

# TASK 3

## STUDENT MANAGEMENT SYSTEM

1. Create a Student class to represent individual students. Include attributes such as name, roll number, grade, and any other relevant details.
2. Implement a StudentManagementSystem class to manage the collection of students. Include methods to add a student, remove a student, search for a student, and display all students.
3. Design the user interface for the Student Management System. This can be a console-based interface or a graphical user interface (GUI) using libraries like Swing or JavaFX.
4. Implement methods to read and write student data to a storage medium, such as a file or a database.
5. Allow users to interact with the Student Management System by providing options such as adding a new student, editing an existing student's information, searching for a student, displaying all students, and exiting the application.
6. Implement input validation to ensure that required fields are not left empty and that the student data is in the correct format