

## PRACTICAL NO:4

```
//SPDX-License-Identifier:MIT
pragma solidity ^0.8.15;
```

```
contract StudentData{
    struct Student{
        string fname;
        string lname;
        uint rollId;

    }
    Student[] private studentsList;

    function addStudent(string memory fname, string memory lname,uint rollId)public returns (string memory){
        require(rollId > 0, "Roll Id cannot be 0");
        studentsList.push(Student(fname,lname,rollId));
        return "Added student successfully";

    }
    function getStudent(uint rollId) public view returns (Student memory){
        bool found;
        Student memory student;

        for(uint i=0; i < studentsList.length;i++){
            if(studentsList[i].rollId != rollId) continue;

            found=true;
            student=studentsList[i];
            break;

        }
        require(found,"No such student exists!");

        return student;
    }
    function removeStudent(uint rollId) public returns(string memory){
        bool found;
        uint idx;

        for(uint i=0; i< studentsList.length;i++){
            if(studentsList[i].rollId != rollId) continue;
            found=true;
            idx=i;
            break;

        }
        require(found,"No such student exists!");
        studentsList[idx]=studentsList[studentsList.length-1];
        studentsList.pop();
    }
}
```

```
    return "Remove student successfully!";  
  }  
  fallback() external { revert("Not allowed");}  
}
```

## OUTPUT

Welcome to Remix 0.35.1

Your files are stored in indexedDB, 16.95 KB / 71.15 GB used

You can use this terminal to:

Check transactions details and start debugging.

Execute JavaScript scripts:

- Input a script directly in the command line interface
- Select a Javascript file in the file explorer and then run 'remix.execute()' or 'remix.executeCurrent()' in the command line interface
- Right click on a JavaScript file in the file explorer and then click 'Run'

The following libraries are accessible:

web3 version 1.5.2

ethers.js

remix

Type the library name to see available commands.