Practical 8

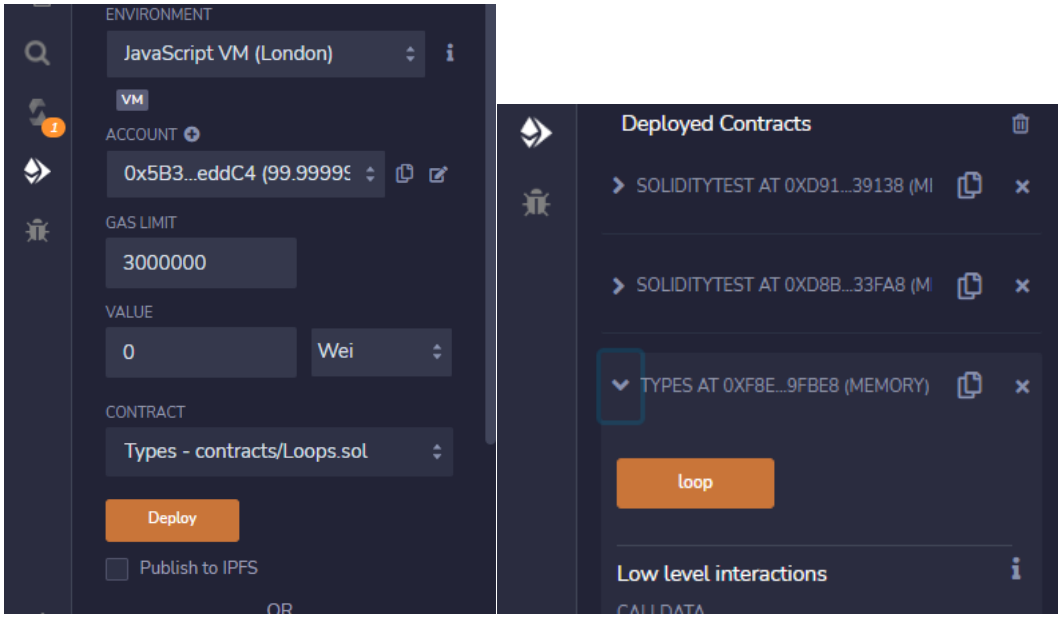
Implement and demonstrate the use of following in solidity

LOOPS

Loops : do while

```
pragma solidity ^0.8.0;

contract Types{

    uint[] data;

    uint8 j=0;

    function loop() public returns(uint[] memory){

        do{
            j++;
            data.push(j);
        }
        while(j<5);

        return data;
    }
}
```

Deploy:



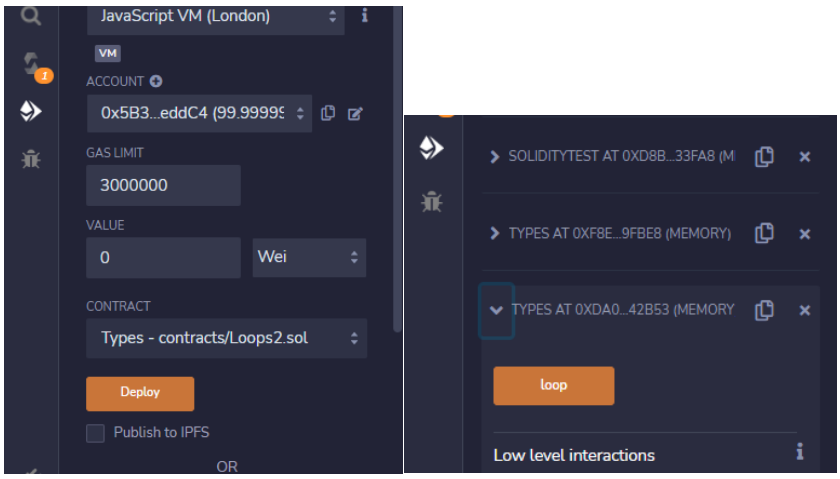
Output :

```
decoded output                {
                                      "0": "uint256[]: 1,2,3,4,5,6"
                              }
```

Loops : while loop

```
pragma solidity ^0.8.0;

contract Types{

    uint[] data;

    uint8 j=0;

    function loop() public returns(uint[] memory){

        while(j<10){
            j++;
            data.push(j);
        }

        return data;
    }
}
```

Deploy :



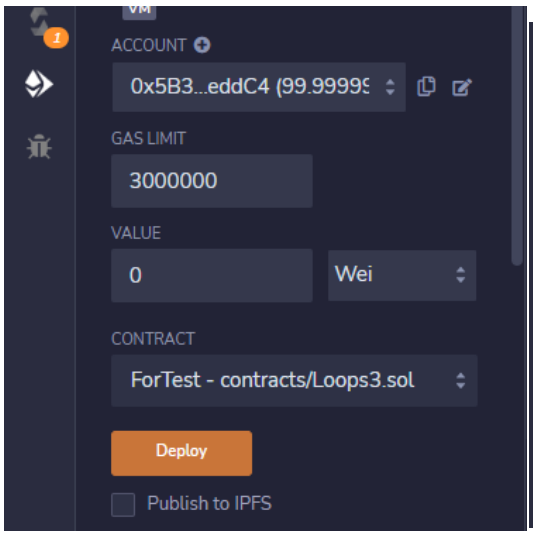
Output:

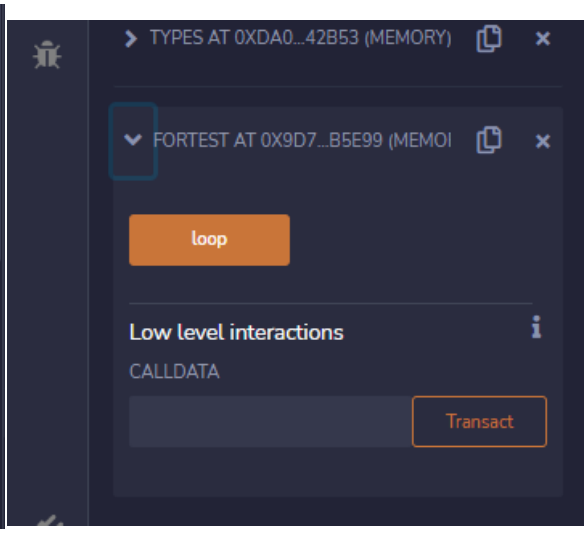
```
decoded output                {
                                    "0": "uint256[]: 1,2,3,4,5,6,7,8,9,10"
                              }
```

Loops : for

```
pragma solidity ^0.8.0;

contract ForTest{

    uint[] data;

    function loop() public returns(uint[] memory){

        for(uint i=0;i<5;i++){
            data.push(i);
        }

        return data;
    }
}
```

Deploy:





Output:

```
decoded output                {
                                    "0": "uint256[]: 0,1,2,3,4"
                              }
```