

REMIX

v1.1.3

default_workspace

FILE EXPLORER

artifacts

build-info

Bank_metadata.json

Bank.json

contracts

scripts

tests

.prettierrc.json

bank.sol

README.txt

remix.config.json

Compiled

Home

bank.sol

```
1 // SPDX-License-Identifier: MIT
2 pragma solidity ^0.8.0;
3
4 contract Bank {
5     mapping(address => uint256) private balances;
6
7     function deposit() public payable {
8         balances[msg.sender] += msg.value;
9     }
10
11     function withdraw(uint256 amount) public {
12         require(balances[msg.sender] >= amount, "Insufficient balance");
13         balances[msg.sender] -= amount;
14         payable(msg.sender).transfer(amount);
15     }
16
17     function getBalance() public view returns (uint256) {
18         return balances[msg.sender];
19     }
20
21 }
```

Explain contract

0 ☐ Listen on all transactions

Filter with transaction hash or address

AI copilot

Welcome to Remix 1.1.3

Your files are stored in indexedDB. 19.53 KB / 276.42 GB used


```
// SPDX-License-Identifier: MIT
pragma solidity ^0.8.0;

contract Bank {
    mapping(address => uint256) private balances;

    function deposit() public payable {
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    function withdraw(uint256 amount) public {
        require(balances[msg.sender] >= amount, "Insufficient balance");
        balances[msg.sender] -= amount;
        payable(msg.sender).transfer(amount);
    }

    function getBalance() public view returns (uint256) {
        return balances[msg.sender];
    }
}
```


Account 1

Deploy a contract

This site wants you to deploy a contract

Estimated changes ?

No changes

Network

s Sepolia


Request from ?

remix.ethereum.org

Network fee ?


0.0001 s SepoliaETH




Speed


 Market ~12 sec

Cancel


Confirm

Deployed Contracts 1



BANK AT 0X931...8826B (BLOC)




Balance: 0 ETH


deposit

withdraw
uint256 amount


getBalance

Low level interactions


CALLDATA

Transact

transact to Bank.deposit pending ...

[view on Etherscan](#) [view on Blockscout](#)

✓

[block:9556887 txIndex:17] from: 0x75f...a2647 to: Bank.deposit() 0x931...8826b value: 1 wei data: 0xd0e...30db0 logs: 0 hash: 0xec1...9fbde

Debug

▼

transact to Bank.withdraw errored: Error encoding arguments: TypeError: invalid BigNumberish string: Cannot convert undefined or null to number

transact to Bank.withdraw pending ...

[view on Etherscan](#) [view on Blockscout](#)

✓

[block:9556895 txIndex:22] from: 0x75f...a2647 to: Bank.withdraw(uint256) 0x931...8826b value: 0 wei data: 0x2e1...00001 logs: 0 hash: 0x591...c0b25

Debug

▼

call to Bank.getBalance

CALL

[call] from: 0x75F387D09bAe4A3D689962257Bb29724D22a2647 to: Bank.getBalance() data: 0x120...65fe0

Debug

▼

DEPLOY & RUN TRANSACTIONS

Bank - bank.sol

evm version: prague

☒ Verify Contract on Explorers

Deploy & Verify

At Address

Load contract from Address

Transactions recorded 5

Deployed Contracts 1

▼

BANK AT 0X931...8826B (BLOCKCHAIN)

Balance: 0 ETH

deposit

withdraw uint256 amount

getBalance

0: uint256: 0

Low level interactions

MetaMask

Account 1

Transaction request

Estimated changes

You send - <0.000001 SepoliaETH

Network s Sepolia

Request from remix.ethereum.org

Interacting with Alert

0x93112...8826b

Network fee 0.0001 s SepoliaETH

Speed Market ~12 sec

Cancel

Confirm

DEPLOY & RUN TRANSACTIONS

Deploy & Verify

At Address

Load contract from Address

Transactions recorded 6 i

Deployed Contracts 1

✓ BANK AT 0X931...8826B (BLOCKCHAIN)

Balance: 0.000000000000000001 ETH

deposit

withdraw 1

getBalance

0: uint256: 0

Low level interactions i

CALLDATA

Transact

MetaMask

Account 1

Transaction request

Estimated changes ?

