

Problem Statement :->

- a) Create a smart contract to Transfer money from A to B.
- b) Apply checks wherever Required like Balance of A must be more than Transfer amount.
- c) Subtotal of Both must be visible.
- d) Owner can do this only.
- e) Add feature of “Pause” “UnPause” for functionality.

Solution:

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

contract Transfer {

    address public owner;
    bool public paused;
    mapping (address=>uint) public bal;

    constructor(){
        owner=msg.sender;
        paused=false;
        bal[owner]=1000;
    }

    modifier onlyOwner(){
        require(msg.sender == owner, "Not allowed");
        _; }

    modifier notPaused(){
        require(!paused,"Transfer is Paused");
        _;}

    function pause() public onlyOwner{
        paused=true;
    }

    function unPause() public onlyOwner{
        paused=false;
    }

    function transfer(address to, uint amt) public notPaused{

        require( bal[msg.sender] >=amt,"Low in Balance");
        bal[msg.sender] -= amt;
        bal[to]+= amt;
    }

}
```

REMIX1.2.021-11-2025

AI

DEPLOY & RUN  
TRANSACTIONS

Deployed Contracts 1

TRANSFER AT 0X51A...F3ED2

Balance: 0 ETH

pause

TRANSFER

to: "0xAb8483F64d9C6d1EcF9b849Ae6"

amt: "150"

CalldataParameterstransact

unPause

bal0xAb8483F64d9C6d1EcF9b849Ae6

0: uint256: 150

owner

0: address: 0x5B38Da6a701c568545dCfcB03FcB875f56beddC4

paused

Compile

transfer\_money.sol

```
1 // SPDX-License-Identifier: MIT
2 pragma solidity ^0.8.0;
3
4 contract Transfer {
5
6     address public owner;
7     bool public paused;
8     mapping (address=>uint) public bal;
9
10    constructor(){
11        owner=msg.sender;
12        paused=false;
13        bal[owner]=1000;
14    }
15
16    modifier onlyOwner(){
17        require(msg.sender == owner, "Not allowed");
18        _;
19    }
20
21    modifier notPaused(){
22        require(!paused,"Transfer is Paused");
23        _;
24    }
25
26    function pause() public onlyOwner{
27
28    }
29 }
```

Explain contract

CALL [call] from: 0x5B38Da6a701c568545dCfcB03FcB875f56beddC4 to: Transfe