

# day68-sol-instance

☰ 태그	
📅 날짜	@2023년 1월 4일

인스턴스는 하나의 컨트랙트에서 다른 컨트랙트가 접근할 수 있다.

```
contract A{  
}
```

```
contract B{  
    A instance = new A();  
}
```

- 기본형태

컨트랙트타입 인스턴스변수명 = new 컨트랙트 ()

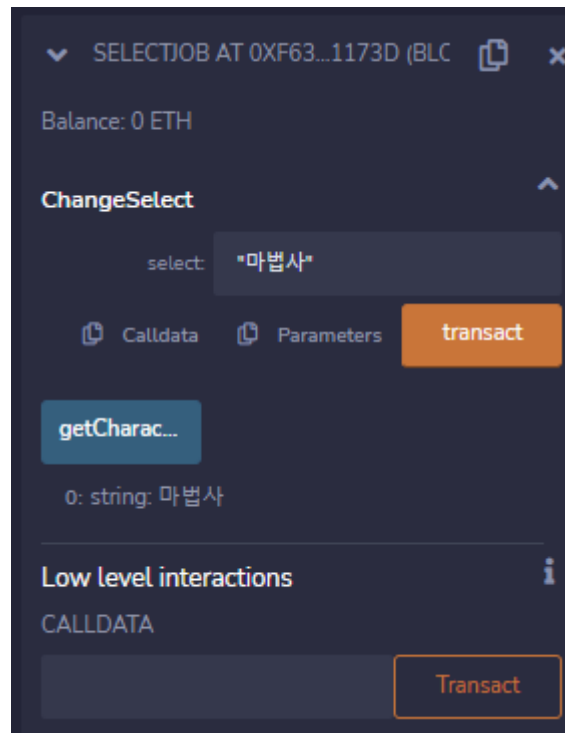
```
// SPDX-License-Identifier: GPL-3.0  
pragma solidity >= 0.7.0 < 0.9.0;  
  
// 캐릭터  
// string 직업  
// 직업 바꿀수 있는 함수  
  
// 캐릭터 직업 선택창  
// 직업을 바꿀 수 있는 함수  
// 직업 볼 수 있는 함수  
  
contract Character {  
    string public Job = "swordman";  
  
    function ChangeJob(string memory _Job) public {  
        Job = _Job;  
    }  
}  
  
contract SelectJob{  
    Character katarina = new Character();
```

```

function ChangeSelect(string memory select) public{
    katarina.ChangeJob(select);
}

function getCharacter() public view returns(string memory){
    return katarina.Job();
}
}

```



```

contract Character{

    string public name;

    // 생성자 인스턴스 컨트랙트 초기 생성시 함수 동작

    constructor(string memory _name){

        name = _name;

    }

}

```

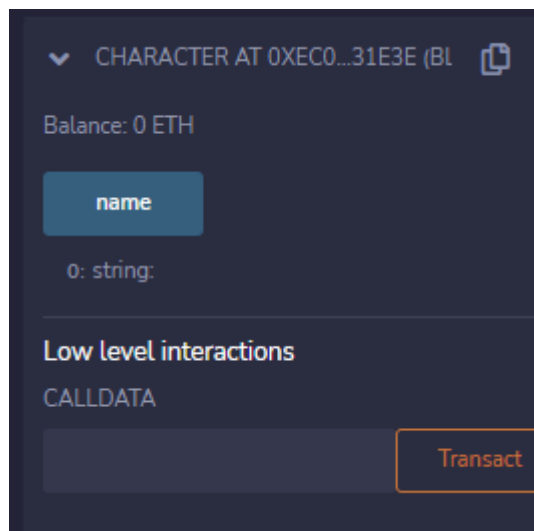
```
// SPDX-License-Identifier: GPL-3.0
pragma solidity >= 0.7.0 < 0.9.0;

//생성자

contract Character{
    string public name;

    //생성자
    constructor (string memory _name){
        name = _name;
    }
}
```

아무것도 넣지 않았을 때



입력했을 때

DEPLOY

NAME:

더조은

Calldata
Parameters

transact

☐ Publish to IPFS

OR

At Address

0x206EADCCe400b685E6954

Transactions recorded
4

Deployed Contracts

SELECTJOB AT 0XF63...1173D (BLO

CHARACTER AT 0XEC0...31E3E (BL

Balance: 0 ETH

name

0: string:

Low level interactions

CALLDATA

Transact

```

contract Character{
    string public name;
    uint256 public att;

    // 생성자 인스턴스 컨트랙트 초기 생성시 함수 동작

    constructor(string memory _name, uint256 _att){
        name = _name;
        att = _att;
    }

```

```
}
```

```
// SPDX-License-Identifier: GPL-3.0
pragma solidity >= 0.7.0 < 0.9.0;

//생성자

contract Character{
    string public name;
    uint256 public att;
    //생성자
    constructor (string memory _name, uint256 _att){
        name = _name;
        att = _att;
    }
}

contract Create{

    Character kata = new Character("Katarina", 100);

    function getData() public view returns(string memory, uint256)
    {
        return (kata.name(), kata.att());
    }
}
```

CONTRACT (Compiled by Remix)

Create - contract/code11.sol

Deploy

☐ Publish to IPFS

OR address of contract

At Address 0x206EADCCe400b685E6954

Transactions recorded 6 ⓘ >

### Deployed Contracts

- > SELECTJOB AT 0XF63...1173D (BLOCK) ⓘ x
- > CHARACTER AT 0XEC0...31E3E (BLOCK) ⓘ x
- > CHARACTER AT 0XEAF...7DF67 (BLOCK) ⓘ x
- > CREATE AT 0X986...5ECD1 (BLOCK) ⓘ x
- ▼ CREATE AT 0X850...382C2 (BLOCK) ⓘ x

Balance: 0 ETH

getData

0: string: Katarina  
1: uint256: 100

### Low level interactions

CALLDATA

```
// SPDX-License-Identifier: GPL-3.0
pragma solidity >= 0.7.0 < 0.9.0;
```

```

//생성자

contract Character{
    string public name;
    uint256 public att;
    //생성자
    constructor (string memory _name, uint256 _att){
        name = _name;
        att = _att;
    }
    function changeData(string memory _name, uint256 _att) public
    {
        name = _name;
        att = _att;
    }
}

contract Create{

    Character kata = new Character("Katarina", 100);

    function getData() public view returns(string memory, uint256)
    {
        return (kata.name(), kata.att());
    }

    function changeData(string memory _name, uint256 _att) public
    {
        kata.changeData(_name, _att);
    }
}

```

CREATE AT 0X96F...51474 (BLOCK)

Balance: 0 ETH

changeData

\_name: 케이슬린

\_att: 50

Calldata

Parameters

transact

getData

0: string: Katarina  
1: uint256: 100

Low level interactions

CALLDATA

Transact

day68-sol-instance

8