Name: Anuj Sachin Dhole

Roll No: B21042

Class: BE CE A

Subject: Blockchain Technology (Laboratory Practice III)

Practical 4)

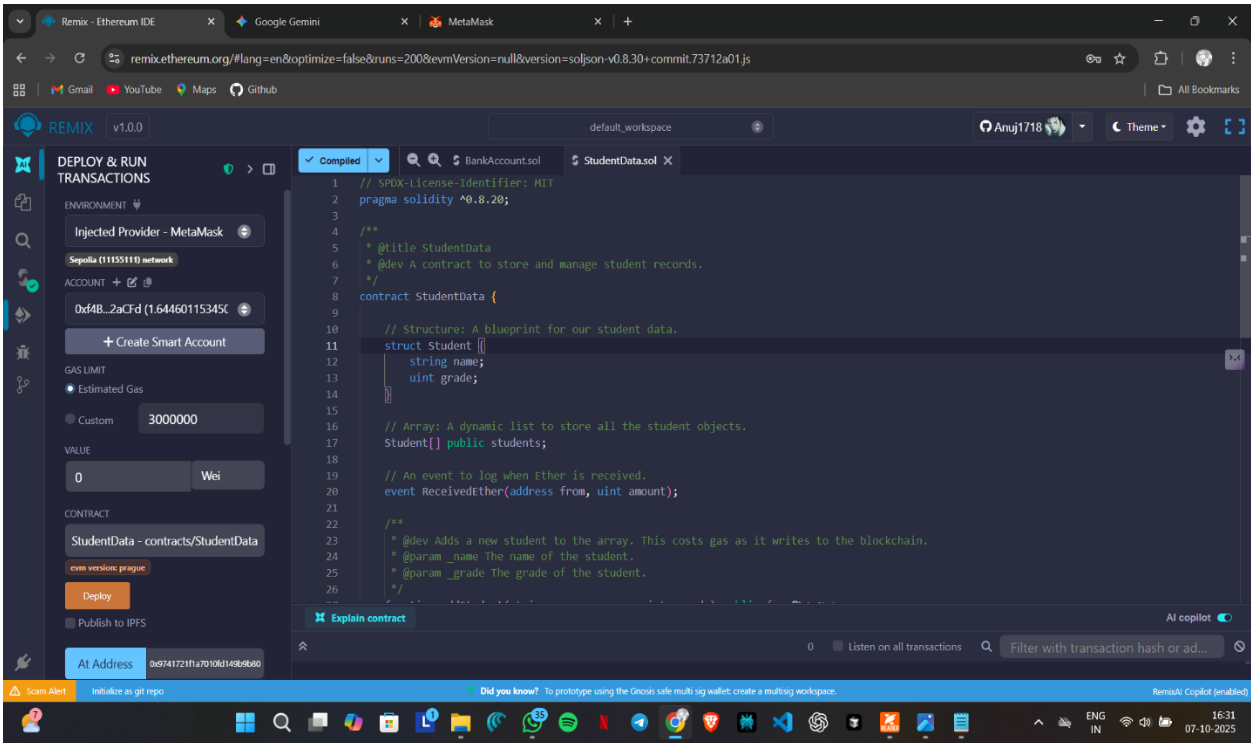
Problem Statement:

Write a program in solidity to create Student data. Use the following constructs:

- Structures
- Arrays
- Fallback

Deploy this as smart contract on Ethereum and Observe the transaction fee and Gas values

---



remix.ethereum.org/#lang=en&optimize=false&runs=200&evmVersion=null&version=soljson-v0.8.30+commit.73712a01.js

DEPLOY & RUN TRANSACTIONS

ENVIRONMENT: Injected Provider - MetaMask

Sepolia (11155111) network

ACCOUNT: 0xf4B...2aCFd (1.64460115345(

GAS LIMIT: ● Estimated Gas ○ Custom 3000000

VALUE: 0 Wei

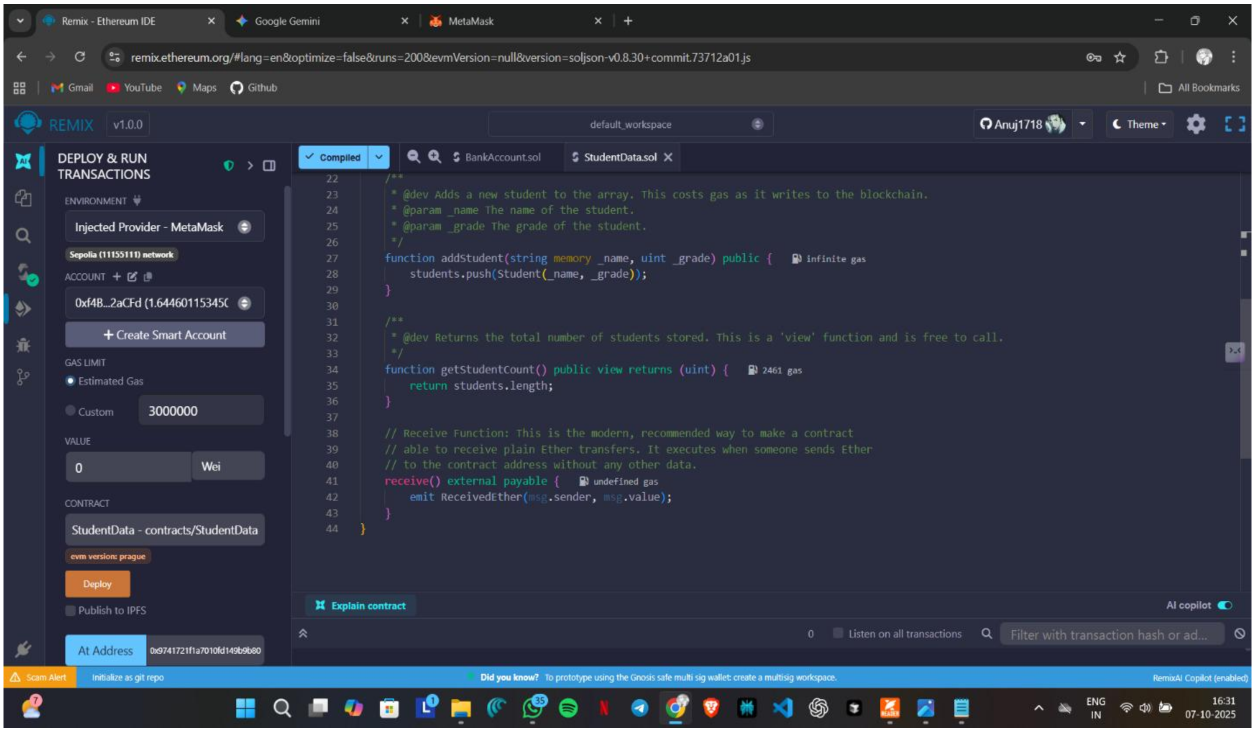
CONTRACT: StudentData - contracts/StudentData

evm version: prague

□ Publish to IPFS

At Address 0x9741721f1a7010fd149b9b80

```
// SPDX-License-Identifier: MIT
pragma solidity ^0.8.20;

/**
 * @title StudentData
 * @dev A contract to store and manage student records.
 */
contract StudentData {

    // Structure: A blueprint for our student data.
    struct Student {
        string name;
        uint grade;
    }

    // Array: A dynamic list to store all the student objects.
    Student[] public students;

    // An event to log when Ether is received.
    event ReceivedEther(address from, uint amount);

    /**
     * @dev Adds a new student to the array. This costs gas as it writes to the blockchain.
     * @param _name The name of the student.
     * @param _grade The grade of the student.
     */
```



Remix - Ethereum IDE
Google Gemini
MetaMask
remix.ethereum.org/#lang=en&optimize=false&runs=200&evmVersion=null&version=soljson-v0.8.30+commit.73712a01.js
Gmail
YouTube
Maps
Github
All Bookmarks
REMIX
v1.0.0
default_workspace
Anuj1718
Theme
Compiled
BankAccount.sol
StudentData.sol
Explain contract
AI copilot
Listen on all transactions
Filter with transaction hash or ad...
Scam Alert
Initialize as git repo
Did you know? To prototype using the Gnosis safe multi sig wallet: create a multisig workspace.
RemixAI Copilot (enabled)
ENG IN
16:31
07-10-2025

