**Write a program that stores the information about students (name, student id,department and address) in a structure and then transfers the information to a file in your directory. Finally, retrieve the information from your file and print in the proper format on your output screen.**

**#include <iostream>**

**#include <cstring>**

**#include <fstream>**

**using namespace std;**

**class Student{**

**private:**

**char name[20], id[10], department[20], address[20];**

**public:**

**Student(){};**

**Student(char n[], char i[], char d[], char a[])**

**{**

**strncpy(name,n,20);**

**strncpy(id,i,20);**

**strncpy(department,d,20);**

**strncpy(address,a,20);**

**}**

**void display(){**

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

**cout << "Id: " << id << endl ;**

**cout << "Department: " << department << endl;**

**cout << "Address: " << address << endl;**

**}**

**};**

**int main()**

**{**

**ofstream data;**

**data.open("Student.dat",ios::out|ios::binary);**

**char name[20], id[10], department[20], address[20];**

**char ans;**

**do**

**{**

**cout << "Enter Student information" << endl;**

**cout << "Name: ";**

**cin >> name;**

**cout << "Id: " ;**

**cin >> id;**

**cout << "Department: " ;**

**cin >> department;**

**cout << "Address: " ;**

**cin >> address;**

**Student newStudent(name,id,department,address);**

**data.write(reinterpret\_cast<char \*>(&newStudent),sizeof(newStudent));**

**cout << "Do you want to continue adding student data y/n";**

**cin >> ans;**

**}**

**while(ans == 'y');**

**data.close();**

**ifstream info;**

**info.open("Student.dat",ios::in|ios::binary);**

**while(!info.eof())**

**{**

**Student newStudent;**

**info.read(reinterpret\_cast<char \*>(&newStudent),sizeof(newStudent));**

**if (info)**

**newStudent.display();**

**}**

**info.close();**

**return 0;**

**}**

**#include<iostream>//or**

**#include<fstream>**

**#include<iomanip>**

**using namespace std;**

**class student**

**{**

**char name[20],department[20],address[20];**

**int id;**

**public:**

**void getdata()**

**{**

**cout<<endl<<"Name:\t";**

**cin.getline(name,20);**

**cout<<endl<<"Address:\t";**

**cin.getline(address,20);**

**cout<<endl<<"Department:\t";**

**cin.getline(department,20);**

**cout<<endl<<"Id:\t";**

**cin>>id;**

**cin.ignore();**

**}**

**void displaydata()**

**{ cout<<setiosflags(ios::left)<<setw(20)<<name<<setw(20)<<address<<setw(20)<<department<<setw(20)<<id<<endl;**

**}**

**};**

**int main()**

**{**

**ofstream file\_write;**

**student st;**

**student disp;**

**char c;**

**file\_write.open("student.txt",ios::out|ios::binary);**

**cout<<"Enter students data:"<<endl;**

**do**

**{**

**st.getdata();**

**file\_write.write(reinterpret\_cast<char\*>(&st),sizeof (st));**

**cout<<"Do you want to add more(y/n)?";**

**cin>>c;**

**cin.ignore();**

**}while(c!='n');**

**file\_write.close();**

**ifstream file\_read;**

**file\_read.open("student.txt",ios::in|ios::binary);**

**cout<<endl<<setiosflags(ios::left)<<setfill('\*')<<setw(62)<<'\*'<<endl;**

**cout<<setfill(' ')<<setw(20)<<"Name"<<setw(20)<<"Address"<<setw(20)<<"Department"<<setw(20)<<"Id"<<endl;**

**cout<<setiosflags(ios::left)<<setfill('\*')<<setw(62)<<'\*'<<setfill(' ')<<endl;**

**while(file\_read.read(reinterpret\_cast<char\*>(&disp),sizeof(disp)))**

**{**

**disp.displaydata();**

**}**

**file\_read.close();**

**}**