

Class_Act23

Encapsulation Activity: Student Report Card System

Objective:

Practice **encapsulation** by handling multiple private data fields (grades in different subjects) and controlling access through getters/setters. Students will also calculate GPA based on valid grades only.

Scenario:

Create a class to manage a student's grades across multiple subjects. The grades must be stored securely (private), and updated only through proper methods. Include a method to compute GPA.

Task Instructions:

1. Create a class `Student`.
2. Use `__init__()` to initialize:
 - Student name (public)
 - Grades for 3 subjects (`__math` , `__science` , `__english`) – **private**
3. Add:
 - Getter methods for each subject.
 - Setter methods that validate grade input (0-100).
 - A method `calculate_gpa()` that returns the average of all grades.
4. Add a method `display_report()` that prints all info in a clean format.