DEPLOY & RUN TRANSACTIONS

ENVIRONMENT: Injected Provider - MetaMask

Sepolia (11155111) network

ACCOUNT: 0xf4B...2aCFd (1.64460115345(

+ Create Smart Account

GAS LIMIT

● Estimated Gas

○ Custom 3000000

VALUE: 0 Wei

CONTRACT: StudentData - contracts/StudentData

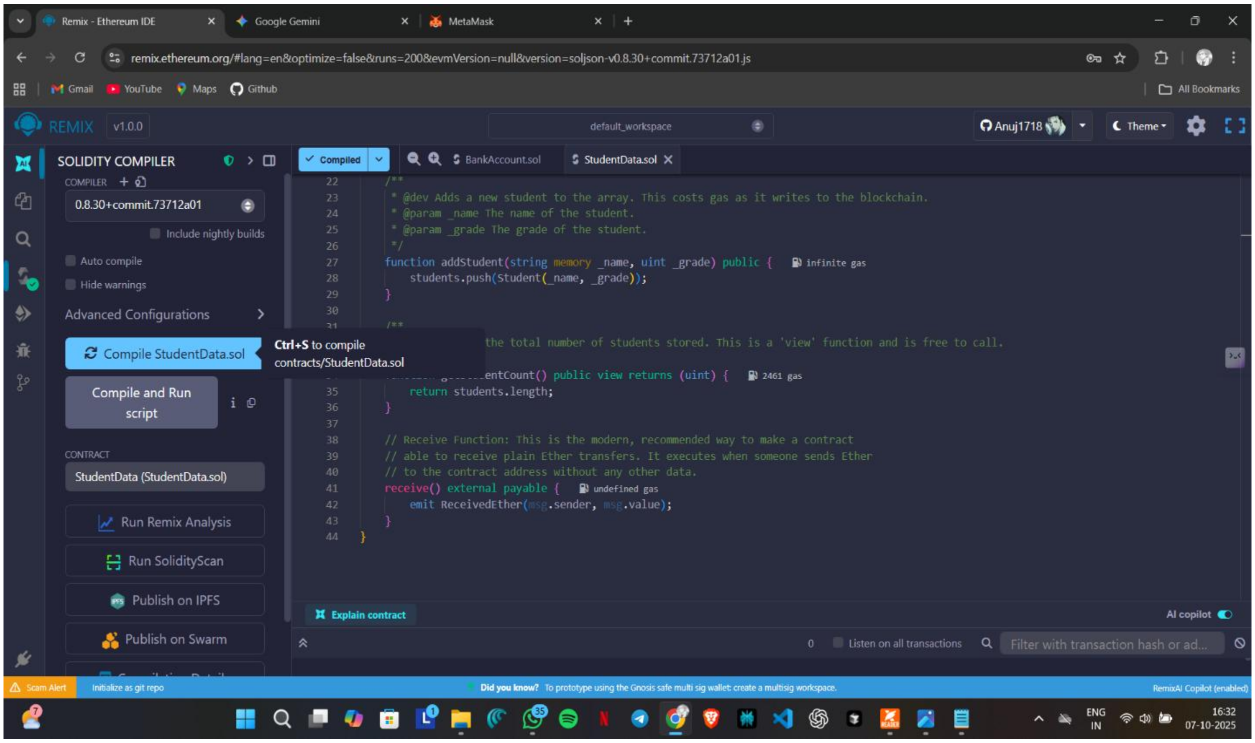
evm version: prague

Deploy

□ Publish to IPFS

At Address 0x9741721f1a7010fd149b9b80

```
    /**
     * @dev Adds a new student to the array. This costs gas as it writes to the blockchain.
     * @param _name The name of the student.
     * @param _grade The grade of the student.
     */
    function addStudent(string memory _name, uint _grade) public {    infinite gas
        students.push(Student(_name, _grade));
    }

    /**
     * @dev Returns the total number of students stored. This is a 'view' function and is free to call.
     */
    function getStudentCount() public view returns (uint) {    2461 gas
        return students.length;
    }

    // Receive Function: This is the modern, recommended way to make a contract
    // able to receive plain Ether transfers. It executes when someone sends Ether
    // to the contract address without any other data.
    receive() external payable {    undefined gas
        emit ReceivedEther(msg.sender, msg.value);
    }
}
```



Remix - Ethereum IDE
Google Gemini
MetaMask
remix.ethereum.org/#lang=en&optimize=false&runs=200&evmVersion=null&version=soljson-v0.8.30+commit.73712a01.js
Gmail
YouTube
Maps
Github
All Bookmarks
REMIX
v1.0.0
default_workspace
Anuj1718
Theme
Compiled
BankAccount.sol
StudentData.sol
Explain contract
AI copilot
Listen on all transactions
Filter with transaction hash or ad...
Scam Alert
Initialize as git repo
Did you know? To prototype using the Gnosis safe multi sig wallet: create a multisig workspace.
RemixAI Copilot (enabled)
ENG IN
16:32
07-10-2025

SOLIDITY COMPILER

COMPILER: 0.8.30+commit.73712a01

□ Include nightly builds

□ Auto compile

□ Hide warnings

Advanced Configurations

Compile StudentData.sol

**Ctrl+S** to compile contracts/StudentData.sol

Compile and Run script

CONTRACT: StudentData (StudentData.sol)

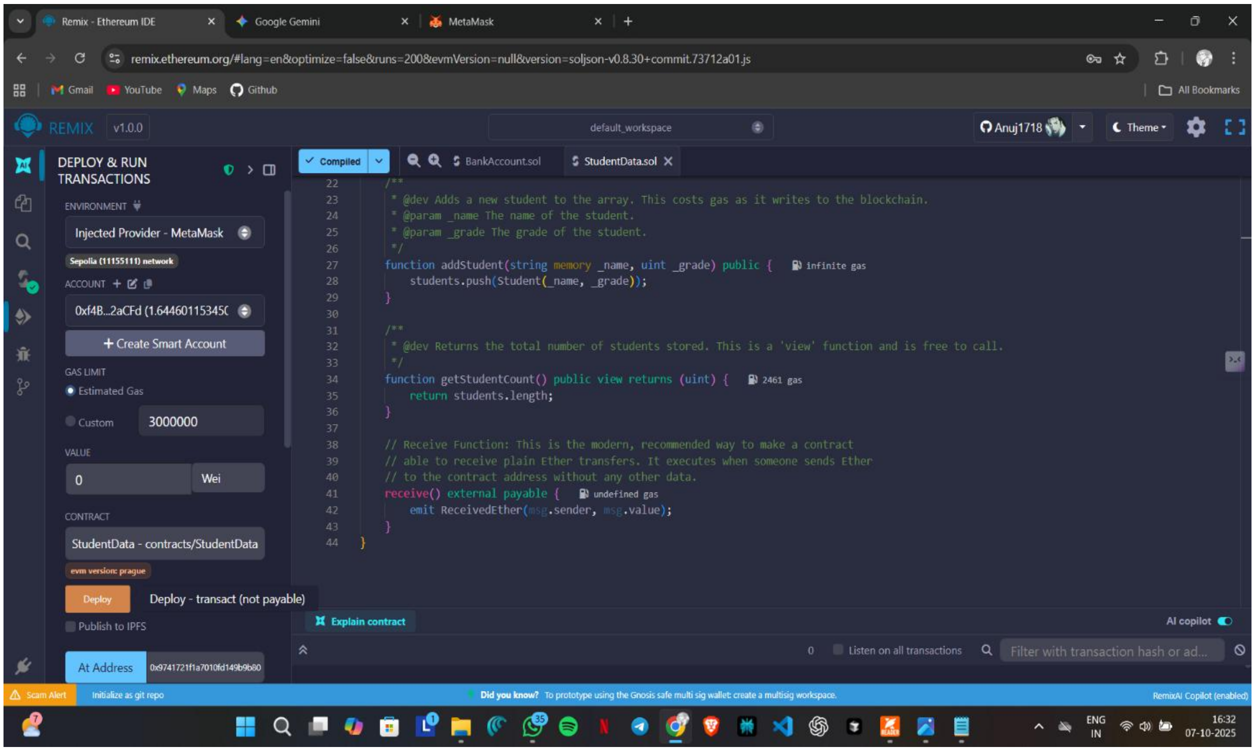
Run Remix Analysis

Run SolidityScan

Publish on IPFS

Publish on Swarm

```
    /**
     * @dev Adds a new student to the array. This costs gas as it writes to the blockchain.
     * @param _name The name of the student.
     * @param _grade The grade of the student.
     */
    function addStudent(string memory _name, uint _grade) public {    infinite gas
        students.push(Student(_name, _grade));
    }

    /**
              the total number of students stored. This is a 'view' function and is free to call.

               entCount() public view returns (uint) {    2461 gas
        return students.length;
    }

    // Receive Function: This is the modern, recommended way to make a contract
    // able to receive plain Ether transfers. It executes when someone sends Ether
    // to the contract address without any other data.
    receive() external payable {    undefined gas
        emit ReceivedEther(msg.sender, msg.value);
    }
}
```



remix.ethereum.org/#lang=en&optimize=false&runs=200&evmVersion=null&version=soljson-v0.8.30+commit.73712a01.js

DEPLOY & RUN TRANSACTIONS

ENVIRONMENT: Injected Provider - MetaMask

Sepolia (11155111) network

ACCOUNT: 0xf4B...2aCFd (1.64460115345C

GAS LIMIT: ● Estimated Gas ○ Custom 3000000

VALUE: 0 Wei

CONTRACT: StudentData - contracts/StudentData

evm version: prague

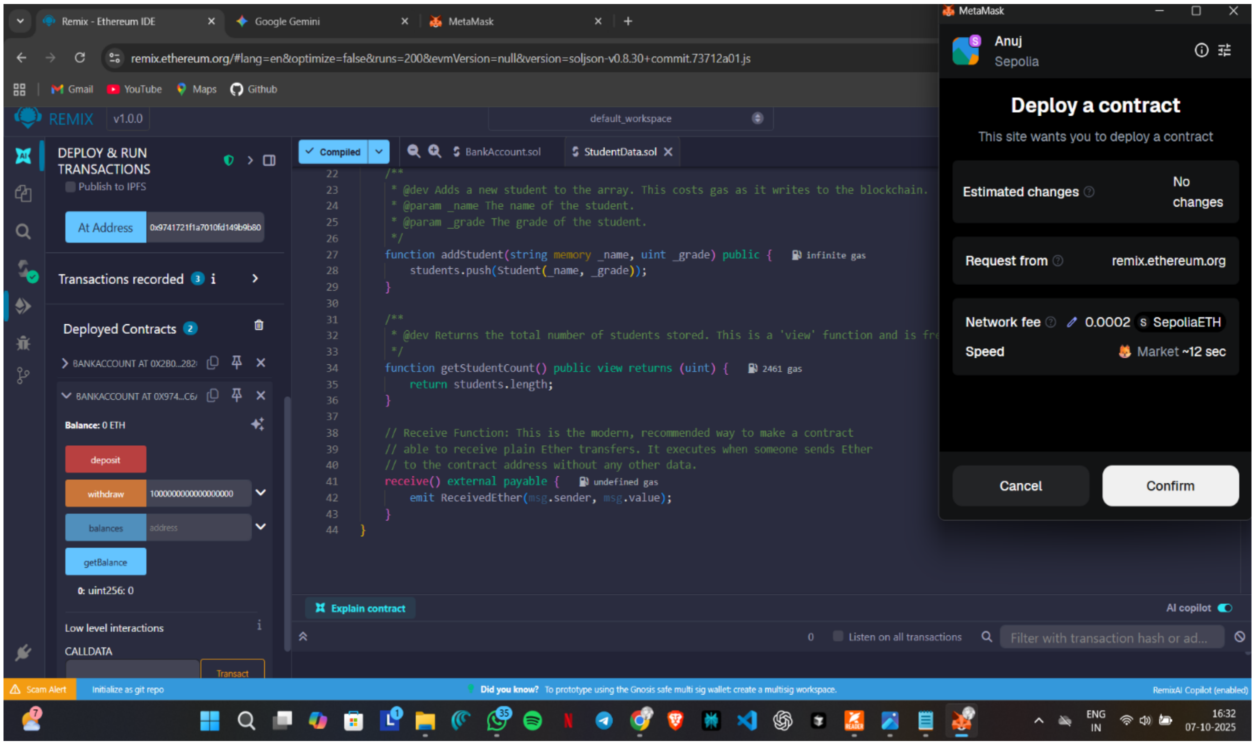
Deploy — Deploy - transact (not payable)

