

```

#include <iostream>
#include <vector>
#include <string>

using namespace std;

class Student {
private:
    string name;
    int rollNumber;
    int marks;
    string grade;

    void calculateGrade() {
        if (marks >= 90) grade = "A";
        else if (marks >= 80) grade = "B";
        else if (marks >= 70) grade = "C";
        else if (marks >= 60) grade = "D";
        else grade = "F";
    }

public:
    Student(string name, int rollNumber, int marks) : name(name), rollNumber(rollNumber), marks(marks) {
        calculateGrade();
    }

    void display() const {
        cout << "Name: " << name << "\nRoll Number: " << rollNumber << "\nMarks: " << marks << "\nGrade: " << grade << endl;
    }
};

int main() {
    vector<Student> students;
    int numStudents;

    cout << "Enter number of students: ";
    cin >> numStudents;

    for (int i = 0; i < numStudents; ++i) {
        string name;
        int rollNumber, marks;

        cout << "\nEnter name of student " << (i + 1) << ": ";
        cin.ignore(); // to clear input buffer
        getline(cin, name);

        cout << "Enter roll number: ";
        cin >> rollNumber;

        cout << "Enter marks: ";
        cin >> marks;

        students.push_back(Student(name, rollNumber, marks));
    }

    cout << "\nStudent Details:\n";
    for (const Student& student : students) {
        student.display();
    }

    return 0;
}

```