# ICT251 Quadratic Solver & Grading System

This project is a single-file web application created using HTML, CSS, and JavaScript. It includes two main tools: a Quadratic Equation Solver and a Grading System.

## 1) Quadratic Solver (ax² + bx + c = 0)

The Quadratic Solver allows users to input the coefficients (a, b, c) of a quadratic equation and computes its roots. It calculates the discriminant (Δ) to determine whether the roots are real and distinct, real and equal, or complex conjugates.

Main Features:

* • Input fields for a, b, and c values
* • Validation for invalid or empty inputs
* • Computation of discriminant and roots
* • Display of results with proper formatting

## 2) Grading System

The Grading System takes a student's score (0–100) and returns a grade based on predefined ranges. It ensures that the entered score is within a valid range and assigns letter grades according to the scale below:

• 85–100: A+  
• 75–84: A  
• 65–74: B+  
• 60–64: B  
• 55–59: C+  
• 50–54: C  
• Below 50: D

## 3) Technologies Used

* • HTML — For structure and layout of the page.
* • CSS — For design, colors, and user interface styling.
* • JavaScript — For all calculations, logic, and interactivity.

## 4) How to Run the Application

1. Copy the HTML code into a text editor such as Visual Studio Code or Notepad++.  
2. Save the file with a .html extension, e.g., quadratic\_grading.html.  
3. Open the file in any modern web browser (e.g., Chrome, Edge, Firefox).  
4. Enter values in the provided fields and click 'Compute' to see results.

## 5) Author Information

Project Title: ICT251 JS GitHub Activity - Web Tools

Developed by: Student Name (replace with your name if submitting)

Course: ICT251 — Web Tools and JavaScript Programming