□ Publish to IPFS

At Address 0x9741721f1a7010fd149b9b80

StudentData.sol

```
    /**
     * @dev Adds a new student to the array. This costs gas as it writes to the blockchain.
     * @param _name The name of the student.
     * @param _grade The grade of the student.
     */
    function addStudent(string memory _name, uint _grade) public {    infinite gas
        students.push(Student(_name, _grade));
    }

    /**
     * @dev Returns the total number of students stored. This is a 'view' function and is free to call.
     */
    function getStudentCount() public view returns (uint) {    2461 gas
        return students.length;
    }

    // Receive Function: This is the modern, recommended way to make a contract
    // able to receive plain Ether transfers. It executes when someone sends Ether
    // to the contract address without any other data.
    receive() external payable {    undefined gas
        emit ReceivedEther(msg.sender, msg.value);
    }
}
```



DEPLOY & RUN TRANSACTIONS

□ Publish to IPFS

At Address 0x9741721f1a7010fd149b9b80

Transactions recorded 3

Deployed Contracts 2

BANKACCOUNT AT 0X2B0...282

BANKACCOUNT AT 0X974...C6/

Balance: 0 ETH

deposit

withdraw 1000000000000000000

balances address

getBalance

0: uint256: 0

Low level interactions

CALLDATA

Transact

MetaMask

Anuj
Sepolia

**Deploy a contract**

This site wants you to deploy a contract

Estimated changes: No changes

Request from: remix.ethereum.org

Network fee: 0.0002 SepoliaETH

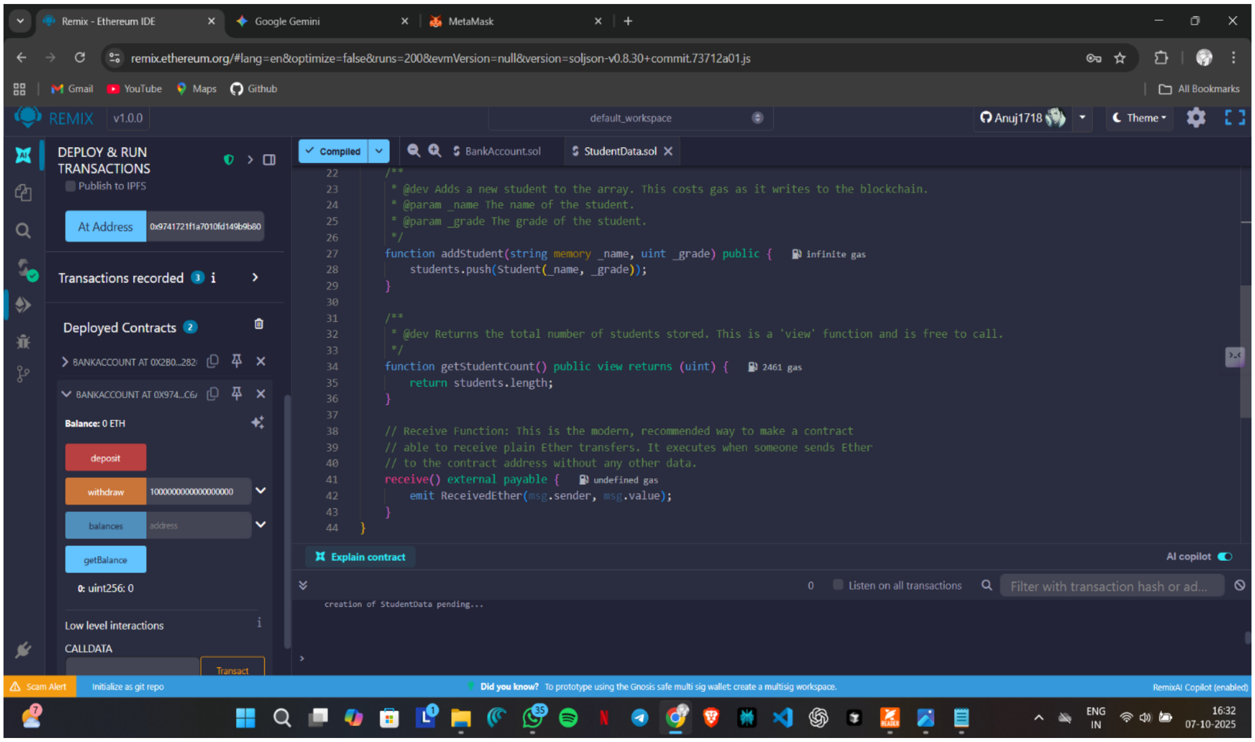
Speed: Market ~12 sec

Cancel | Confirm

StudentData.sol

```
    /**
     * @dev Adds a new student to the array. This costs gas as it writes to the blockchain.
     * @param _name The name of the student.
     * @param _grade The grade of the student.
     */
    function addStudent(string memory _name, uint _grade) public {    infinite gas
        students.push(Student(_name, _grade));
    }

    /**
     * @dev Returns the total number of students stored. This is a 'view' function and is fr
     */
    function getStudentCount() public view returns (uint) {    2461 gas
        return students.length;
    }

    // Receive Function: This is the modern, recommended way to make a contract
    // able to receive plain Ether transfers. It executes when someone sends Ether
    // to the contract address without any other data.
    receive() external payable {    undefined gas
        emit ReceivedEther(msg.sender, msg.value);
    }
}
```

Remix - Ethereum IDE
Google Gemini
MetaMask
remix.ethereum.org/#lang=en&optimize=false&runs=200&evmVersion=null&version=soljson-v0.8.30+commit.73712a01.js
Gmail
YouTube
Maps
Github
REMIX v1.0.0
default_workspace
Compiled
BankAccount.sol
Explain contract
AI copilot
Listen on all transactions
Filter with transaction hash or ad...
Scam Alert
Initialize as git repo
Did you know? To prototype using the Gnosis safe multi sig wallet: create a multisig workspace.
RemixAI Copilot (enabled)
ENG IN
16:32
07-10-2025



remix.ethereum.org/#lang=en&optimize=false&runs=200&evmVersion=null&version=soljson-v0.8.30+commit.73712a01.js

At Address: 0x9741721f1a7010fd149b9b80

BANKACCOUNT AT 0X2B0...282

BANKACCOUNT AT 0X974...C6

Balance: 0 ETH

withdraw: 1000000000000000000

balances: address

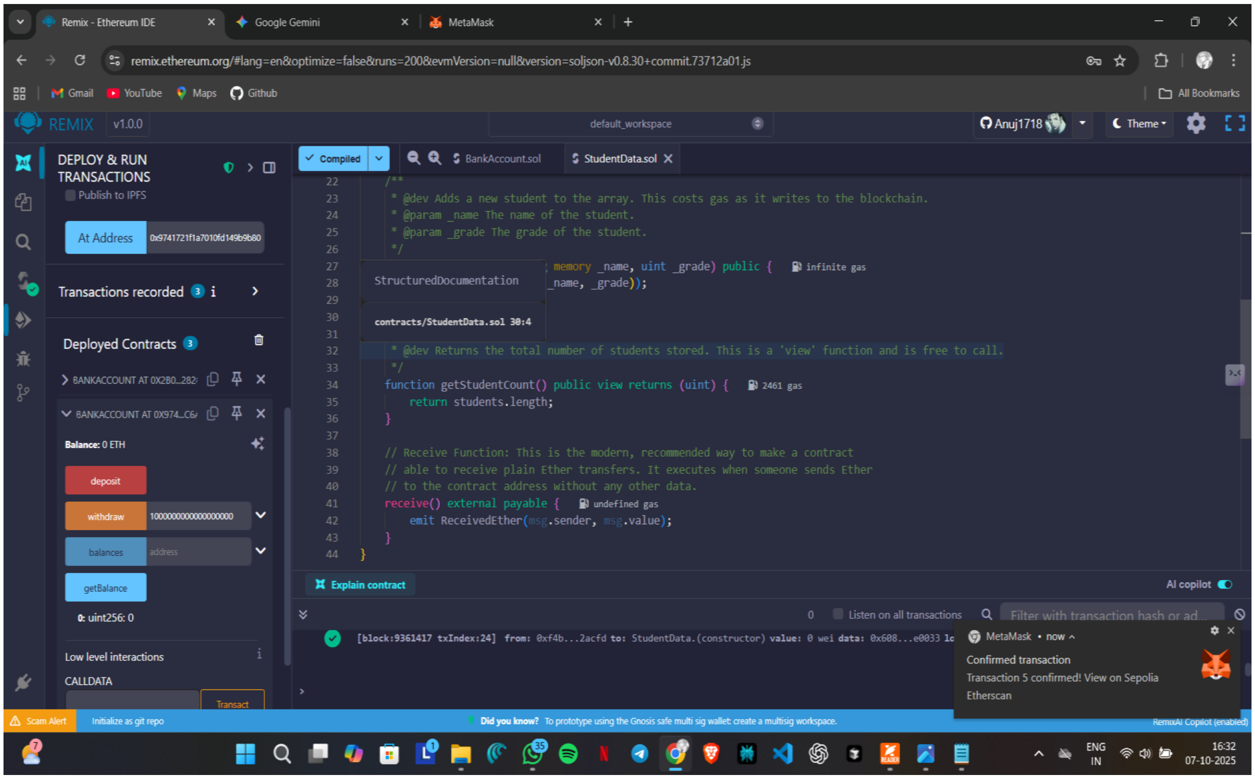
0: uint256: 0

```
    /**
     * @dev Adds a new student to the array. This costs gas as it writes to the blockchain.
     * @param _name The name of the student.
     * @param _grade The grade of the student.
     */
    function addStudent(string memory _name, uint _grade) public {    infinite gas
        students.push(Student(_name, _grade));
    }

    /**
     * @dev Returns the total number of students stored. This is a 'view' function and is free to call.
     */
    function getStudentCount() public view returns (uint) {    2461 gas
        return students.length;
    }

    // Receive Function: This is the modern, recommended way to make a contract
    // able to receive plain Ether transfers. It executes when someone sends Ether
    // to the contract address without any other data.
    receive() external payable {    undefined gas
        emit ReceivedEther(msg.sender, msg.value);
    }
}
```

```
creation of StudentData pending...
```

Did you know? To prototype using the Gnosis safe multi sig wallet: create a multisig workspace.

