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**PF Project**

#include <iostream>

#include <string>

using namespace std;

struct Student {

    int id;

    string name;

    float marks;

};

void addStudent(Student& student, int id, const string& name, float marks) {

    student.id = id;

    student.name = name;

    student.marks = marks;

}

void displayStudent(const Student& student) {

    cout << "ID: " << student.id << endl;

    cout << "Name: " << student.name << endl;

    cout << "Marks: " << student.marks << endl;

}

void getStudentInput(int& id, string& name, float& marks) {

    cout << "Enter Student ID: ";

    cin >> id;

    cin.ignore();  // Clear the input buffer before reading the name

    cout << "Enter Student Name: ";

    getline(cin, name);  // Read the full name

    cout << "Enter Marks: ";

    cin >> marks;

}

int main() {

    const int MAX\_STUDENTS = 100;

    Student\* students = new Student[MAX\_STUDENTS];

    int studentCount = 0;

    int choice;

    do {

        cout << "\n1. Add Student\n";

        cout << "2. Display All Students\n";

        cout << "3. Exit\n";

        cout << "Enter your choice: ";

        cin >> choice;

        if (choice == 1) {

            if (studentCount < MAX\_STUDENTS) {

                int id;

                string name;

                float marks;

                getStudentInput(id, name, marks);

                addStudent(students[studentCount], id, name, marks);

                studentCount++;

                cout << "Student added successfully!\n";

            } else {

                cout << "Student limit reached. Cannot add more students.\n";

            }

        } else if (choice == 2) {

            if (studentCount > 0) {

                for (int i = 0; i < studentCount; i++) {

                    cout << "\nStudent " << i + 1 << ":\n";

                    displayStudent(students[i]);

                }

            } else {

                cout << "No students to display.\n";

            }

        }

    } while (choice != 3);

    delete[] students;

    return 0;

}