You receive + <0.000001 s SepoliaETH

Network s Sepolia

Request from ? remix.ethereum.org

Interacting with ? Alert > 0x93112...8826b

Network fee ? 0 s SepoliaETH

Speed 🦊 Market ~12 sec

Cancel

Confirm

```

[vm]
from: 0x583...40225
to: Bank.(constructor)
value: 0 wei
data: 0x608...e0033
logs: 0
hash: 0x632...f5c39
transact to Bank.deposit pending ...
[vm]
from: 0x583...40225
to: Bank.deposit() 0x7ED...70E2F
value: 0 wei
data: 0xd0e...30db0
logs: 0
hash: 0x13d...bd6fe
transact to Bank.withdraw pending ...
[vm]
from: 0x583...40225
to: Bank.withdraw(uint256) 0x7ED...70E2F
value: 0 wei
data: 0x2e1...00001
logs: 0
hash: 0x20f...2cc01
transact to Bank.withdraw errored: Error occurred: revert.

revert
    The transaction has been reverted to the initial state.
Reason provided by the contract: "Insufficient balance".
If the transaction failed for not having enough gas, try increasing the gas limit gently.
transact to Bank.deposit pending ...
[vm]
from: 0x583...40225
to: Bank.deposit() 0x7ED...70E2F
value: 1 wei
data: 0xd0e...30db0
logs: 0
hash: 0x8e5...e809b
transact to Bank.withdraw errored: Error encoding arguments: TypeError: invalid BigNumberish
string: empty string (argument="value", value="", code=INVALID_ARGUMENT, version=6.14.0)
transact to Bank.withdraw pending ...
[vm]
from: 0x583...40225
to: Bank.withdraw(uint256) 0x7ED...70E2F
value: 0 wei
data: 0x2e1...00001
logs: 0
hash: 0x3aa...1e668
call to Bank.getBalance
call
[call]
from: 0x583031D1113aD414F02576BD6afaBfb302140225
to: Bank.getBalance()
data: 0x120...65fe0

```

REMIX v1.1.3 default_workspace

FILE EXPLORER

- artifacts
- build-info
- Bank_metadata.json
- Bank.json
- contracts
- scripts
- tests
- .prettierrc.json
- banksol
- README.txt
- remix.config.json
- StudentData.sol

```
1 // SPDX-License-Identifier: MIT
2 pragma solidity ^0.8.0;
3
4 contract StudentData {
5
6     struct Student {
7         uint256 rollNo;
8         string name;
9         uint8 age;
10        string course;
11    }
12
13    Student[] public students;
14
15    event FallbackCalled(address sender, uint256 value, string message);
16
17    function addStudent(uint256 _rollNo, string memory _name, uint8 _age, string memory _course) public {
18        students.push(Student(_rollNo, _name, _age, _course));
19    }
20
21    function getStudentCount() public view returns (uint256) {
22        return students.length;
23    }
24
25    function getStudent(uint256 index) public view returns (uint256, string memory, uint8, string memory) {
26        require(index < students.length, "Invalid index");
27    }
28 }
```

Explain contract AI copilot

0 Listen on all transactions Filter with transaction hash or address

Deployed Contracts 1

STUDENTDATA AT 0xFc7...FE2BB (MEMORY)

Balance: 0 ETH

addStudent 16, "Chetan", 20, "BT"

getStudent 0

0: uint256: 16

1: string: Chetan

2: uint8: 20

3: string: BT

getStudentCou...

0: uint256: 2

students uint256

Low level interactions

CALLDATA

Transact

```
4 contract StudentData {
5
6     struct Student {
7         uint256 rollNo;
8         string name;
9         uint8 age;
10        string course;
11    }
12
13    Student[] public students;
14
15    event FallbackCalled(address sender, uint256 value, string message);
16
17    function addStudent(uint256 _rollNo, string memory _name, uint8 _age, string memory _course) public {
18        students.push(Student(_rollNo, _name, _age, _course));
19    }
20
21    function getStudentCount() public view returns (uint256) {
22        return students.length;
23    }
24
25    function getStudent(uint256 index) public view returns (uint256, string memory, uint8, string memory) {
26        require(index < students.length, "Invalid index");
27    }
28 }
```

Explain contract AI copilot

0 Listen on all transactions Filter with transaction hash or address

to: StudentData.getStudent(uint256) data: 0x642...00010

call to StudentData.getStudent errored: Error occurred: revert.

revert

The transaction has been reverted to the initial state.

Reason provided by the contract: "Invalid index".

If the transaction failed for not having enough gas, try increasing the gas limit gently.

transact to StudentData.addStudent pending ...

[vm] from: 0x583...40225

to: StudentData.addStudent(uint256,string,uint8,string) 0xfC7...fe2Bb

value: 0 wei data: 0x4c5...00000 logs: 0 hash: 0x654...d4eea

call to StudentData.getStudent

[call] from: 0x583031D1113aD414F02576BD6aFaBfb302140225

to: StudentData.getStudent(uint256) data: 0x642...00000

call to StudentData.getStudentCount

[call] from: 0x583031D1113aD414F02576BD6aFaBfb302140225

to: StudentData.getStudentCount() data: 0x41e...0c407

Debug

```
// SPDX-License-Identifier: MIT
pragma solidity ^0.8.0;
```

```
contract StudentData {

    struct Student {
        uint256 rollNo;
        string name;
        uint8 age;
        string course;
    }

    Student[] public students;

    event FallbackCalled(address sender, uint256 value, string message);

    function addStudent(uint256 _rollNo, string memory _name, uint8 _age, string memory
_course) public {
        students.push(Student(_rollNo, _name, _age, _course));
    }

    function getStudentCount() public view returns (uint256) {
        return students.length;
    }

    function getStudent(uint256 index) public view returns (uint256, string memory, uint8, string
memory) {
        require(index < students.length, "Invalid index");
        Student memory s = students[index];
        return (s.rollNo, s.name, s.age, s.course);
    }

    fallback() external payable {
        emit FallbackCalled(msg.sender, msg.value, "Fallback function triggered");
    }

    receive() external payable {}
}
```