ENG IN 16:32 07-10-2025



remix.ethereum.org/#lang=en&optimize=false&runs=200&evmVersion=null&version=soljson-v0.8.30+commit.73712a01.js

At Address: 0x9741721f1a7010fd149b9b80

BANKACCOUNT AT 0X2B0...282

BANKACCOUNT AT 0X974...C6

Balance: 0 ETH

withdraw: 1000000000000000000

balances: address

0: uint256: 0

```
    /**
     * @dev Adds a new student to the array. This costs gas as it writes to the blockchain.
     * @param _name The name of the student.
     * @param _grade The grade of the student.
     */
      memory _name, uint _grade) public {    infinite gas
      _name, _grade));

     * @dev Returns the total number of students stored. This is a 'view' function and is free to call.
     */
    function getStudentCount() public view returns (uint) {    2461 gas
        return students.length;
    }

    // Receive Function: This is the modern, recommended way to make a contract
    // able to receive plain Ether transfers. It executes when someone sends Ether
    // to the contract address without any other data.
    receive() external payable {    undefined gas
        emit ReceivedEther(msg.sender, msg.value);
    }
}
```

StructuredDocumentation

contracts/StudentData.sol 30:4

```
[block:9361417 txIndex:24] from: 0xf4b...2acfd to: StudentData.(constructor) value: 0 wei data: 0x608...e0033 lo
```

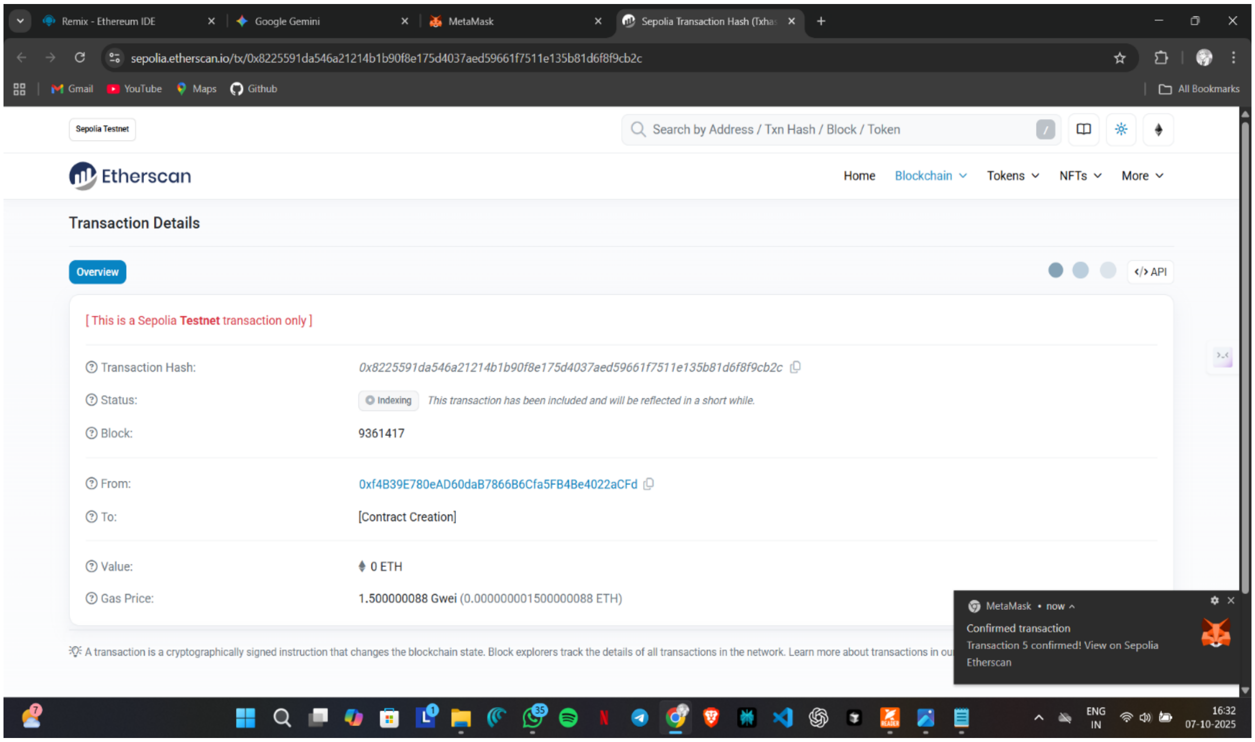
MetaMask • now

Confirmed transaction

Transaction 5 confirmed! View on Sepolia Etherscan

Did you know? To prototype using the Gnosis safe multi sig wallet: create a multisig workspace.

ENG IN 16:32 07-10-2025



sepolia.etherscan.io/tx/0x8225591da546a21214b1b90f8e175d4037aed59661f7511e135b81d6f8f9cb2c

Sepolia Testnet

Etherscan

### Transaction Details

Overview

[ This is a Sepolia **Testnet** transaction only ]

Transaction Hash: 0x8225591da546a21214b1b90f8e175d4037aed59661f7511e135b81d6f8f9cb2c

Status: Indexing *This transaction has been included and will be reflected in a short while.*

Block: 9361417

From: 0xf4B39E780eAD60daB7866B6Cfa5FB4Be4022aCFd

To: [Contract Creation]

Value: 0 ETH

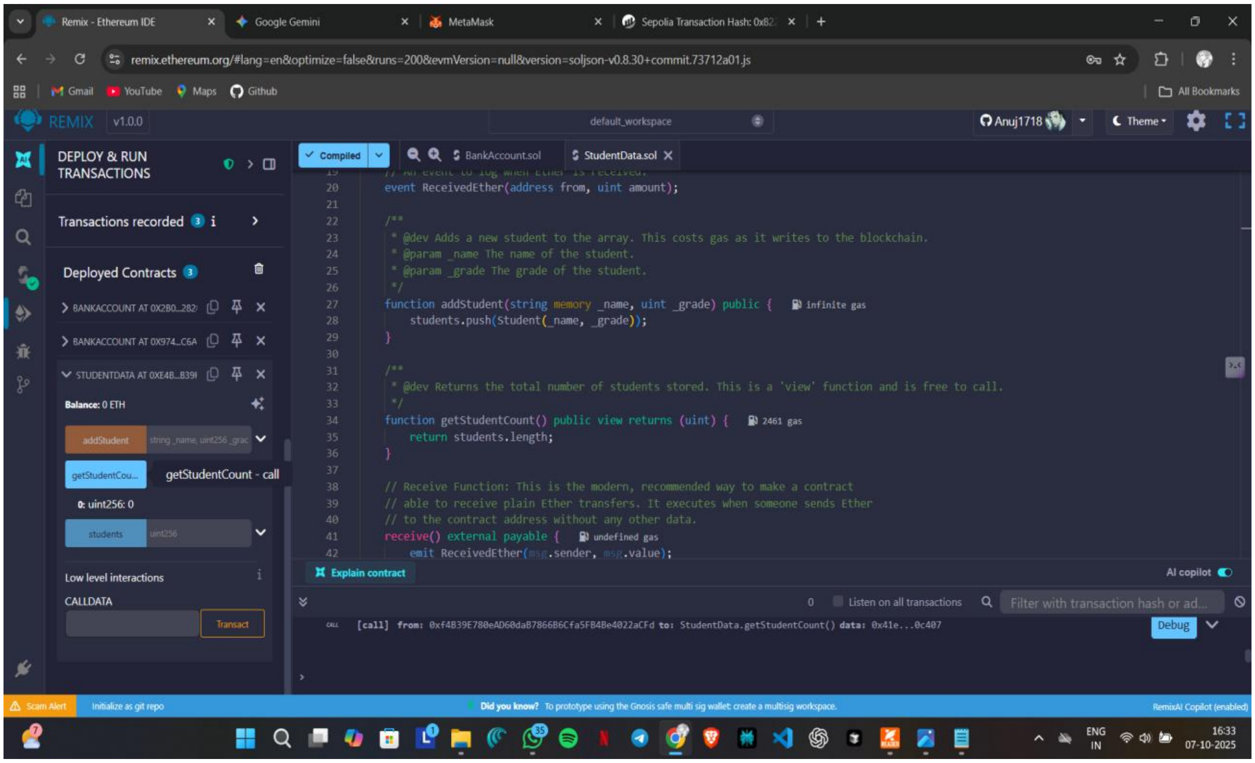
Gas Price: 1.500000088 Gwei (0.000000001500000088 ETH)

A transaction is a cryptographically signed instruction that changes the blockchain state. Block explorers track the details of all transactions in the network. Learn more about transactions in ou

MetaMask • now

Confirmed transaction

Transaction 5 confirmed! View on Sepolia Etherscan



remix.ethereum.org/#lang=en&optimize=false&runs=200&evmVersion=null&version=soljson-v0.8.30+commit.73712a01.js

