

**第23次作業**

**班級: 資工二甲**

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**物件導向程式設計**

題目

請根據上課範例，  
將檔案讀取成績程式用物件導向方式  
定義一個class score，  
除了完成constructor，  
同時請完成幾個member function，  
讓以下程式可以執行。

程式

#include <iostream>

#include <string>

#include <sstream>

#include <fstream>

using namespace std;

class score {

friend ifstream& operator>>(ifstream& in, score& b);

friend ofstream& operator<<(ofstream& out, const score& b);

int n;

string\* name;

string\* id;

float\* value;

public:

score(int a = 47) {

n = a;

name = new string[n];

id = new string[n];

value = new float[n];

}

~score() {

delete[] name;

delete[] id;

delete[] value;

}

};

ifstream& operator>>(ifstream& in, score& b) {

if (in.is\_open()) {

string str;

int i = 0;

while (getline(in, str)) {

istringstream stream(str);

string s;

getline(stream, s, ',');

b.name[i] = s;

getline(stream, s, ',');

b.id[i] = s;

getline(stream, s, ',');

b.value[i] = stof(s);

i++;

}

} else {

cout << "Fail to open file" << endl;

}

return in;

}

ofstream& operator<<(ofstream& out, const score& b) {

if (b.n > 0) {

out << "姓名\t學號\t成績" << endl;

for (int i = 0; i < b.n; i++) {

cout << b.name[i] << "\t" << b.id[i] << "\t" << b.value[i] << endl;

}

}

return out;

}

int main() {

score csie\_2\_a;

ifstream myFile("stu.txt");

myFile >> csie\_2\_a;

myFile.close();

ofstream outFile("output.txt");

outFile << csie\_2\_a;

outFile.close();

return 0;

}

執行結果

