#include <iostream>

#include <string>

Using namespace std;

Class Course {

Private:

String course Name;

String\* students;

Int numStudents;

Int maxStudents;

Public:

// Constructor

Course(const string& name, int max) : courseName(name), numStudents(0), maxStudents(max) {

Students = new string[maxStudents];

}

// Deep copy constructor

Course(const Course& other) : courseName(other.courseName), numStudents(other.numStudents), maxStudents(other.maxStudents) {

Students = new string[maxStudents];

For (int I = 0; I < numStudents; ++i) {

Students[i] = other.students[i];

}

}

// Destructor

~Course() {

Delete[] students;

}

// Function to get the course name

String getCourseName() const {

Return courseName;

}

// Function to add a new student

Void addStudent(const string& studentName) {

If (numStudents < maxStudents) {

Students[numStudents] = studentName;

++numStudents;

} else {

Cout << “Course is full. Cannot add more students.” << endl;

}

}

// Function to drop a student

Void dropStudent(const string& studentName) {

For (int I = 0; I < numStudents; ++i) {

If (students[i] == studentName) {

// Shift remaining elements to fill the gap

For (int j = I; j < numStudents – 1; ++j) {

Students[j] = students[j + 1];

}

--numStudents;

Return; // Student found and dropped

}

}

Cout << “Student not found in the course.” << endl;

}

// Function to get the array of students

Const string\* getStudents() const {

Return students;

}

// Function to get the number of students

Int getNumStudents() const {

Return numStudents;

}

};

Int main() {

// Example usage in the main function

Course course1(“Math”, 3);

Course1.addStudent(“Alice”);

Course1.addStudent(“Bob”);

// Deep copy using copy constructor

Course course2 = course1;

// Drop a student from course2

Course2.dropStudent(“Alice”);

// Output course names and students

Cout << “Course 1: “ << course1.getCourseName() << endl;

Cout << “Students in Course 1: “;

For (int I = 0; I < course1.getNumStudents(); ++i) {

Cout << course1.getStudents()[i] << “ “;

}

Cout << endl;

Cout << “Course 2: “ << course2.getCourseName() << endl;

Cout << “Students in Course 2: “;

For (int I = 0; I < course2.getNumStudents(); ++i) {

Cout << course2.getStudents()[i] << “ “;

}

Cout << endl;

Return 0;

}