DEPLOY & RUN TRANSACTIONS

Transactions recorded 3

Deployed Contracts 3

BANKACCOUNT AT 0X2B0...282

BANKACCOUNT AT 0X974...C6A

STUDENTDATA AT 0XE4B...B39

**Balance:** 0 ETH

addStudent string _name, uint256 _grac

getStudentCou... getStudentCount - call

0: uint256: 0

students uint256

Low level interactions

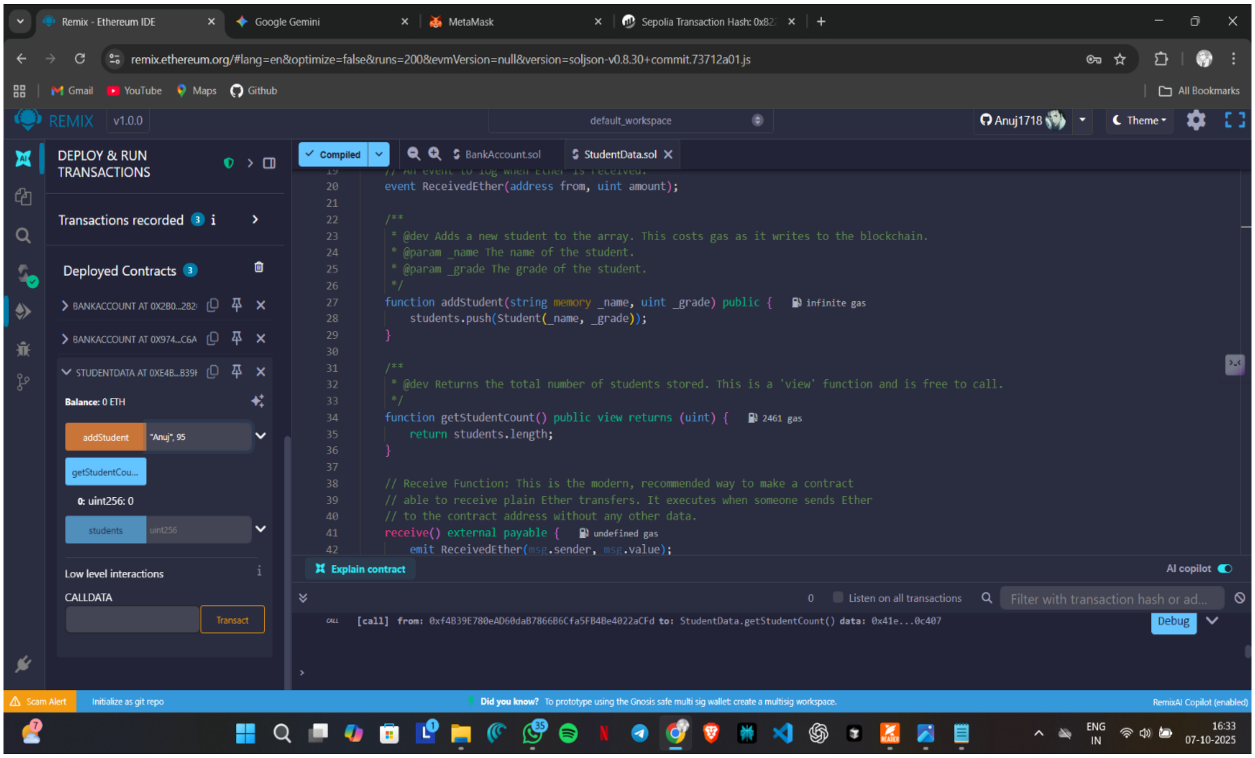
CALLDATA

Transact

```
    // An event to log when Ether is received.
    event ReceivedEther(address from, uint amount);

    /**
     * @dev Adds a new student to the array. This costs gas as it writes to the blockchain.
     * @param _name The name of the student.
     * @param _grade The grade of the student.
     */
    function addStudent(string memory _name, uint _grade) public {    infinite gas
        students.push(Student(_name, _grade));
    }

    /**
     * @dev Returns the total number of students stored. This is a 'view' function and is free to call.
     */
    function getStudentCount() public view returns (uint) {    2461 gas
        return students.length;
    }

    // Receive Function: This is the modern, recommended way to make a contract
    // able to receive plain Ether transfers. It executes when someone sends Ether
    // to the contract address without any other data.
    receive() external payable {    undefined gas
        emit ReceivedEther(msg.sender, msg.value);
```

```
CALL [call] from: 0xf4B39E780eAD60daB7866B6Cfa5FB4Be4022aCFd to: StudentData.getStudentCount() data: 0x41e...0c407
```

**Did you know?** To prototype using the Gnosis safe multi sig wallet: create a multisig workspace.



Transactions recorded 3

Deployed Contracts 3

BANKACCOUNT AT 0X2B0...282

BANKACCOUNT AT 0X974...C6A

STUDENTDATA AT 0XE4B...B39E

Balance: 0 ETH

addStudent "Anuj", 95

getStudentCou...

0: uint256: 0

students uint256

Low level interactions

CALLDATA

Transact

```
    // An event to log when Ether is received.
    event ReceivedEther(address from, uint amount);

    /**
     * @dev Adds a new student to the array. This costs gas as it writes to the blockchain.
     * @param _name The name of the student.
     * @param _grade The grade of the student.
     */
    function addStudent(string memory _name, uint _grade) public {    infinite gas
        students.push(Student(_name, _grade));
    }

    /**
     * @dev Returns the total number of students stored. This is a 'view' function and is free to call.
     */
    function getStudentCount() public view returns (uint) {    2461 gas
        return students.length;
    }

    // Receive Function: This is the modern, recommended way to make a contract
    // able to receive plain Ether transfers. It executes when someone sends Ether
    // to the contract address without any other data.
    receive() external payable {    undefined gas
        emit ReceivedEther(msg.sender, msg.value);
```

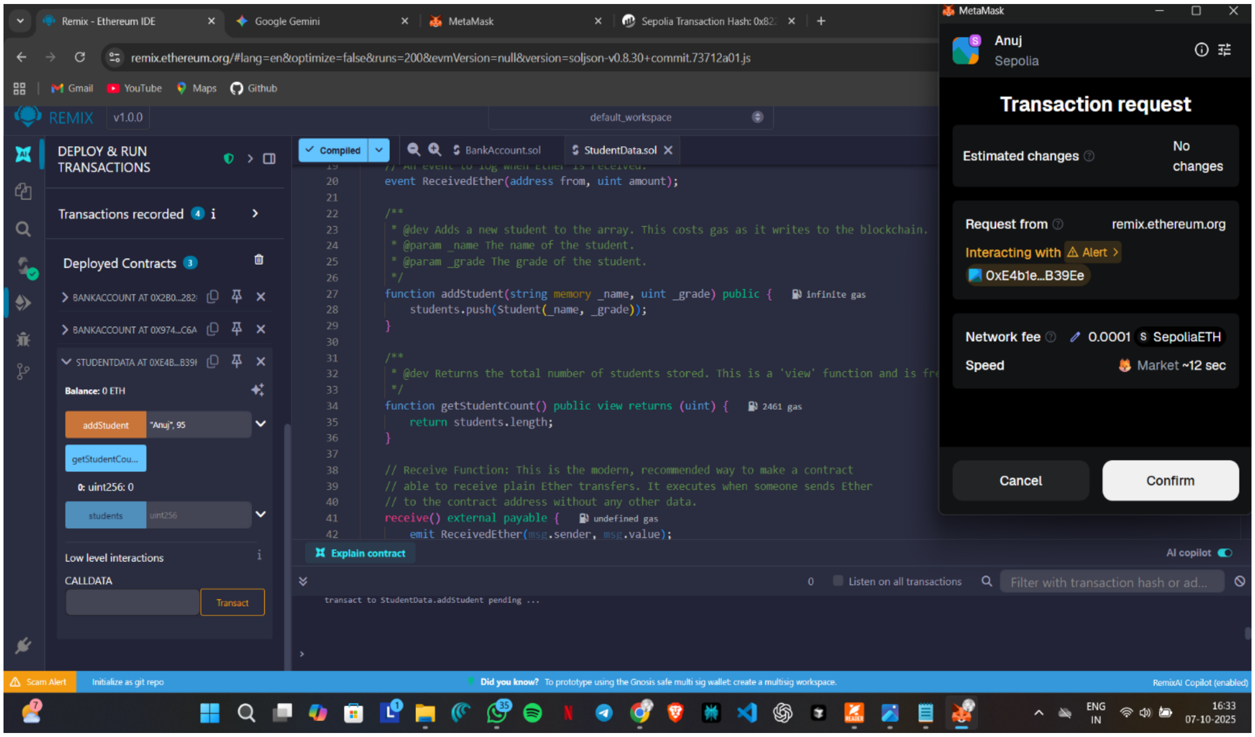
0 □ Listen on all transactions

Filter with transaction hash or ad...

```
CALL [call] from: 0xf4B39E780eAD60daB7866B6Cfa5FB4Be4022aCFd to: StudentData.getStudentCount() data: 0x41e...0c407
```

Did you know? To prototype using the Gnosis safe multi sig wallet: create a multisig workspace.

ENG IN 16:33 07-10-2025


Remix - Ethereum IDE
Google Gemini
MetaMask
Sepolia Transaction Hash: 0x82...
remix.ethereum.org/#lang=en&optimize=false&runs=200&evmVersion=null&version=soljson-v0.8.30+commit.73712a01.js
Gmail
YouTube
Maps
Github
REMIX
v1.0.0
default_workspace
DEPLOY & RUN TRANSACTIONS
Compiled
BankAccount.sol
StudentData.sol
Explain contract
AI copilot
Scam Alert
Initialize as git repo
RemixAI Copilot (enabled)

Transactions recorded 4

Deployed Contracts 3

BANKACCOUNT AT 0X2B0...282

BANKACCOUNT AT 0X974...C6A

STUDENTDATA AT 0XE4B...B39E

Balance: 0 ETH

addStudent "Anuj", 95

getStudentCou...

