

INFO-1272 JavaScript 1

LAB 5

Due Date: November 9th, 2025, 11:59 pm

Submission Directions: FOL Submissions folder → Lab 5

Lab Description

This task simulates a **student grade analyzer** where users will input student names and their grades. The application will store all grades in an array, perform calculations such as averages, identify the highest and lowest grades, and display summary information for the entire class.

You will write the JavaScript code for each step listed below inside the `<script>` section of your HTML file.

Comment your code appropriately.

Instructions

1. **Create an HTML file** named using the following format:
Firstname_Lab5.html
Example: Krutarth_Lab5.html
2. **Create a Function** to handle the Grade Analyzer system.
3. **Gather input from the user:**
 - a. Prompt the user for how many students are in the class.
 - b. Create two arrays:
 - studentNames – to store the names of the students
 - studentGrades – to store their grades (as numbers)
4. Gather data for each student:
 - Prompt the user to enter the **student's name**.
 - Prompt the user to enter that student's **grade** (0–100).
 - Store both values in their respective arrays.
 - Display a message in the console confirming the student's information (e.g., "Student 1: Alex - Grade: 88").

5. **Calculate the average grade:**

- Create a function `calculateAverage(arr)` to add all grades and calculate the average.
- Display the average (rounded to two decimal places).

6. **Find the highest and lowest grade:**

- Create a function `findMinMax(arr)` that loops through the grades and finds both the **highest** and **lowest** grade values.
- Display them in the console.

7. **Use a do...while loop** to allow the user to display information again:

- After displaying the results, use a `confirm()` dialog asking:
"Would you like to view the results again?"
- If the user clicks OK, re-display all student data and calculations; otherwise, end the program with a message like "Thank you for using the Grade Analyzer!".

8. **Output (Console Only):**

Once all inputs are gathered and calculations are complete, display in the console:

- The list of students and their grades
- The class average
- The highest and lowest grade
- Any custom messages you'd like to add