

2400030009-SkillEndSemExam

```
<!DOCTYPE html>

<html>

<head>

  <title>Student Marks Table with Sorting & Filtering</title>

  <style>

    table {

      width: 70%;

      border-collapse: collapse;

      margin-top: 20px;

    }

    th, td {

      border: 1px solid black;

      padding: 10px;

      text-align: center;

    }

    th {

      cursor: pointer;

      background-color: #e0e0e0;

    }

  </style>

</head>

<body>

  <h2>Student Marks Table</h2>

  <label>Filter by Subject:</label>

  <select id="subjectFilter" onchange="filterTable()">

    <option value="All">All</option>

    <option value="Maths">Maths</option>

    <option value="Science">Science</option>

    <option value="English">English</option>

  </select>

  <table>

    <thead>

      <tr>

        <th>Name</th>

        <th>Maths</th>

        <th>Science</th>

        <th>English</th>

      </tr>

    </thead>

    <tbody>

      <tr>

        <td>John</td>

        <td>85</td>

        <td>90</td>

        <td>78</td>

      </tr>

      <tr>

        <td>Jane</td>

        <td>72</td>

        <td>88</td>

        <td>85</td>

      </tr>

      <tr>

        <td>Mike</td>

        <td>95</td>

        <td>82</td>

        <td>91</td>

      </tr>

      <tr>

        <td>Sarah</td>

        <td>88</td>

        <td>75</td>

        <td>80</td>

      </tr>

      <tr>

        <td>David</td>

        <td>70</td>

        <td>78</td>

        <td>72</td>

      </tr>

    </tbody>

  </table>

</body>

</html>
```

```
</select>
```

```
<label>Marks Range:</label>
```

```
<input type="number" id="minMark" placeholder="Min"> -
```

```
<input type="number" id="maxMark" placeholder="Max">
```

```
<button onclick="filterTable()">Apply</button>
```

```
<table id="studentTable">
```

```
  <thead>
```

```
    <tr>
```

```
      <th onclick="sortTable(0)">Name</th>
```

```
      <th onclick="sortTable(1)">Subject</th>
```

```
      <th onclick="sortTable(2)">Marks</th>
```

```
    </tr>
```

```
  </thead>
```

```
  <tbody id="tableBody"></tbody>
```

```
</table>
```

```
<script>
```

```
const students = [
```

```
  { name: "Arjun", subject: "Maths", marks: 89 },
```

```
  { name: "Ram", subject: "Science", marks: 76 },
```

```
  { name: "Rekha", subject: "English", marks: 92 },
```

```
  { name: "Sita", subject: "Maths", marks: 65 },
```

```
  { name: "Kiran", subject: "Science", marks: 80 }
```

```
];
```

```
function loadTable(data) {
```

```
  const tableBody = document.getElementById("tableBody");
```

```
  tableBody.innerHTML = "";
```

```
  data.forEach(st => {
```

```
    tableBody.innerHTML += `
```

```
      <tr>
```

```
        <td>${st.name}</td>
```

```
        <td>${st.subject}</td>
```

```

        <td>${st.marks}</td>
    </tr>`;
});
}

loadTable(students);

function sortTable(column) {
    let sorted = [...students].sort((a, b) => {
        let A = Object.values(a)[column], B = Object.values(b)[column];
        return A > B ? 1 : -1;
    });
    loadTable(sorted);
}

function filterTable() {
    let subject = document.getElementById("subjectFilter").value;
    let min = document.getElementById("minMark").value;
    let max = document.getElementById("maxMark").value;

    let filtered = students.filter(st => {
        return (subject === "All" || st.subject === subject) &&
            (!min || st.marks >= min) &&
            (!max || st.marks <= max);
    });
    loadTable(filtered);
}

</script>

</body>
</html>

```

Student Marks Table

Filter by Subject:

All

 Marks Range:

87

 -

98

Apply

Name	Subject	Marks
Arjun	Maths	89
Ram	Science	76
Rekha	English	92
Sita	Maths	65
Kiran	Science	80