0: uint256: 0

students uint256

Low level interactions

CALLDATA

Transact

```
    // An event to log when Ether is received.
    event ReceivedEther(address from, uint amount);

    /**
     * @dev Adds a new student to the array. This costs gas as it writes to the blockchain.
     * @param _name The name of the student.
     * @param _grade The grade of the student.
     */
    function addStudent(string memory _name, uint _grade) public {    infinite gas
        students.push(Student(_name, _grade));
    }

    /**
     * @dev Returns the total number of students stored. This is a 'view' function and is fre
     */
    function getStudentCount() public view returns (uint) {    2461 gas
        return students.length;
    }

    // Receive Function: This is the modern, recommended way to make a contract
    // able to receive plain Ether transfers. It executes when someone sends Ether
    // to the contract address without any other data.
    receive() external payable {    undefined gas
        emit ReceivedEther(msg.sender, msg.value);
```

0 □ Listen on all transactions

Filter with transaction hash or ad...

```
transact to StudentData.addStudent pending ...
```

MetaMask

Anuj
Sepolia

Transaction request

Estimated changes: No changes

Request from: remix.ethereum.org

Interacting with ⚠ Alert

0xE4b1e...B39Ee

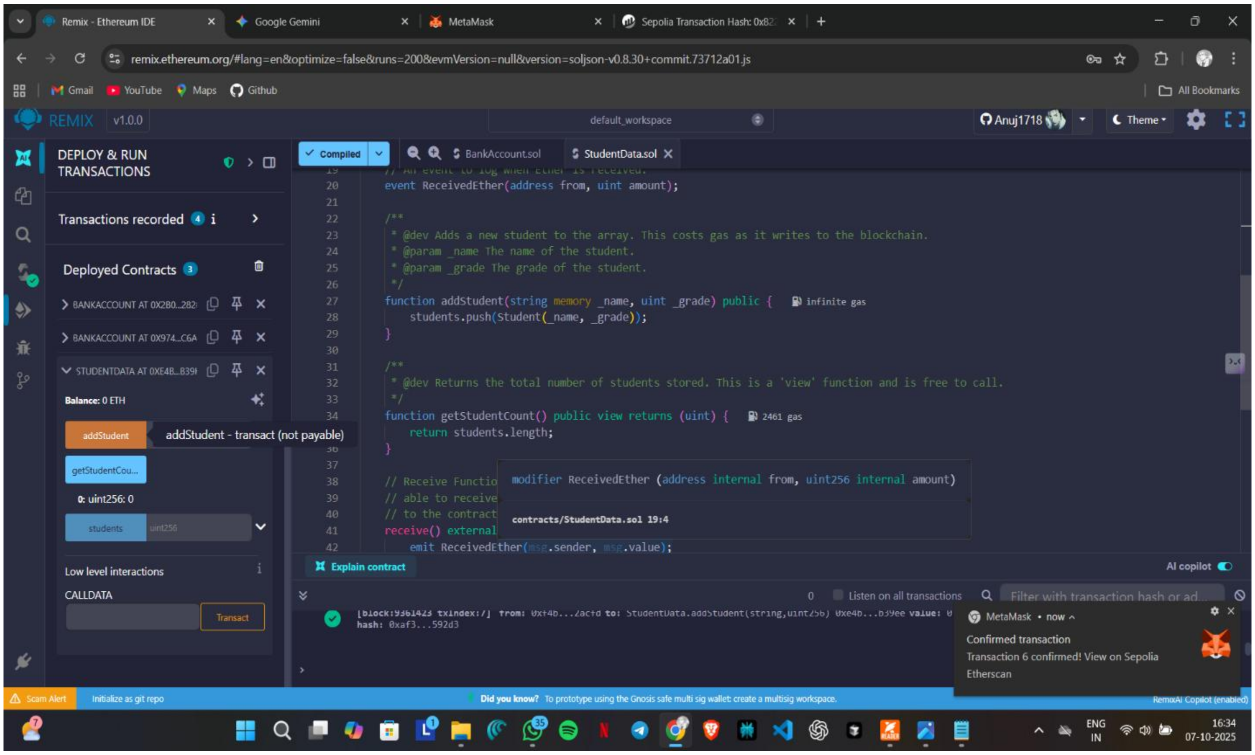
Network fee: 0.0001 SepoliaETH

Speed: Market ~12 sec

Cancel | Confirm

Did you know? To prototype using the Gnosis safe multi sig wallet: create a multisig workspace.

ENG IN 16:33 07-10-2025


Remix - Ethereum IDE
Google Gemini
MetaMask
Sepolia Transaction Hash: 0x82
remix.ethereum.org/#lang=en&optimize=false&runs=200&evmVersion=null&version=soljson-v0.8.30+commit.73712a01.js
Gmail
YouTube
Maps
Github
All Bookmarks
REMIX
v1.0.0
default_workspace
Anuj1718
Theme
DEPLOY & RUN TRANSACTIONS
Transactions recorded 4
Deployed Contracts 3
BANKACCOUNT AT 0X2B0...282
BANKACCOUNT AT 0X974...C6A
STUDENTDATA AT 0XE4B...B39
addStudent
addStudent - transact (not payable)
getStudentCou...
students
uint256
Low level interactions
CALLDATA
Transact
Compiled
BankAccount.sol
StudentData.sol
Explain contract
AI copilot
Listen on all transactions
Filter with transaction hash or ad...
Scam Alert
Initialize as git repo
RemixAI Copilot (enabled)

Balance: 0 ETH

0: uint256: 0

```
    // An event to log when Ether is received.
    event ReceivedEther(address from, uint amount);

    /**
     * @dev Adds a new student to the array. This costs gas as it writes to the blockchain.
     * @param _name The name of the student.
     * @param _grade The grade of the student.
     */
    function addStudent(string memory _name, uint _grade) public {    infinite gas
        students.push(Student(_name, _grade));
    }

    /**
     * @dev Returns the total number of students stored. This is a 'view' function and is free to call.
     */
    function getStudentCount() public view returns (uint) {    2461 gas
        return students.length;
    }

    // Receive Functio
    // able to receive
    // to the contract
    receive() external
        emit ReceivedEther(msg.sender, msg.value);
```

```
modifier ReceivedEther (address internal from, uint256 internal amount)

contracts/StudentData.sol 19:4
```

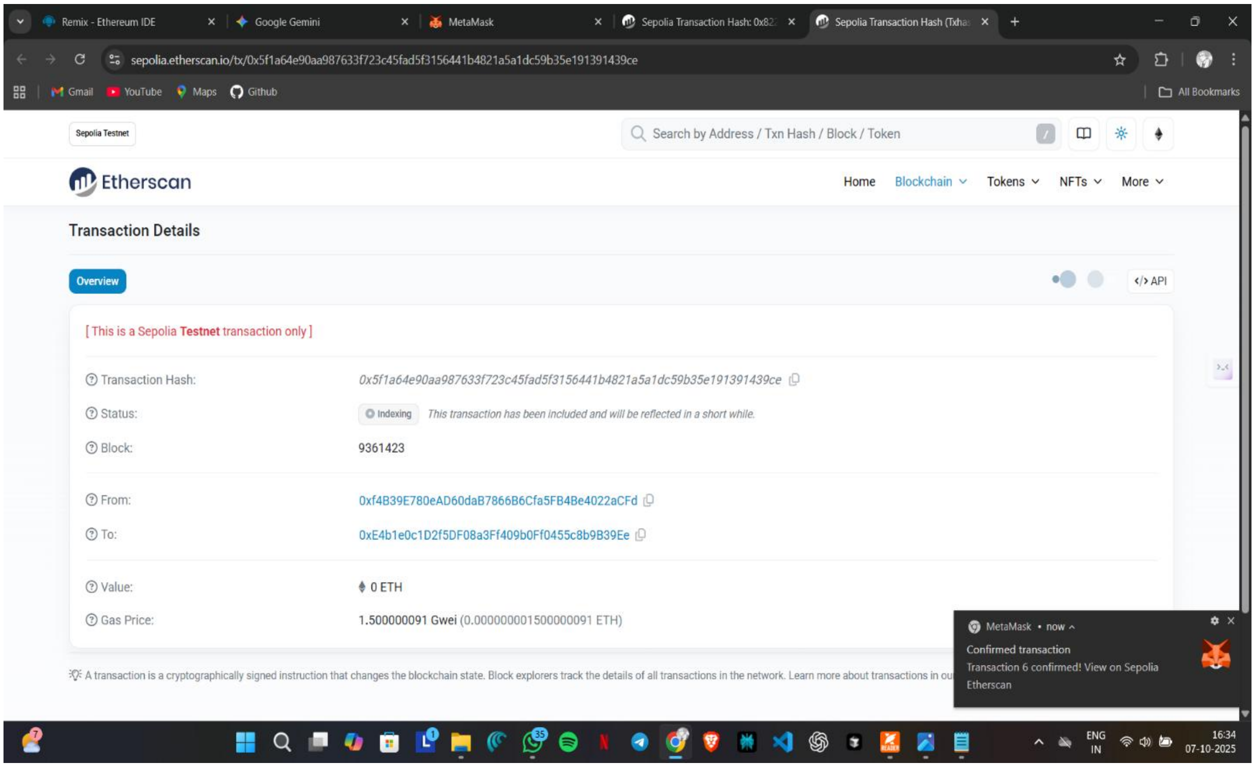
```
[block:9361423 txIndex:7] from: 0xf4b...2acfd to: StudentData.addStudent(string,uint256) 0xe4b...b39ee value: 0
hash: 0xaf3...592d3
```

MetaMask • now

Confirmed transaction

Transaction 6 confirmed! View on Sepolia Etherscan

Did you know? To prototype using the Gnosis safe multi sig wallet: create a multisig workspace.