Deployed Contracts 1



✓ STUDENTDATA AT 0XA13...EAD95 (MEMORY)



Balance: 0 ETH

addStudent

uint256 _rollNo, string _name, uint8 _age, string _cou



getStudent

uint256 index



getStudentCou...

students

uint256



Low level interactions




CALLDATA

Transact



```
[vm]
from: 0x583...40225
to: StudentData.addStudent(uint256,string,uint8,string) 0xfC7...fe2Bb
value: 0 wei
data: 0x4c5...00000
logs: 0
hash: 0x654...d4eea
call to StudentData.getStudent
call
[call]
from: 0x583031D1113aD414F02576BD6afaBfb302140225
to: StudentData.getStudent(uint256)
data: 0x642...00000
call to StudentData.getStudentCount
call
[call]
from: 0x583031D1113aD414F02576BD6afaBfb302140225
to: StudentData.getStudentCount()
data: 0x41e...0c407
call
[call]
from: 0x583031D1113aD414F02576BD6afaBfb302140225
to: StudentData.getStudent(uint256)
data: 0x642...00010
call to StudentData.getStudent errored: Error occurred: revert.
```

revert


The transaction has been reverted to the initial state.
Reason provided by the contract: "Invalid index".
If the transaction failed for not having enough gas, try increasing the gas limit gently.
transact to StudentData.addStudent pending ...


Account 1 


4 network addresses





\$0.00

+\$0.00 (+0.00%) [Discover](#) 

Buy

Swap

Send


Receive


Tokens



DeFi

NFTs

Activity

Sepolia 

SepoliaETH



No conversion rate available
0.0505 SepoliaETH

Sent

Status

Confirmed

View on block explorer

Copy transaction ID

From

To

Ox75F38...a2647

Oxafa85...fFBF5

Transaction

Nonce

3

Amount

<0.000001 SepoliaETH

Gas Limit (Units)

31500

Gas Used (Units)

21000

Base fee (GWEI)

0.00000001

Priority fee (GWEI)

1.5

Total gas fee

0.000031 SepoliaETH

Max fee per gas

0.000000002 SepoliaETH

Total

0.0000315 SepoliaETH

+ Activity log

<

Review

≡

S

<0.000001 SepoliaETH

From

Account 1

>

To

Oxafa85...fFBF5

Network

Sepolia

Network fee ⓘ

0 S SepoliaETH

Speed

Market ~12 sec

Cancel

Confirm



Send

S

S

SepoliaETH

To



Oxafa85...fFBF5



Amount

0.0000000001


SepoliaETH


0.05047 SepoliaETH available [Max](#)


Continue





\$0.00

+\$0.00 (+0.00%) [Discover](#) 


Buy


Swap


Send


Receive

Tokens DeFi NFTs Activity

Sepolia 

 SepoliaETH



No conversion rate available
0.0505 SepoliaETH

Deployed Contracts 1

STUDENTDATA AT 0XFC7...FE28B (MEMORY)

Balance: 0 ETH

addStudent

16, "Chetan", 20, "BT"

getStudent

0

0: uint256: 16

1: string: Chetan

2: uint8: 20

3: string: BT

getStudentCou...

0: uint256: 2

students

uint256

Low level interactions

CALLDATA

Transact

4 contract StudentData {

5

Explain contract

0 ☐ Listen on all transactions

Filter with transaction hash or ad...

AI copilot

to: StudentData.getStudent(uint256) data: 0x642...00010

call to StudentData.getStudent errored: Error occurred: revert.

revert

The transaction has been reverted to the initial state.
Reason provided by the contract: "Invalid index".
If the transaction failed for not having enough gas, try increasing the gas limit gently.

transact to StudentData.addStudent pending ...

✓ [vm] from: 0x583...40225

to: StudentData.addStudent(uint256,string,uint8,string) 0xfc7...fe28b

value: 0 wei data: 0x4c5...00000 logs: 0 hash: 0x654...d4eea

call to StudentData.getStudent

Debug

✓ [call] from: 0x583031D1113aD414F02576BD6af8fb302140225

to: StudentData.getStudent(uint256) data: 0x642...00000

call to StudentData.getStudentCount

Debug

✓ [call] from: 0x583031D1113aD414F02576BD6af8fb302140225

to: StudentData.getStudentCount() data: 0x41e...0c407

Debug