

## Code: -

```
// Solidity program to implement
// the above approach
pragma solidity >= 0.7.0<0.8.0;

// Build the Contract
contract MarksManagmtSys
{
    // Create a structure for
    // student details
    struct Student
    {
        int ID;
        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;
    }

    // Create a function to add
    // the new records
    function addNewRecords(int _ID,
                           string memory _fName,
                           string memory _lName,
                           int _marks) public onlyOwner
    {
        // Increase the count by 1
        stdCount = stdCount + 1;
    }
}
```

```

    // Fetch the student details
    // with the help of stdCount
    stdRecords[stdCount] = Student(_ID, _fName,
                                   _lName, _marks);
}

// Create a function to add bonus marks
function bonusMarks(int _bonus) public onlyOwner
{
    stdRecords[stdCount].marks =
        stdRecords[stdCount].marks + _bonus;
}
}

```

Output: -

The screenshot displays the Remix Ethereum IDE interface. On the left, the 'DEPLOY & RUN TRANSACTIONS' panel shows the contract 'MARKSMANGMTSYS AT 0xD91...' with a balance of 0 ETH. It features two transaction forms: 'addNewRecords' and 'bonusMarks'. The 'addNewRecords' form has fields for \_ID (20), \_fName (Mahendra), \_lName (Kumar), and \_marks (75), with a 'transact' button. The 'bonusMarks' form has a field for \_bonus (5) and a 'transact' button. Below these, the 'stdCount' variable is shown as 0, and the 'stdRecords' array is displayed with one entry: { int256: 1, string: fName Mahendra, string: lName Kumar, int256: marks 80 }. A 'call' button is also present. The main editor shows the Solidity code for 'StudentMarksMangmtSys.sol', which includes a 'Student' struct, a 'stdRecords' array, and a 'bonusMarks' function. The bottom panel shows a transaction log with a call from 0x5B380a701c568545dCfC8B3Fc8875f56beddC4 to MarksMangmtSys.stdRecords(int256) with data 0xcd9...00001. The system tray at the bottom indicates 26°C, Haze, and the date 10/15/2022.