

01.students.json

```
[  
  {  
    "studentId": "S001",  
    "name": "Kalhara",  
    "email": "mail1@mail.com",  
    "registered": true,  
    "courses": [  
      {  
        "courseCode": "C001",  
        "courseName": "C++",  
        "credits": 2  
      },  
      {  
        "courseCode": "C03",  
        "courseName": "C#",  
        "credits": 3  
      },  
      {  
        "courseCode": "C025",  
        "courseName": "OOP",  
        "credits": 5  
      },  
      {  
        "courseCode": "C015",  
        "courseName": "React",  
        "credits": 5  
      }  
    ]  
  },  
  {  
    "studentId": "S002",  
    "name": "Saman",  
    "email": "mail2@mail.com",  
    "registered": true,  
    "courses": [  
      {  
        "courseCode": "C001",  
        "courseName": "C++",  
        "credits": 2  
      }  
    ]  
  }]
```

```
        },
        {
            "courseCode": "C025",
            "courseName": "OOP",
            "credits": 5

        },
        {
            "courseCode": "C015",
            "courseName": "React",
            "credits": 5

        },
        {
            "courseCode": "C015",
            "courseName": "React",
            "credits": 5

        }
    ]
},
{
    "studentId": "S003",
    "name": "Ishara",
    "email": "mail3@mail.com",
    "registered": false,
    "courses": [
        {
            "courseCode": "C025",
            "courseName": "OOP",
            "credits": 5

        },
        {
            "courseCode": "C025",
            "courseName": "OOP",
            "credits": 5

        }
    ]
},
{
    "studentId": "S004",
```

```
"name": "Saranga",
"email": "mail4@mail.com",
"registered": true,
"courses": {
    "courseCode": "C023",
    "courseName": "SOWA",
    "credits": 3
},
{
    "studentId": "S005",
    "name": "Dulara",
    "email": "mail5@mail.com",
    "registered": true,
    "courses": [
        {
            "courseCode": "C022",
            "courseName": "Java",
            "credits": 4
        },
        {
            "courseCode": "C023",
            "courseName": "SOWA",
            "credits": 3
        },
        {
            "courseCode": "C015",
            "courseName": "React",
            "credits": 5
        }
    ]
}
```

Index.html

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <title>Student Data</title>
    <style>
        table {
            border-collapse: collapse;
            width: 80%;
            margin-bottom: 30px;
        }
        th, td {
            border: 1px solid #333;
            padding: 8px;
        }
        th {
            background-color: #f2f2f2;
        }
        ul {
            padding-left: 18px;
            margin: 0;
        }
    </style>
</head>
<body>

<h2>All Student Details</h2>
<table id="dataTable">
    <thead>
        <tr>
            <th>Student Id</th>
            <th>Name</th>
            <th>Email</th>
            <th>Registered</th>
            <th>Courses</th>
        </tr>
    </thead>
    <tbody></tbody>
</table>

<h2>Registered Student Details</h2>
<table id="dataTable2">
    <thead>
```

```

<tr>
    <th>Student Id</th>
    <th>Name</th>
    <th>Email</th>
    <th>Registered</th>
    <th>Courses</th>
</tr>
</thead>
<tbody></tbody>
</table>

<h2>More Than 3 Courses Students</h2>
<table id="dataTable3">
    <thead>
        <tr>
            <th>Student Id</th>
            <th>Name</th>
            <th>Email</th>
            <th>Registered</th>
            <th>Courses</th>
        </tr>
    </thead>
    <tbody></tbody>
</table>

<script>
    var xhr = new XMLHttpRequest();
    xhr.open("GET", "students.json", true);

    xhr.onload = function () {
        if (xhr.status === 200) {
            var data = JSON.parse(xhr.responseText);

            var allTable = document.querySelector("#dataTable tbody");
            var registeredTable = document.querySelector("#dataTable2 tbody");
            var moreThan3Table = document.querySelector("#dataTable3 tbody");

            data.forEach(function (student) {

                var courses = Array.isArray(student.courses)
                    ? student.courses
                    : [student.courses];
            });
        }
    };
</script>

```

```
var courseList = "<ul>";
courses.forEach(function (course) {
    courseList += "<li>" + course.courseName + "</li>";
});
courseList += "</ul>";

function createRow() {
    var row = document.createElement("tr");
    row.innerHTML =
        "<td>" + student.studentId + "</td>" +
        "<td>" + student.name + "</td>" +
        "<td>" + student.email + "</td>" +
        "<td>" + student.registered + "</td>" +
        "<td>" + courseList + "</td>";
    return row;
}

allTable.appendChild(createRow());

if (student.registered === true) {
    registeredTable.appendChild(createRow());
}

if (courses.length > 3) {
    moreThan3Table.appendChild(createRow());
}
});

};

xhr.send();
</script>

</body>
</html>
```

Output

01.

All Student Details

| Student Id | Name | Email | Registered | Courses |
|------------|---------|----------------|------------|---|
| S001 | Kalhara | mail1@mail.com | true | <ul style="list-style-type: none">• C++• C#• OOP• React |
| S002 | Saman | mail2@mail.com | true | <ul style="list-style-type: none">• C++• OOP• React• React |
| S003 | Ishara | mail3@mail.com | false | <ul style="list-style-type: none">• OOP• OOP |
| S004 | Saranga | mail4@mail.com | true | <ul style="list-style-type: none">• SOWA |
| S005 | Dulara | mail5@mail.com | true | <ul style="list-style-type: none">• Java• SOWA• React |

02.

Registered Student Details

| Student Id | Name | Email | Registered | Courses |
|------------|---------|----------------|------------|---|
| S001 | Kalhara | mail1@mail.com | true | <ul style="list-style-type: none">• C++• C#• OOP• React |
| S002 | Saman | mail2@mail.com | true | <ul style="list-style-type: none">• C++• OOP• React• React |
| S004 | Saranga | mail4@mail.com | true | <ul style="list-style-type: none">• SOWA |
| S005 | Dulara | mail5@mail.com | true | <ul style="list-style-type: none">• Java• SOWA• React |

03.

More Than 3 Courses Students

| Student Id | Name | Email | Registered | Courses |
|------------|---------|----------------|------------|---|
| S001 | Kalhara | mail1@mail.com | true | <ul style="list-style-type: none">• C++• C#• OOP• React |
| S002 | Saman | mail2@mail.com | true | <ul style="list-style-type: none">• C++• OOP• React• React |