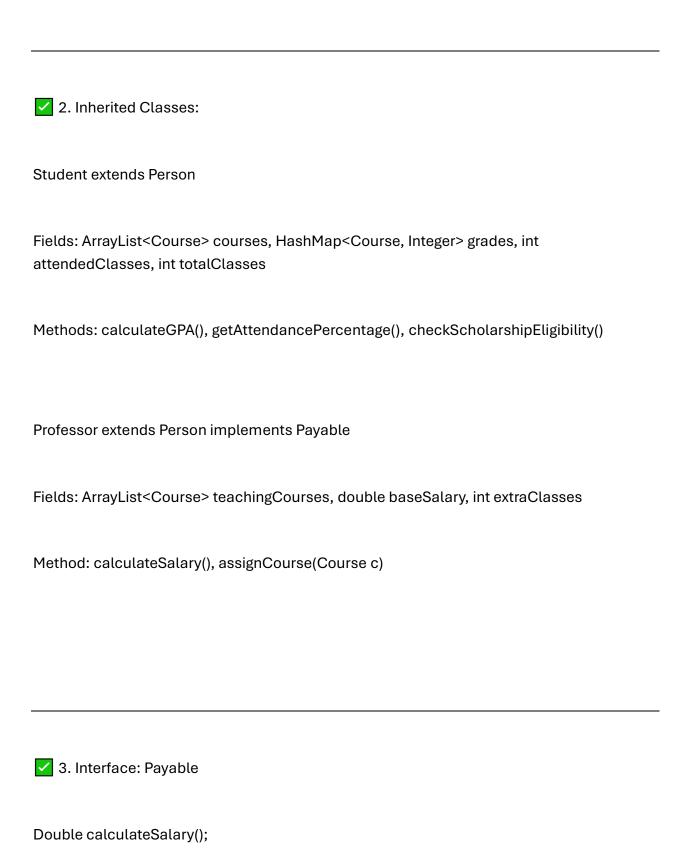
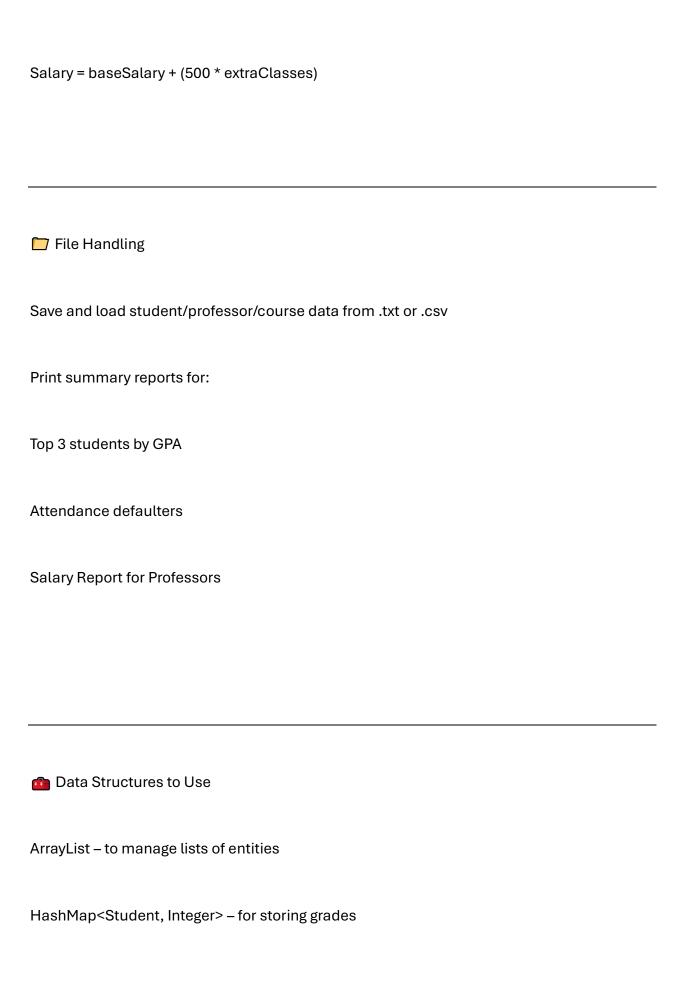
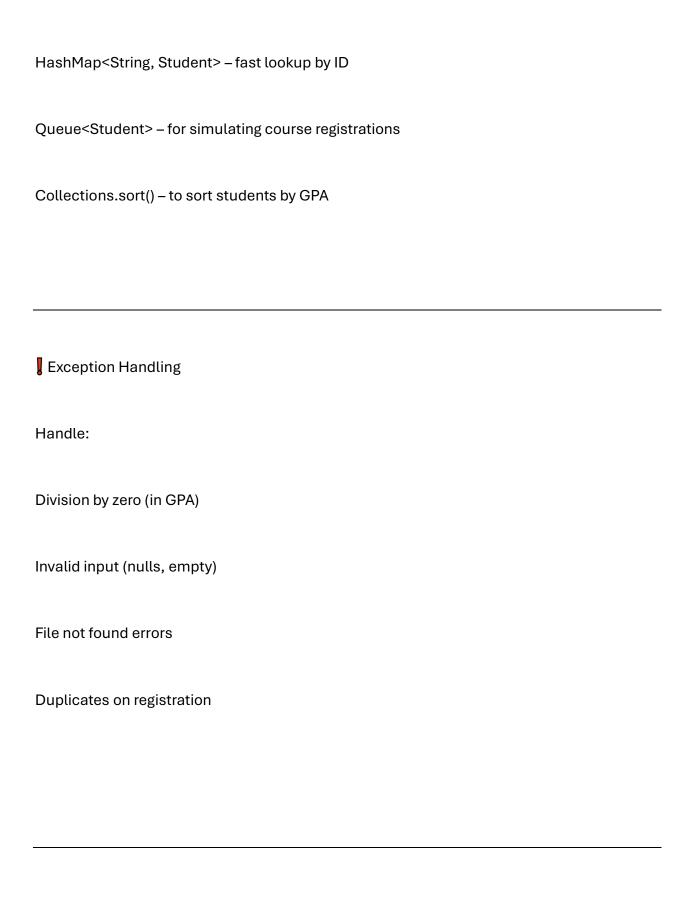
Big Java Question – University Management System
Objective:
Design a Java-based University Management System that manages students, professors, courses, grades, salaries, attendance, and more, using core Java concepts and good programming practices.
Requirements and Features
✓ 1. Base Class: Person (Abstract)
Fields: id, name, gender, address
Constructor and displayDetails() method
Abstract void showRole();
Access Modifiers: Use private and protected for encapsulation



✓ 4. Class: Course
Fields: String courseId, String courseName, int credits, Professor professor
Constructor and getter/setters
✓ 5. Class: University
Fields:
ArrayList <student> students</student>
ArrayList <professor> professors</professor>
ArrayList <course> courses</course>
Features:









Use Java Scanner for a menu system like:

Welcome to University System

- 1. Add Student
- 2. Add Professor
- 3. Add Course
- 4. Register Student to Course
- 5. Calculate GPA
- 6. Generate Reports
- 7. Exit

Add login roles (Admin / Professor / Student)

Passwords stored in HashMap<String, String>

Role-based access to functionalities