#include<iostream>

using namespace std;

//FILE in C

//Modes

// r - read

// w - write

// a - append

// rb - read binary

// wb - write binary

// ab - append binary

//void main() {

//

//#pragma region Write To File

//

// //FILE\* file;

// //fopen\_s(&file,"myfile.txt", "w");

// //char\* text = new char[] {"Salam Dunya"};

// //cout << strlen(text) + 1 << endl;

// //fwrite(text, sizeof(char), strlen(text), file);

//

//

// //fclose(file);

//

//#pragma endregion

//

//

//#pragma region Append Mode

// /\*FILE\* file;

// fopen\_s(&file, "myfile.txt", "a");

// char\* text1 = new char[100]{};

// cin.getline(text1, 100);

// fwrite(text1, sizeof(char), strlen(text1), file);

//

// fclose(file);\*/

//#pragma endregion

//

//

//

//

//#pragma region Read From File

// //FILE\* file;

// //fopen\_s(&file, "myfile.txt", "r");

// ////fseek(file, 5, 0); //cursor yerini deyishmek uchun

// //char\* text = new char[100]{};

// //while (fread\_s(text,100, sizeof(char), 100, file) != 0)

// //{

// // cout << text << endl;

// // text = new char[100]{};

// //}

// //fclose(file);

//

//

//#pragma endregion

//

//

//

//

//

//#pragma region Write And Read Array Binary File

//

// /\*FILE\* file;

// int size = 5;

// int\* arr = new int[size] {1, 2, 3, 4, 5};

// fopen\_s(&file, "myarray.bin", "wb");

// fwrite((char\*)arr, sizeof(int), size, file);

//

// fclose(file);

//

//\*/

//

// /\*int size = 5;

// int\* buffer = new int[size] {};

// FILE\* file;

// fopen\_s(&file, "myarray.bin", "rb");

// fread\_s(buffer, sizeof(int)\*size, sizeof(int), size, file);

//

// for (size\_t i = 0; i < size; i++)

// {

// cout << buffer[i] << endl;

// }\*/

//

//

//

//

//

//

//

//#pragma endregion

//

//

//

//

//

//

//}

struct Student {

char\* name;

char\* surname;

int age;

};

void main() {

/\*Student\*\* students = new Student \* [] {

new Student{ new char[] {"Tural"},new char[] {"Turalli"},25},

new Student{ new char[] {"Leyla"},new char[] {"Leylali"},32}

};

int count = 2;\*/

/\*

2

5

Tural

7

Turalli

25

5

Leyla

7

Leylali

32\*/

#pragma region Write Struct

//FILE\* file;

//fopen\_s(&file, "students.bin", "wb");

//fwrite(&count, sizeof(int), 1, file);

//for (size\_t i = 0; i < count; i++)

//{

// //for every student data

// int l1 = strlen(students[i]->name);

// fwrite(&l1, sizeof(int), 1, file);

// fwrite(students[i]->name, sizeof(char), l1, file);

//

// int l2 = strlen(students[i]->surname);

// fwrite(&l2, sizeof(int), 1, file);

// fwrite(students[i]->surname, sizeof(char), l2, file);

// fwrite(&students[i]->age, sizeof(int), 1, file);

//}

//fclose(file);

#pragma endregion

#pragma region Read Struct

FILE\* file;

fopen\_s(&file, "students.bin", "rb");

int count = 0;

fread\_s(&count,sizeof(int), sizeof(int), 1,file);

//cout << count << endl;

Student\*\* students = new Student \* [count] {};

for (size\_t i = 0; i < count; i++)

{

int l1 = 0;

fread\_s(&l1, sizeof(int), sizeof(int), 1, file);

char\* name = new char[l1+1]{};

fread\_s(name, l1, sizeof(char), l1, file);

int l2 = 0;

fread\_s(&l2, sizeof(int), sizeof(int), 1, file);

char\* surname = new char[l2 + 1]{};

fread\_s(surname, l2, sizeof(char), l2, file);

int age = 0;

fread\_s(&age, sizeof(int), sizeof(int), 1, file);

students[i] = new Student{ name,surname,age };

}

for (size\_t i = 0; i < count; i++)

{

cout << "Name : " << students[i]->name << endl;

cout << "Surname : " << students[i]->surname << endl;

cout << "Age : " << students[i]->age << endl;

}

#pragma endregion

}