• Problem Statement

Managing student academic records manually is time-consuming, error-prone, and inefficient.

A digital system is needed to store, update, calculate, and retrieve marks and grades quickly.

• Scope of the Project

- Store and manage student details.

- Add, update, delete, and search student records.

- Automatically calculate percentages and grades.

- Provide a user-friendly, menu-driven interface.

- Maintain persistent data using JSON files.

• Target Users

- School teachers

- Tuition center staff

- Students tracking their performance

- Small educational institutions

- Anyone needing a lightweight record management tool

• High-level Features

- Add student records

- View all students

- Search students by ID

- Update subject marks

- Delete student records

- Automatic grade and percentage calculation

- JSON-based data persistence

- Input validation and error handling