Remix - Ethereum IDE
Google Gemini
MetaMask
Sepolia Transaction Hash: 0x82
Sepolia Transaction Hash (Txhas
sepolia.etherscan.io/tx/0x5f1a64e90aa987633f723c45fad5f3156441b4821a5a1dc59b35e191391439ce
Gmail
YouTube
Maps
Github
All Bookmarks
Sepolia Testnet
Search by Address / Txn Hash / Block / Token
Etherscan
Home
Blockchain
Tokens
NFTs
More
Overview
</> API

Transaction Details

[ This is a Sepolia **Testnet** transaction only ]

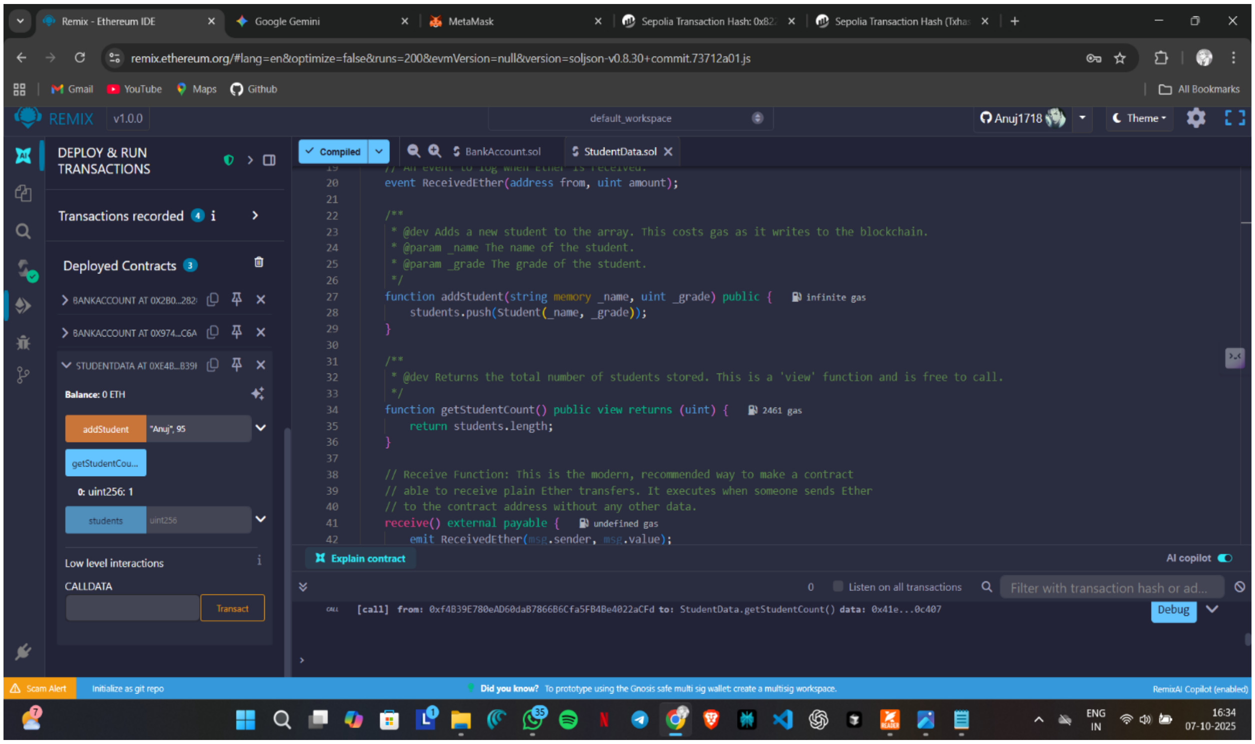
| | |
|---|---|
| Transaction Hash: | *0x5f1a64e90aa987633f723c45fad5f3156441b4821a5a1dc59b35e191391439ce* |
| Status: | Indexing *This transaction has been included and will be reflected in a short while.* |
| Block: | 9361423 |
| From: | 0xf4B39E780eAD60daB7866B6Cfa5FB4Be4022aCFd |
| To: | 0xE4b1e0c1D2f5DF08a3Ff409b0Ff0455c8b9B39Ee |
| Value: | 0 ETH |
| Gas Price: | 1.500000091 Gwei (0.000000001500000091 ETH) |

A transaction is a cryptographically signed instruction that changes the blockchain state. Block explorers track the details of all transactions in the network. Learn more about transactions in ou

MetaMask • now

Confirmed transaction

Transaction 6 confirmed! View on Sepolia Etherscan



Remix - Ethereum IDE
Google Gemini
MetaMask
Sepolia Transaction Hash: 0x82
Sepolia Transaction Hash (Txha
remix.ethereum.org/#lang=en&optimize=false&runs=200&evmVersion=null&version=soljson-v0.8.30+commit.73712a01.js
Gmail
YouTube
Maps
Github
All Bookmarks
REMIX
v1.0.0
default_workspace
Anuj1718
Theme
DEPLOY & RUN TRANSACTIONS
Compiled
BankAccount.sol
StudentData.sol
Explain contract
AI copilot
Scam Alert
Initialize as git repo
RemixAI Copilot (enabled)
Debug

Transactions recorded 4

Deployed Contracts 3

- BANKACCOUNT AT 0X2B0...282
- BANKACCOUNT AT 0X974...C6A
- STUDENTDATA AT 0XE4B...B39

**Balance:** 0 ETH

addStudent "Anuj", 95

getStudentCou...

0: uint256: 1

students uint256

Low level interactions

CALLDATA

Transact

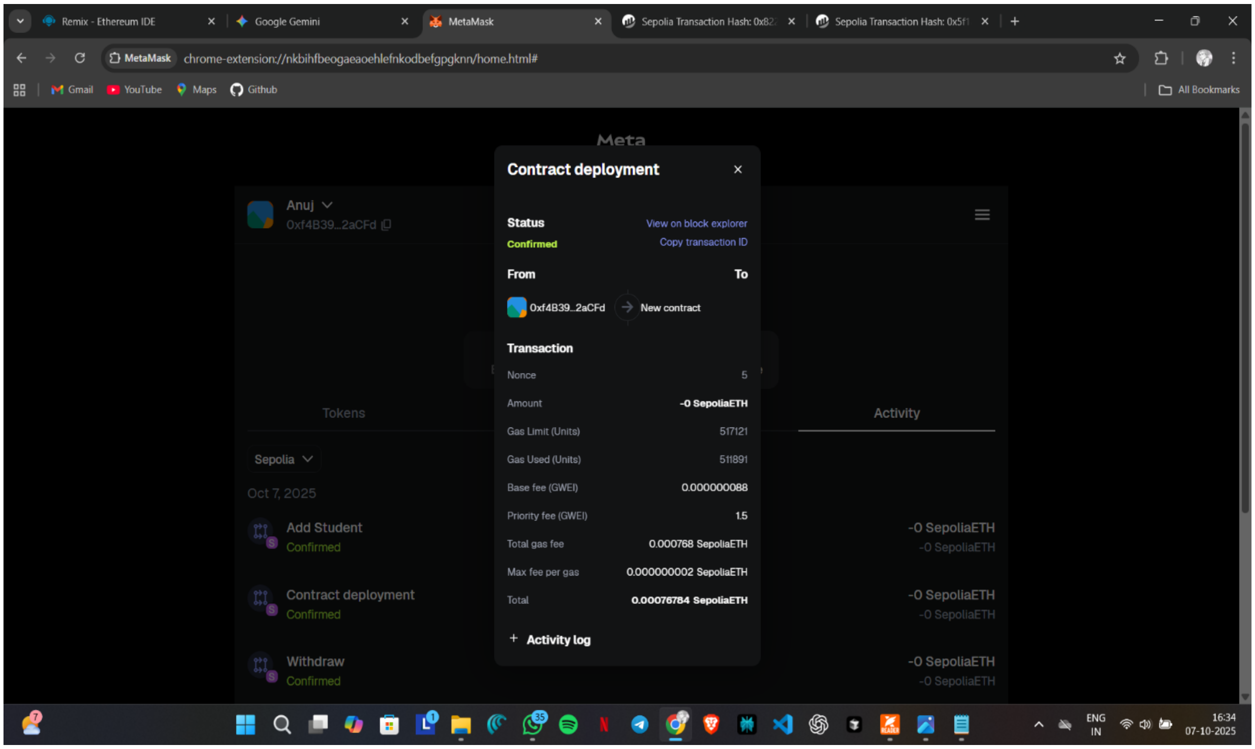
```
    // An event to log when Ether is received.
    event ReceivedEther(address from, uint amount);

    /**
     * @dev Adds a new student to the array. This costs gas as it writes to the blockchain.
     * @param _name The name of the student.
     * @param _grade The grade of the student.
     */
    function addStudent(string memory _name, uint _grade) public {    infinite gas
        students.push(Student(_name, _grade));
    }

    /**
     * @dev Returns the total number of students stored. This is a 'view' function and is free to call.
     */
    function getStudentCount() public view returns (uint) {    2461 gas
        return students.length;
    }

    // Receive Function: This is the modern, recommended way to make a contract
    // able to receive plain Ether transfers. It executes when someone sends Ether
    // to the contract address without any other data.
    receive() external payable {    undefined gas
        emit ReceivedEther(msg.sender, msg.value);
```

0 ☐ Listen on all transactions Filter with transaction hash or ad...

```
CALL  [call] from: 0xf4B39E780eAD60daB7866B6Cfa5FB4Be4022aCFd to: StudentData.getStudentCount() data: 0x41e...0c407
```

**Did you know?** To prototype using the Gnosis safe multi sig wallet: create a multisig workspace.

16:34 07-10-2025



Remix - Ethereum IDE
Google Gemini
MetaMask
Sepolia Transaction Hash: 0x82
Sepolia Transaction Hash: 0x5f1
MetaMask
chrome-extension://nkbihfbeogaeaoehlefnkodbefgpgknn/home.html#
Gmail
YouTube
Maps
Github
All Bookmarks
Tokens
Activity
Sepolia

Anuj
0xf4B39...2aCFd

Oct 7, 2025

| | |
|---|---|
| Add Student<br>Confirmed | -0 SepoliaETH<br>-0 SepoliaETH |
| Contract deployment<br>Confirmed | -0 SepoliaETH<br>-0 SepoliaETH |
| Withdraw<br>Confirmed | -0 SepoliaETH<br>-0 SepoliaETH |

