

Remix Fund me

```
4 import "@chainlink/contracts/src/v0.8/interfaces/AggregatorV3Interface.sol";
5 import "../PriceConverter.sol";
6
7 error NotOwner();
8
9 contract FundMe {
10     using PriceConverter for uint256;
11
12     mapping(address => uint256) public addressToAmountFunded;
13     address[] public funders;
14
15     // Could we make this constant? /* hint: no! We should make it immutable! */
16     address public /* immutable */ i_owner;
17     uint256 public constant MINIMUM_USD = 50 * 10 ** 18;
18
19     constructor() {
20         i_owner = msg.sender;
21     }
22
23     function fund() public payable {
24         require(msg.value.getConversionRate() >= MINIMUM_USD, "You need to spend more ETH!");
25         // require(PriceConverter.getConversionRate(msg.value) >= MINIMUM_USD, "You need to spend more ETH!");
26         addressToAmountFunded[msg.sender] += msg.value;
27         funders.push(msg.sender);
28     }
29
30     function getVersion() public view returns (uint256){
31         AggregatorV3Interface priceFeed = AggregatorV3Interface(0x8A753747A1Fa494EC906cE90E9f37563A8AF630e);
32         return priceFeed.version();
33     }
34
35     modifier onlyOwner {
36         // require(msg.sender == owner);
37         if (msg.sender != i_owner) revert NotOwner();
38         _;
39     }
40
41     function withdraw() payable onlyOwner public {
42         for (uint256 funderIndex=0; funderIndex < funders.length; funderIndex++){
```

```

3         address funder = funders[funderIndex];
4         addressToAmountFunded[funder] = 0;
5     }
6     funders = new address[](0);
7     // // transfer
8     // payable(msg.sender).transfer(address(this).balance);
9     // // send
10    // bool sendSuccess = payable(msg.sender).send(address(this).balance);
11    // require(sendSuccess, "Send failed");
12    // call
13    (bool callSuccess, ) = payable(msg.sender).call{value: address(this).balance}("");
14    require(callSuccess, "Call failed");
15 }
16 // Explainer from: https://solidity-by-example.org/fallback/
17 // Ether is sent to contract
18 //     is msg.data empty?
19 //         /   \
20 //         yes  no
21 //         /   \
22 //     receive()? fallback()
23 //         /   \
24 //     yes    no
25 //     /       \
26 //receive() fallback()
27
28 fallback() external payable {
29     fund();
30 }
31
32 receive() external payable {
33     fund();
34 }
35
36 }
37

```

```

1 // SPDX-License-Identifier: MIT
2 pragma solidity ^0.8.8;
3
4 import "@chainlink/contracts/src/v0.8/interfaces/AggregatorV3Interface.sol";
5
6 // Why is this a library and not abstract?
7 // Why not an interface?
8 library PriceConverter {
9     // We could make this public, but then we'd have to deploy it
10    function getPrice() internal view returns (uint256) {
11        // Rinkeby ETH / USD Address
12        // https://docs.chain.link/docs/ethereum-addresses/
13        AggregatorV3Interface priceFeed = AggregatorV3Interface(
14            0x8A753747A1Fa494EC906cE90E9f37563A8AF630e
15        );
16        (, int256 answer, , , ) = priceFeed.latestRoundData();
17        // ETH/USD rate in 18 digit
18        return uint256(answer * 10000000000);
19    }
20
21    // 10000000000
22    function getConversionRate(uint256 ethAmount)
23        internal
24        view
25        returns (uint256)
26    {
27        uint256 ethPrice = getPrice();
28        uint256 ethAmountInUsd = (ethPrice * ethAmount) / 1000000000000000000;
29        // the actual ETH/USD conversion rate, after adjusting the extra 0s.
30        return ethAmountInUsd;
31    }
32 }

```

```

// SPDX-License-Identifier: MIT
pragma solidity ^0.8.7;

contract FallbackExample {
    uint256 public result;

    // Fallback function must be declared as external.
    fallback() external payable {
        result = 1;
    }

    receive() external payable {
        result = 2;
    }
}

```

```

1 // SPDX-License-Identifier: MIT
2 pragma solidity ^0.6.0;
3
4 contract SafeMathTester{
5     uint8 public bigNumber = 255; // unchecked
6
7     function add() public {
8         bigNumber = bigNumber + 1;
9     }
10 }

```

```

1 // SPDX-License-Identifier: MIT
2 pragma solidity ^0.8.0;
3
4 contract SafeMathTester{
5     uint8 public bigNumber = 255; // checked
6
7     function add() public {
8         unchecked {bigNumber = bigNumber + 1;}
9     }
10 }

```