnet**.
2. Visit [aave.com](https://aave.com) in your browser.
3. Click “Enter App” to launch the Aave application.
4. Select “Connect Wallet” and connect via MetaMask.
5. From the top-right corner, enable **Testnet Mode**.
6. Choose the **Ethereum (Sepolia)** network.
7. Navigate to the **Swap** section.
8. In the swap fields, select **ETH** as the token you’re swapping from and **DAI** as the token you’re swapping to.
9. Enter a test amount of **ETH** to swap.
10. Click “View Details” to review the transaction information



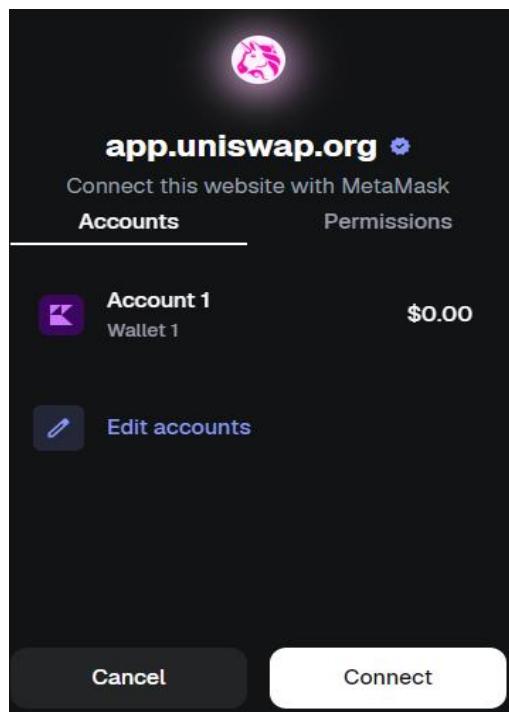
**Step:1**



**Step:4**



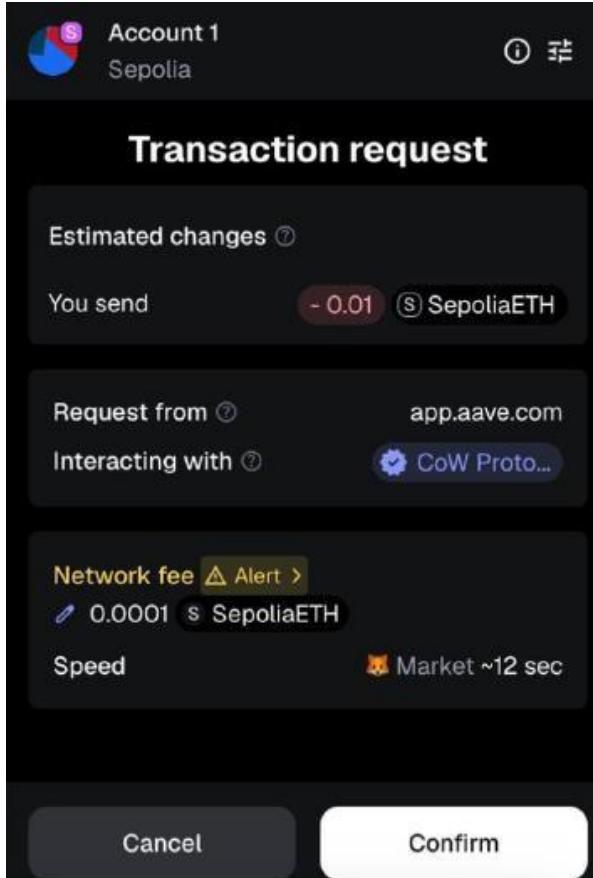
### Step:3



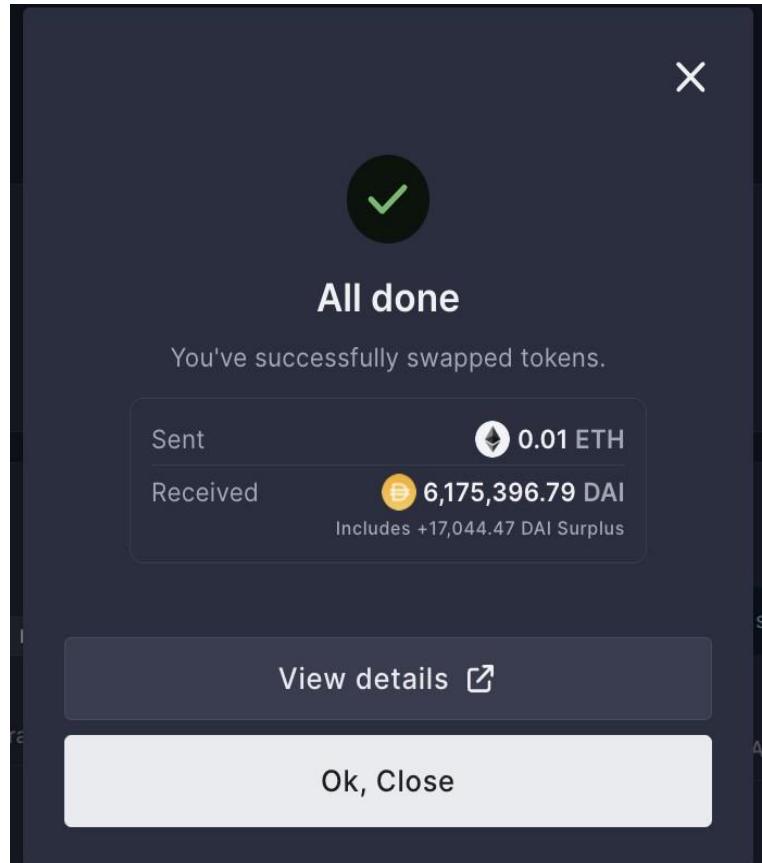
### Step:4

**Step:3**

**Step:4**



Step:5



Step:6

### Observation Table:

1. MetaMask successfully connects to the Sepolia testnet and interacts with Aave without any issues.
2. Test ETH can be easily swapped to DAI using Aave's testnet interface.
3. Transaction details like gas fees, slippage, and exchange rate are clearly visible before confirming the swap.

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>		

