Vidyavardhini's College Of Engineering & Technology, Vasai
ASSIGNMENT NO. 4
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NAME: CHETAN BHUYAL   **ROLL NO.** : 16
DATE :   **SUBJECT :** FULL STACK JAVA PROGRAMING
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QUESTION :

A teacher wants a small webpage where they can enter a student's marks for Maths , science and English.

When the teacher clicks a button, the program will:

- Display the total marks.

- Display the grade (A, B, C, D, Fail).

- Show the result message dynamically using the DOM.

Use html and javascript DOM concept for above problem.

CODE:

```html
<!DOCTYPE html>
<html>
<head>
  <title>Student Marks Calculator</title>
  <style>
    body { font-family: Arial, sans-serif; margin: 30px; }
    input { margin: 5px; padding: 5px; }
    button { padding: 5px 10px; }
    #result { margin-top: 20px; font-weight: bold; }
```

```html
    </style>
</head>
<body>
    <h2>Student Marks Calculator</h2>

    <label>Maths: </label>
    <input type="number" id="maths" placeholder="0-100"><br>

    <label>Science: </label>
    <input type="number" id="science" placeholder="0-100"><br>

    <label>English: </label>
    <input type="number" id="english" placeholder="0-100"><br>

    <button onclick="calculateResult()">Calculate</button>

    <div id="result"></div>

    <script>
        function calculateResult() {
            // Get marks from input fields
            let maths =
parseFloat(document.getElementById("maths").value);
            let science =
parseFloat(document.getElementById("science").value);
            let english =
parseFloat(document.getElementById("english").value);

            // Validate inputs
            if (isNaN(maths) || isNaN(science) || isNaN(english)) {
                document.getElementById("result").innerHTML =
"Please enter valid marks for all subjects!";
```

```
            return;
        }

        if (maths < 0 || maths > 100 || science < 0 || science > 100 ||
english < 0 || english > 100) {
            document.getElementById("result").innerHTML =
"Marks must be between 0 and 100.";
            return;
        }

        // Calculate total
        let total = maths + science + english;

        // Calculate grade
        let grade;
        let average = total / 3;
        if (average >= 90) grade = "A";
        else if (average >= 75) grade = "B";
        else if (average >= 60) grade = "C";
        else if (average >= 50) grade = "D";
        else grade = "Fail";

        // Display result dynamically
        let message = `Total Marks: ${total} <br> Grade: ${grade}
<br> `;
        message += (grade === "Fail") ? "Result: You need to
improve!" : "Result: Well done!";
        document.getElementById("result").innerHTML =
message;
    }
  </script>
</body>
```

</html>

OUTPUT :

Total Marks: 255
Grade: B
Result: Well done!