**Student Report Card Management System**

**Overview**

The **Student Report Card Management System** is a console-based C++ project designed to manage student records such as marks, grades, and personal information. The project allows users to create, modify, display, and delete student records, as well as generate reports for individual students or the entire class. The project utilizes file handling in C++ to store student records in a binary file, ensuring data persistence.

**Features**

* **Add Student Record:** Input student details (roll number, name, marks for subjects) and automatically calculate the percentage and grade.
* **Display All Records:** View all student records with their marks, percentage, and grade.
* **Search Record by Roll Number:** Retrieve a specific student record using the roll number.
* **Modify Record:** Update student details.
* **Delete Record:** Remove a student record from the database.
* **Class Result:** View a tabular report of all students, including marks and grades.
* **Student Report Card:** View a detailed report card for an individual student.

**Class and Methods**

**class student**

This class contains methods to manage individual student records. The key attributes include roll number, name, marks for five subjects (Physics, Chemistry, Maths, English, and Computer Science), percentage, and grade.

* **void getdata()**  
  Prompts the user to input details for a student and stores them.
* **void showdata() const**  
  Displays the stored details of the student.
* **void show\_tabular() const**  
  Shows the student details in a tabular format (used for class result).
* **int retrollno() const**  
  Returns the roll number of the student (used for searching or modifying a specific student).
* **void calculate()**  
  Private method that calculates the student's percentage and assigns a grade based on their marks.

**File Handling**

* **student.dat**:A binary file where all student records are saved. This file ensures that records persist between program runs.
* **Temp.dat**  
  A temporary file used when modifying or deleting student records.

**Menu Structure**

**Main Menu**

1. **Result Menu**: View class result or individual student report card.
2. **Entry/Edit Menu**: Create, display, search, modify, or delete student records.
3. **Exit**: Close the application.

**Result Menu**

* Class result (tabular report of all students).
* Individual report card based on roll number.

**Entry/Edit Menu**

* Create a new student record.
* Display all student records.
* Search a student record by roll number.
* Modify a student's record.
* Delete a student's record.