

BT Ass4

```
// SPDX-License-Identifier: UNLICENSED
```

```
pragma solidity >= 0.7.0;
```

```
contract Student_management{
```

```
    struct Student{
        int stud_id;
        string Name;
        string Department;
    }
```

```
    Student[] Students;
```

```
    function add_stud(int stud_id, string memory Name, string memory Department) public{
        Student memory stud = Student(stud_id, Name, Department);
        Students.push(stud);
    }
```

```
    function getStudent(int stud_id) public view returns(string memory, string memory){
        for(uint i = 0; i < Students.length; i++){
            Student memory stud = Students[i];
            if(stud.stud_id == stud_id){
                return(stud.Name, stud.Department);
            }
        }
        return("Name Not Found", "Department Not Found");
    }
```

```
    fallback() external payable {
```

```
// Add a default student when Ether is sent to the contract without a function call
Students.push(Student(999, "Default Student", "Default Department"));

    emit EtherReceived(msg.sender, msg.value);
}

receive() external payable {

    emit EtherReceived(msg.sender, msg.value);
}

// Event to log Ether received
event EtherReceived(address indexed sender, uint256 amount);
}
```