

Python Module - End Project

Build a Python-based **Student Management System** using the concepts of Python programming covered in your syllabus. This system should allow users (admin/teacher) to add, view, update, and delete student records.

1. **Login System** (3 marks)
 - Predefined login credentials (username/password).
 - Basic password checking.
2. **Add New Student Record** (3 marks)
 - Input fields: Name, Roll Number, Age, Department, Marks.
3. **View Student Record** (3 marks)
 - Display all student data in a user-friendly format.
4. **Update Student Details** (3 marks)
 - Allow editing any field based on Roll Number.
5. **Delete Student Record** (3 marks)
 - Remove a student based on Roll Number.
6. **Exit Option** (1 mark) : Clean exit with proper messages.
7. **Use File Handling** to store student data persistently (3 marks) : Read from and write to a file (`students.txt` or `.csv`).
8. **Search student by name or department** (1 mark)
9. **Auto-generate student ID** (1 mark)
10. **View top-performing students (using marks)**(1 mark)
11. **Use modules like `datetime` to show time of entry**(1 mark)
12. **Create a custom module** for repeated functionalities (e.g., validation) (1 mark)
13. **Handle invalid inputs using exception handling** (1 mark)