OOP Lab Exp No.2

#include <iostream>

#include <string.h>

using namespace std;

class StudData;

class Student

{

    string name;

    int roll\_no;

    string cls;

    char \*division;

    string dob;

    char \*bloodgroup;

    static int count;

public:

    Student()

    {

        name = "";

        roll\_no = 0;

        cls = "";

        division = new char;

        dob = "dd/mm/yyyy";

        bloodgroup = new char[4];

    }

    ~Student()

    {

        delete division;

        delete[] bloodgroup;

    }

    static int getCount()

    {

        return count;

    }

    void getData(StudData \*);

    void dispData(StudData \*);

};

class StudData

{

    string caddress;

    long int \*contno;

    long int \*dlno;

    friend class Student;

public:

    StudData()

    {

        caddress = "";

        contno = new long;

        dlno = new long;

    }

    ~StudData()

    {

        delete contno;

        delete dlno;

    }

    void getStudData()

    {

        cout << "Enter Contact Address : ";

        cin.get();

        getline(cin, caddress);

        cout << "Enter Contact Number : ";

        cin >> \*contno;

        cout << "Enter Driving License Number : ";

        cin >> \*dlno;

    }

    void dispStudData()

    {

        cout << "Contact Address : " << caddress << endl;

        cout << "Contact Number : " << \*contno << endl;

        cout << "Driving License Number : " << \*dlno << endl;

    }

};

inline void Student::getData(StudData \*st)

{

    cout << "Enter Student Name : ";

    getline(cin, name);

    cout << "Enter Roll Number : ";

    cin >> roll\_no;

    cout << "Enter Class : ";

    cin.get();

    getline(cin, cls);

    cout << "Enter Division : ";

    cin >> division;

    cout << "Enter Date of Birth : ";

    cin.get();

    getline(cin, dob);

    cout << "Enter Blood Group : ";

    cin >> bloodgroup;

    st->getStudData();

    count++;

}

inline void Student::dispData(StudData \*st1)

{

    cout << "Student Name : " << name << endl;

    cout << "Roll Number : " << roll\_no << endl;

    cout << "Class : " << cls << endl;

    cout << "Division : " << division << endl;

    cout << "Date of Birth : " << dob << endl;

    cout << "Blood Group : " << bloodgroup << endl;

    st1->dispStudData();

}

int Student::count;

int main()

{

    Student \*stud1[100];

    StudData \*stud2[100];

    int n = 0;

    char ch;

    do

    {

        stud1[n] = new Student;

        stud2[n] = new StudData;

        stud1[n]->getData(stud2[n]);

        n++;

        cout << "Do you want to add another student (y/n) : ";

        cin >> ch;

        cin.get();

    } while (ch == 'y' || ch == 'Y');

    for (int i = 0; i < n; i++)

    {

        cout << "---------------------------------------------------------------" << endl;

        stud1[i]->dispData(stud2[i]);

    }

    cout << "---------------------------------------------------------------" << endl;

    cout << "Total Students : " << Student::getCount();

    cout << endl

         << "---------------------------------------------------------------" << endl;

    for (int i = 0; i < n; i++)

    {

        delete stud1[i];

        delete stud2[i];

    }

    return 0;

}