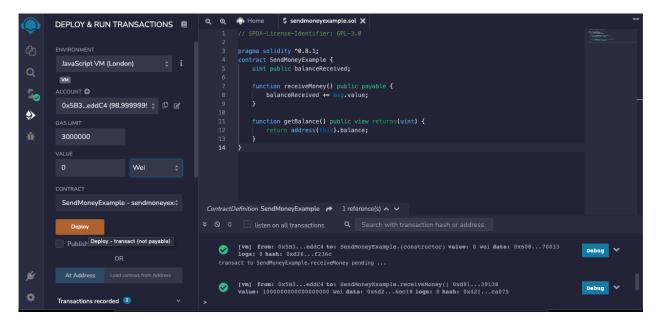
LAB 1:

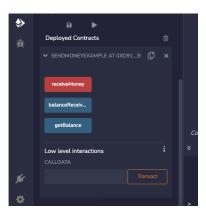
Deposit/Withdraw Ether

Buat smart contract yang simple dengan membuat file di remix.

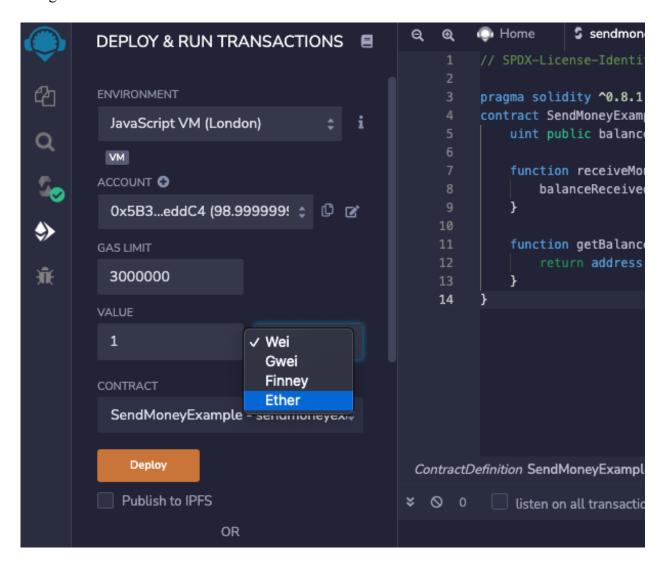
```
Home
                                                                              sendmoneyexample.sol X
         FILE EXPLORERS
    Workspaces ∄ 🗷 🖥 🕹 🕸
4
                                                                contract SendMoneyExample {
   uint public balanceReceived;
        default_workspace
         - D - O ±
.
          scripts
          tests
                                                                    function getBalance() public view returns(uint) {
   return address(this).balance;
           () 259fe6e2bf1abf7e6de124f5511bf0 f3.json
          UTS
          README.txt
                                                       ContractDefinition SendMoneyExample → 1 reference(s) ∧ ∨
```

Melakukan deploy smart contract, lalu dapat melihat jika kita dapat menyimpan ether dan mendapatkan balance ether dari smart contract.

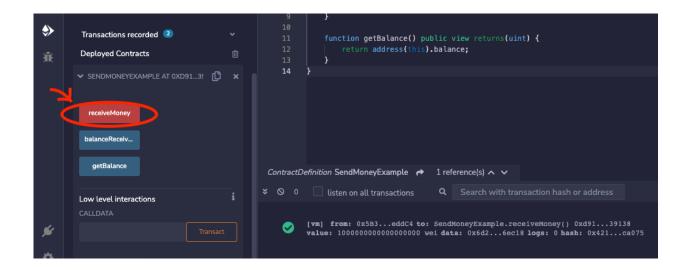




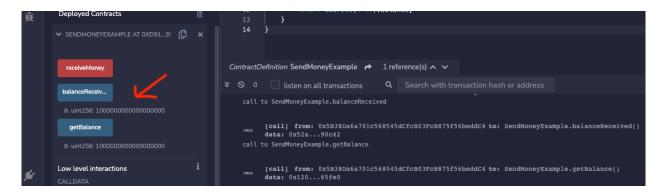
Mengirimkan 1 ether ke smart contract



Dengan cara scroll kebawah dan menekan tombol receivemoney



Melakukan pengecekan pada balance

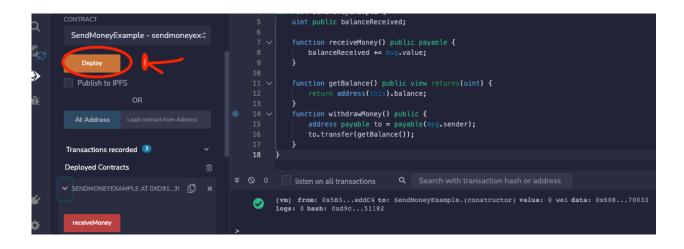


Add a Withdraw Function

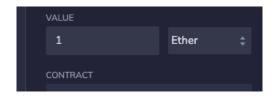
menambahkan function pada file remix untuk menambahkan fitur withdrawMoney.

