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1: #include<iostream>
2: #include<fstream>
3: #include<cstdlib>
4: using namespace std;
5: class Student{
6: public:
7:     //add your function
8:     Student():numClass(0),name(""){};
9:     void addc(string c);
10:    bool checkc(string c);
11:    void getname(string n){name = n;};
12:    void getnumclass(int nc){numClass = nc;};
13:    void newc(){classList = new string[numClass];};
14:    string oname();
15: private:
16:    string name;
17:    int numClass;
18:    string *classList;
19:    int i=0;
20: };
21: void Student::addc(string c){
22:     classList[i] = c;
23:     ++i;
24: }
25: string Student::oname(){
26:     return name;
27: }
28: bool Student::checkc(string c){
29:     for(int j=0 ; j<numClass ; ++j){
30:         if(c == classList[j]){
31:             j = 0;
32:             return true;
33:         }
34:     }
35:     return false;
36: }
37: int main()
38: {
39:     //Student *studentList;
40:     //string *classList;
41:     int nums=0, numc=0;
42:     ifstream ifs;
43:     ofstream ofs;
44:     ifs.open("input3.txt");
45:     ofs.open("output1.txt");
46:     if(ifs.fail()){

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47:         cout<<"Can not open input file";
48:         exit(1);
49:     }
50:     if(ofs.fail()){
51:         cout<<"Can not open ouput file";
52:         exit(1);
53:     }
54:     ifs>>nums;
55:     Student *studentList = new Student[nums];
56:     ifs>>numc;
57:     string *cclassList = new string[numc];
58:     for(int i=0 ; i<numc ; ++i){
59:         string c;
60:         ifs>>c;
61:         cclassList[i] = c;
62:     }
63:     for(int i=0 ; i<nums ; ++i){
64:         string namee;
65:         ifs>>namee;
66:         int numsc=0;
67:         ifs>>numsc;
68:         studentList[i].getname(namee);
69:         studentList[i].getnumclass(numsc);
70:         studentList[i].newc();
71:         for(int j=0 ; j<numsc ; ++j){
72:             string cn;
73:             ifs>>cn;
74:             studentList[i].addc(cn);
75:         }
76:     }
77:     for(int i=0 ; i<numc ; ++i){
78:         ofs<<"Class : "<<cclassList[i]<<endl;
79:         ofs<<" ";
80:         for(int k=0 ; k<nums ; ++k){
81:             if(studentList[k].checkc(cclassList[i])){
82:                 string nn = studentList[k].oname();
83:                 ofs<<nn<<" ";
84:             }
85:         }
86:         ofs<<endl;
87:     }
88:     ifs.close();
89:     ofs.close();
90:     cout<<"Success";
91:     return 0;
92: }

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