**Assignment**

**Learner Details**

* **Name: Nikhil k**
* **Enrollment Number: SU625MR004**
* **Batch / Class: June 2025 MERN**
* **Assignment: Student Marks Table with total calculation**
* **Date of Submission: 15/07/2025**

**Problem Solving Activity 1.1**

**1. Program Statement**

The goal of this program is to create an HTML table that displays marks scored by students in various subjects. A "Submit" button is provided for each student, which, when clicked, calculates and displays the total marks for that student. The program takes subject marks as input (hardcoded) and dynamically shows the total on the webpage.

**2. Algorithm**

* Create an HTML table with rows representing each student and their marks in different subjects.
* Include a final column with a placeholder for the total and a button labeled "Submit".
* Write a JavaScript function named calculateTotal() which:
  + Accepts the cell ID and marks as parameters.
  + Adds all marks and displays the total in the specified cell.
* Link the function to the button using onclick.

**3. Pseudocode**

For each student:

Display name and marks in English, Kannada, Hindi, Social Science, Biology, Chemistry

Create a button labeled "Submit"

On button click:

Call calculateTotal function

Pass marks and corresponding cell ID

Inside function:

Add marks

Update the content of the 'total' cell with calculated sum

**4. Program Code**

<!DOCTYPE html>

<html lang="en">

<head>

    <meta charset="UTF-8">

    <title>Student Marks Table 15-07-2025 </title>

    <style>

        body {

            font-family: Arial, sans-serif;

            padding: 40px;

            background-color: antiquewhite;

        }

        table {

            width: 100%;

            border-collapse: collapse;

            text-align: justify;

        }

        th,

        td {

            border: 1px solid #333;

            padding: 10px;

        }

        th {

            background-color: chocolate;

            color: white;

        }

        tr:hover {

            background-color: burlywood;

        }

        button {

            padding: 5px 10px;

            background-color: green;

            color: white;

            border: double;

            border-radius: 5px;

            cursor: pointer;

        }

        button:hover {

            background-color: brown;

        }

    </style>

</head>

<body>

    <h2 style="background-color:darkgreen; color:beige; height: 31px; ">Student Marks Table -  2K 25 StemUp!!!!!!</h2>

    <table style="background-color:darkgoldenrod;">

        <thead>

            <tr>

                <th>Name</th>

                <th>English</th>

                <th>Kannada</th>

                <th>Hindi</th>

                <th>Social Science</th>

                <th>Biology</th>

                <th>Chemistry</th>

                <th>Total</th>

                <th>Instructions: Click on the below button to get your final 'Total' result </th>

            </tr>

        </thead>

        <tbody>

            <tr id="row1">

                <td>Shrayanth S</td>

                <td>78</td>

                <td>80</td>

                <td>89</td>

                <td>77</td>

                <td>75</td>

                <td>85</td>

                <td id="total1">Note: Click on the Submit button to get your Total Marks</td>

                <td><button onclick="calculateTotal('total1', 78, 80, 89, 77, 75, 85)">Submit</button></td>

            </tr>

            <tr id="row2">

                <td>Nikhil</td>

                <td>88</td>

                <td>90</td>

                <td>85</td>

                <td>80</td>

                <td>78</td>

                <td>88</td>

                <td id="total2">Note: Click on the Submit button to get your Total Marks</td>

                <td><button onclick="calculateTotal('total2', 88, 90, 85, 80, 78, 88)">Submit</button></td>

            </tr>

            <tr id="row3">

                <td>Chandrakanth</td>

                <td>65</td>

                <td>70</td>

                <td>60</td>

                <td>75</td>

                <td>80</td>

                <td>68</td>

                <td id="total3">Note: Click on the Submit button to get your Total Marks</td>

                <td><button onclick="calculateTotal('total3', 65, 70, 60, 75, 80, 68)">Submit</button></td>

            </tr>

            <tr id="row4">

                <td>Vishnu Priya</td>

                <td>90</td>

                <td>85</td>

                <td>88</td>

                <td>92</td>

                <td>86</td>

                <td>84</td>

                <td id="total4">Note: Click on the Submit button to get your Total Marks</td>

                <td><button onclick="calculateTotal('total4', 90, 85, 88, 92, 86, 84)">Submit</button></td>

            </tr>

            <tr id="row5">

                <td>Indira Priyadharshini</td>

                <td>72</td>

                <td>68</td>

                <td>74</td>

                <td>70</td>

                <td>69</td>

                <td>76</td>

                <td id="total5">Note: Click on the Submit button to get your Total Marks</td>

                <td><button onclick="calculateTotal('total5', 72, 68, 74, 70, 69, 76)">Submit</button></td>

            </tr>

        </tbody>

    </table>

    <script>

        function calculateTotal(cellId, m1, m2, m3, m4, m5, m6) {

            let total = m1 + m2 + m3 + m4 + m5 + m6;

            document.getElementById(cellId).innerText = total;

        }

    </script>

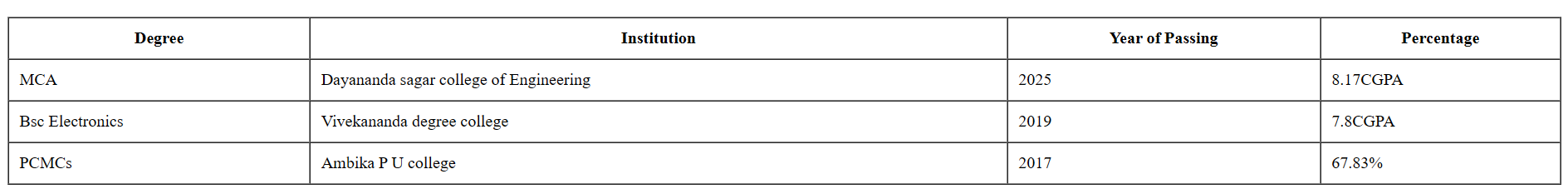
</body

</html>

**5. Test Cases**

| **Student Name** | **Expected Total** | **Button Click Result** |
| --- | --- | --- |
| Shrayanth S | 484 | Passes |
| Nikhil | 509 | Passes |
| Chandrakanth | 418 | Passes |
| Vishnu Priya | 525 | Passes |
| Indira Priyadharshini | 429 | Passes |

**6. Screenshots of Output**



**7. Observation / Reflection**

Working on this assignment gave me a clear understanding of how to use HTML tables and how JavaScript can make web pages interactive. A small challenge I faced was making sure each "Submit" button worked correctly for the right student, but that helped me learn how event handling works. I also enjoyed playing around with CSS to make the table look clean and readable. Next time, I’d like to improve the project by calculating totals automatically or letting users enter their own marks. Overall, it was a fun and useful way to practice HTML, CSS, and JavaScript together.