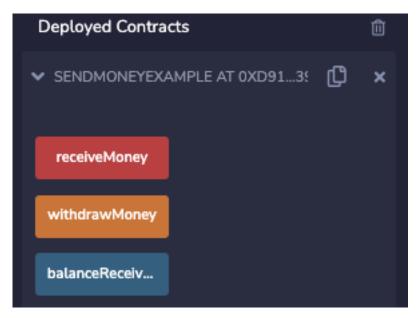
```
13 }
14 | function withdrawMoney() public {
15 | address payable to = payable(msg.sender);
16 | to.transfer(getBalance());
17 | }
18 }
```

Melakukan deploy ulang dengan smart contract yang baru.



Masukkan "1 Eter" ke dalam kotak input nilai, lalu tekan "receiveMoney" di Instans kontrak baru tersebut.

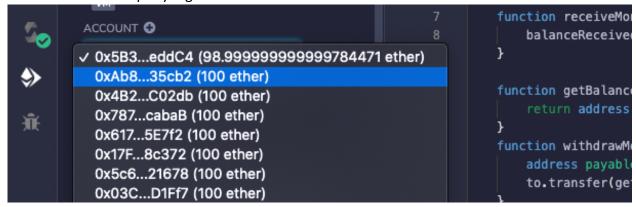




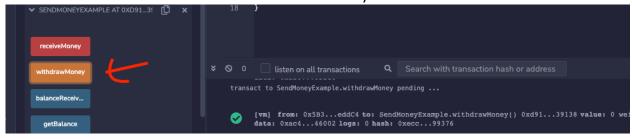
Cek nilai balance sudah bernilai 1 lagi



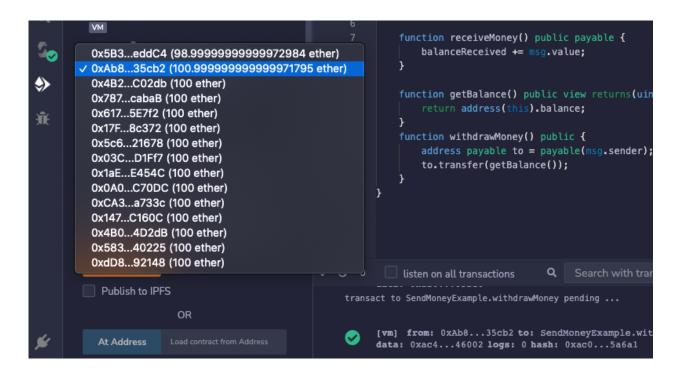
Tarik dana dari dompet yang berbeda.



Lalu scroll kebawah dan tekan tombol "withdrawMoney"



Nilai ether yang ada pada dompet tersebut sudah berubah.



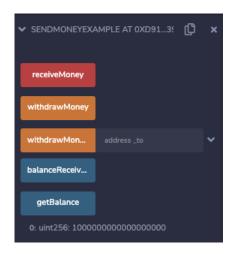
Melakukan Withdraw ke alamat akun yang spesifik

Tambahkan fungsi withdrawmoneyto pada file remix untuk menambah fitur baru.

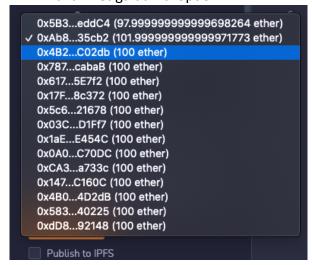
```
function withdrawMoney() public {
    address payable to = payable(msg.sender);
    to.transfer(getBalance());
}

function withdrawMoneyTo(address payable __to) public {
    ..._to.transfer(getBalance());
    ....}
}
```

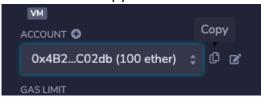
Redeploy ulang Smart Contract yang baru, untuk mengktifkan fitur withdrawmoneyto



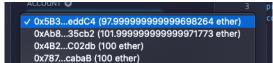
Lakukan Test the "withdrawMoneyTo" function, dengan Langkah dibawah 1. Pilih akun ketiga dari dropdown



2. Tekan icon "copy":



3. Kembali ke akun pertama:



4.Paste Akun yang Anda salin ke kolom input di sebelah "withdrawMoneyTo":

Tekan tombol "withdrawMoneyTo" dan lihat apa yang terjadi



5. Sekarang buka dropdown Akun ke 3. Lihat saldo Akun ketiga Anda? 102 Eter!!!

```
✓ 0x5B3...eddC4 (96.999999999999666958 ether)
0xAb8...35cb2 (100.9999999999971773 ether)
0x4B2...C02db (102 ether)
0x787...cabaB (100 ether)
```

Withdrawal Locking Extend the Smart Contract.

Tambahkan code baru pada file remix seperti yang dibawah ini

```
pragma solidity ~0.8.1;
     contract SendMoneyExample {
       uint public balanceReceived;
       uint public lockedUntil;
         function receiveMoney() public payable {
           balanceReceived += msg.value;
             lockedUntil = block.timestamp + 1 minutes;
         function getBalance() public view returns(uint) {
            return address(this).balance;
         function withdrawMoney() public {
             if(lockedUntil < block.timestamp) {</pre>
             address payable to = payable(msg.sender);
             to.transfer(getBalance());
         function withdrawMoneyTo(address payable _to) public {
             if(lockedUntil < block.timestamp) {</pre>
                 _to.transfer(getBalance());
27
```

1. deploy ulang new smart contract

- 2. Kirim 1 Ether ke Smart Contract dengan cara klik "receiveMoney"
- 3. Cek Balance dan LocketUntil