**Contract deployment**

**Status** — Confirmed

View on block explorer

Copy transaction ID

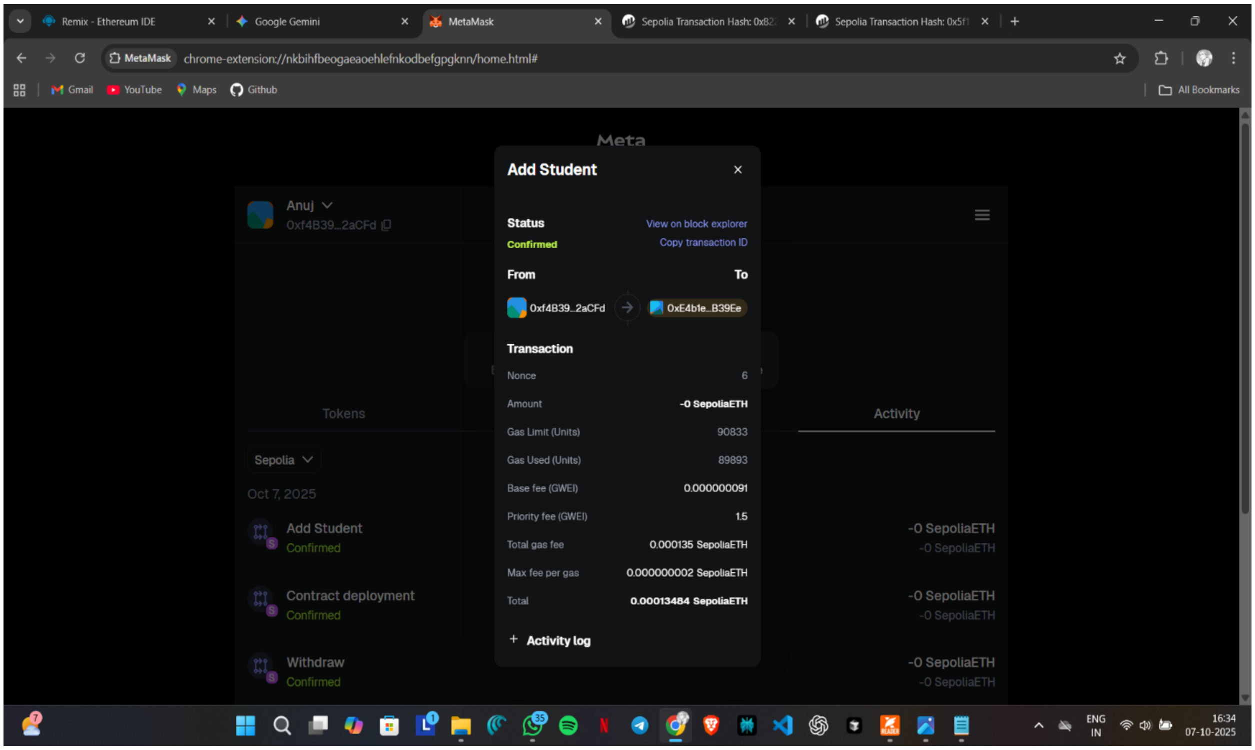
**From** 0xf4B39...2aCFd → **To** New contract

**Transaction**

| | |
|---|---|
| Nonce | 5 |
| Amount | -0 SepoliaETH |
| Gas Limit (Units) | 517121 |
| Gas Used (Units) | 511891 |
| Base fee (GWEI) | 0.000000088 |
| Priority fee (GWEI) | 1.5 |
| Total gas fee | 0.000768 SepoliaETH |
| Max fee per gas | 0.000000002 SepoliaETH |
| Total | 0.00076784 SepoliaETH |

+ Activity log

16:34 07-10-2025



chrome-extension://nkbihfbeogaeaoehlefnkodbefgpgknn/home.html#

Anuj
0xf4B39...2aCFd

Tokens | Activity

Sepolia

Oct 7, 2025

| | |
|---|---|
| Add Student<br>Confirmed | -0 SepoliaETH<br>-0 SepoliaETH |
| Contract deployment<br>Confirmed | -0 SepoliaETH<br>-0 SepoliaETH |
| Withdraw<br>Confirmed | -0 SepoliaETH<br>-0 SepoliaETH |

## Add Student

**Status** — Confirmed

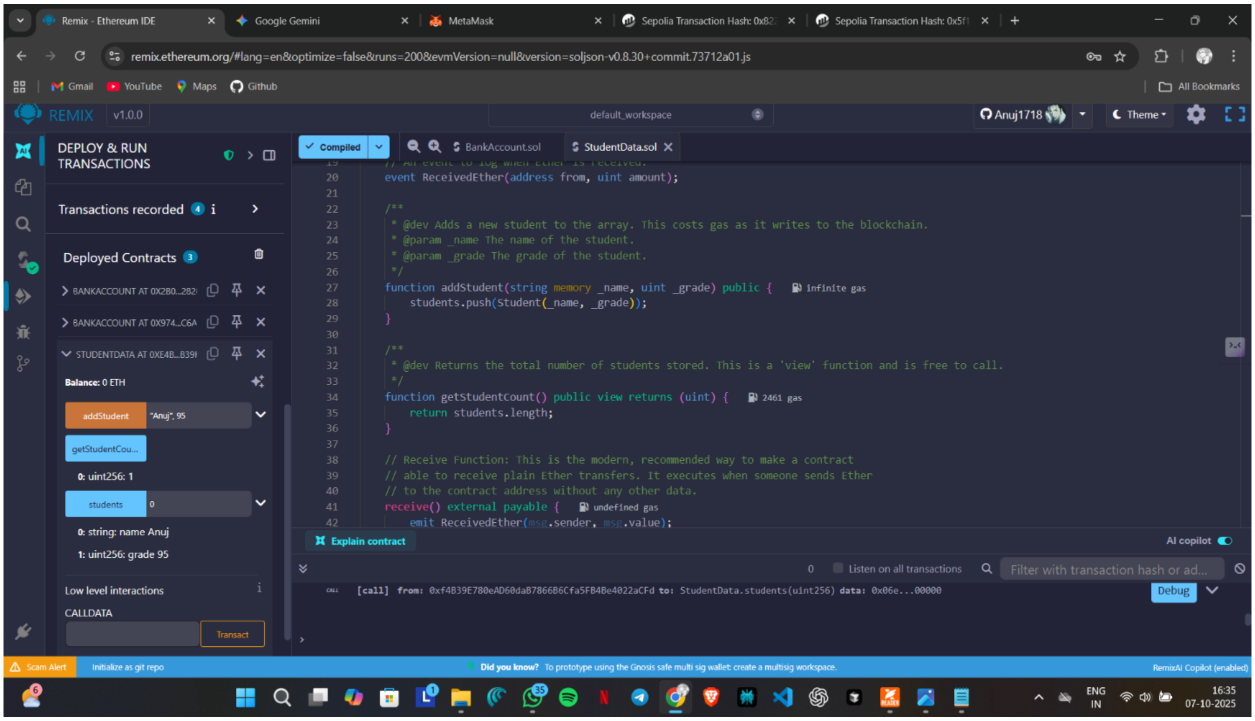
View on block explorer
Copy transaction ID

**From** 0xf4B39...2aCFd → **To** 0xE4b1e...B39Ee

**Transaction**

| | |
|---|---|
| Nonce | 6 |
| Amount | -0 SepoliaETH |
| Gas Limit (Units) | 90833 |
| Gas Used (Units) | 89893 |
| Base fee (GWEI) | 0.000000091 |
| Priority fee (GWEI) | 1.5 |
| Total gas fee | 0.000135 SepoliaETH |
| Max fee per gas | 0.000000002 SepoliaETH |
| Total | 0.00013484 SepoliaETH |

+ Activity log



remix.ethereum.org/#lang=en&optimize=false&runs=200&evmVersion=null&version=soljson-v0.8.30+commit.73712a01.js

REMIX v1.0.0 — default_workspace — Anuj1718

DEPLOY & RUN TRANSACTIONS

Transactions recorded 4

Deployed Contracts 3

- BANKACCOUNT AT 0X2B0...282
- BANKACCOUNT AT 0X974...C6A
- STUDENTDATA AT 0XE4B...B39

Balance: 0 ETH

addStudent "Anuj", 95

getStudentCou...

0: uint256: 1

students 0

0: string: name Anuj

1: uint256: grade 95

Low level interactions

CALLDATA

Transact

Compiled | BankAccount.sol | StudentData.sol

```
    // An event to log when Ether is received.
    event ReceivedEther(address from, uint amount);

    /**
     * @dev Adds a new student to the array. This costs gas as it writes to the blockchain.
     * @param _name The name of the student.
     * @param _grade The grade of the student.
     */
    function addStudent(string memory _name, uint _grade) public {    infinite gas
        students.push(Student(_name, _grade));
    }

    /**
     * @dev Returns the total number of students stored. This is a 'view' function and is free to call.
     */
    function getStudentCount() public view returns (uint) {    2461 gas
        return students.length;
    }

    // Receive Function: This is the modern, recommended way to make a contract
    // able to receive plain Ether transfers. It executes when someone sends Ether
    // to the contract address without any other data.
    receive() external payable {    undefined gas
        emit ReceivedEther(msg.sender, msg.value);
```

```
CALL  [call] from: 0xf4B39E780eAD60daB7866B6Cfa5FB4Be4022aCFd to: StudentData.students(uint256) data: 0x06e...00000
```

Remix - Ethereum IDE
Google Gemini
MetaMask
Sepolia Transaction Hash: 0x82
Sepolia Transaction Hash: 0x5f1
Gmail
YouTube
Maps
Github
All Bookmarks
Theme
Explain contract
AI copilot
0
Listen on all transactions
Filter with transaction hash or ad...
Debug
Scam Alert
Initialize as git repo
Did you know? To prototype using the Gnosis safe multi sig wallet: create a multisig workspace.
RemixAI Copilot (enabled)
ENG
IN
16:35
07-10-2025