Class 12 Computer Science Project

# Project Title: Student Report Card Generator

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## 1. About the Project

This project reads student information from a CSV file and generates a formatted report card including marks and grades. It now includes a feature to add new student records to the CSV file via a menu-driven interface.

## 2. Aim

To develop a student report card generator with the ability to add and manage student data using file handling.

## 3. Objectives

- To read and display student records  
- To search for a student by roll number  
- To generate and save report cards  
- To add a new student record from within the program

## 4. Tools Used

• Python 3  
• CSV File Handling  
• Dictionary and List Data Structures  
• String Formatting

## 5. Algorithm

Step 1: Load student records from a CSV file  
Step 2: Present a menu with options to view, search, generate report, or add new data  
Step 3: For report generation, compute total and assign grades  
Step 4: For new records, take input and append to CSV  
Step 5: Loop until the user exits

## 6. Sample Output (Text Format)

--- Student Report Card Generator ---  
1. View All Student Records  
2. Search and Generate Report Card  
3. Export Report to File  
4. Add New Student Record  
5. Exit

## 7. Conclusion

This project demonstrates how file handling and dictionary-based logic can be combined to manage and analyze student performance. The addition of a new student record option makes it interactive and complete.