

Lab 12

File IO

Lab objectives

After completing this lab, the students should be able to

- Open and close files programmatically
- Read data from a file and process it
- Write data to file

Task: 01

Create a text file with a couple of lines manually and then write a C++ program to read and display the file contents.

Task: 02

Create a student database that holds the students' information (Reg #, Name, Semester and CGPA). When you run the program, it should display the following options

1. Add a new student
2. Delete a student record
3. View all students information
4. Search a particular student

The user will select one of the options and your program should respond accordingly (i.e. if the user enters 1, your program should ask the user for student name, registration number etc. If the user enters 3, your program should display all records).

Hint: Create a structure with the name student that has 4 members (Reg #, Name, Semester and GPA). Write and read the structure accordingly when required.

Extra Credit Activity:

Write a C++ program to reduce a matrix to its echelon and reduced echelon form.