Mini Hackathon #1 — Student Performance Analyzer (Python)

Project Overview

You and your teammate will build a beginner-friendly Python program that analyzes student marks and provides insights such as averages, rankings, and pass/fail status.

Project Requirements

- Accept student data as a list of dictionaries or from a simple file.
- Calculate class average, highest score, lowest score, and total students.
- Classify students as Pass (≥50) or Fail (<50).
- Rank students from highest to lowest score.
- Display results clearly in the terminal.

Team Collaboration

Each team consists of two people. One focuses on logic and calculations, the other focuses on input/output and presentation. Both must contribute code and Git commits.

Suggested Project Structure

main.py, analyzer.py, optional data file, and a README.md explaining how to run the project.

Bonus (Optional)

- Handle invalid input gracefully.
- Export results to a file.
- Add basic unit tests.

Definition of Done

The program runs without errors, meets all requirements, includes a README, and shows Git collaboration with commits from both teammates.