# project Description

The Student Report Card Generator is a python-based application designed to collect, process, and display academic performance data for students. It allows users to input student details, enter subject marks, automatically calculate grades, and visualize performance in a bar chart. The project also supports savings and loading student records to and from a file, making it practical for real-world usage.

## KEY FEATURES:

User Input Handling: Collects student details and marks through interactive prompts.

Automated Grading: Calculates letter grades based on predefined score ranges.

Data storage: Saves and loads student reports using Json for persistence.

Data structures: Utilizes lists and dictionaries to store and process data efficiently.

Visualization: Generates a performance chart using matplotlib for easy handling

## Technologies Used:

Python 3

Matplotlib (data visualization)

JSON (data persistence)

## Skills Demonstrated:

Variables, conditionals, loops, and functions.

File handling (read/write operations)

Data Visualization

Basic error handling

Modular code organization

## Portfolio value

This project highlights practical programming skills by combing data collection, processing, storage, and visualization- all essential in real-world software development. It demonstrates not only coding ability but also an understanding and maintainability