

#### Assignment.4: program in solidity to create studentdata

##### CODE/OUTPUT:

```
// SPDX-License-Identifier: MIT
```

```
pragma solidity >=0.7.0 <0.9.0;
```

```
contract StudentData{
```

```
    struct Student{
```

```
        int rollNo;
```

```
        string fName;
```

```
        string lName;
```

```
        int marks;
```

```
    }
```

```
    address owner;
```

```
    int public stdCount =0;
```

```
    mapping(int => Student) public stdRecords;
```

```
    modifier onlyOwner{
```

```
        require (owner == msg.sender);
```

```
        _;
```

```
    }
```

```
    constructor(){
```

```
        owner=msg.sender;
```

```
    }
```

```
    function addNewRecords (int _rollNo, string memory _fName, string memory _lName, int  
_marks) public onlyOwner{
```

```
        stdCount=stdCount+1;
```

```

stdRecords [stdCount]=Student (_rollNo,_fName,_lName,_marks);
}

function bonusMarks(int _bonus) public onlyOwner{
    stdRecords[stdCount].marks=stdRecords[stdCount].marks + _bonus;
}

fallback () external payable{
}
}

```

## OUTPUT

The screenshot displays the Remix IDE interface. The left sidebar contains navigation icons. The main panel is titled 'DEPLOY & RUN TRANSACTIONS' and shows a balance of 0 ETH. It features a form for the 'addNewRecords' function with the following inputs: \_rollNo: 1, \_fName: yash, \_lName: wani, and \_marks: 95. Below this, there are tabs for 'Calldata', 'Parameters', and 'transact'. The 'bonusMarks' function is also visible with an input of 'int256 \_bonus'. The 'stdCount' variable is set to 1, and the 'stdRecords' array is shown with its first element containing the rollNo, fName, lName, and marks. The right panel shows the Solidity code editor with the following code:

```

14 int public
15 mapping(in
16
17 modifier o
18     requir
19     _;
20 }
21
22 constructo
23
24     owner=
25 }
26
27 function a
28     stdCou
29
30     stdRec
31 }
32
33 function b
34
35     stdRec

```

At the bottom right, the 'Low level interactions' panel shows a call from 0x5... to 0xfe6...15f, labeled as 'call to StudentData.stdRec'.



prajwal

sable

50

## Parameters

transact

```
int256 _bonus
```

stdCount

```
0: int256: 2
```

2

```
0: int256: rollNo 2
```

```
1: string: fName prajwal
```

2: string: lName sable

```
3: int256: marks 50
```

**i**

CALLDATA

Transact

**bonusMarks**

5



**stdCount**

0: int256: 2

**stdRecords**

2



0: int256: rollNo 2

1: string: fName prajwal

2: string: lName sable

3: int256: marks 55

---

Low level interactions

