#include<iostream>

#include<fstream>

#include<stdlib.h>

#include<string.h>

using namespace std;

class file

{

int roll;

float age;

char name[100];

public:

void input();

void show();

char \*getn()

{

return name;

}

};

file fileobj;

fstream fil;

void file::input()

{

cout<<"Enter the roll, Age and name :";

cin>>roll>>age;

cin>>name;

}

void file::show()

{

cout<<"Roll==> "<<roll<<endl;

cout<<"Age ==> "<<age<<endl;

cout<<"Name==> "<<name<<endl;

}

void Create() //Function to Create Data File

{

char ch='y';

fil.open("binary.dat",ios::out| ios::binary);

while(ch=='y' || ch =='Y')

{

fileobj.input();

fil.write((char\*)&fileobj, sizeof(fileobj));

cout<<"Want to Continue.....";

cin>>ch;

}

fil.close();

}

void Add() //Function to Add New Record in Data File

{

char ch='y';

fil.open("binary.dat",ios::out|ios::app| ios::binary);

while(ch=='y' || ch =='Y')

{

fileobj.input();

fil.write((char\*)&fileobj, sizeof(fileobj));

cout<<"Want to Continue.....";

cin>>ch;

}

fil.close();

}

void Display() //Function to Display All Record from Data File

{

fil.open("binary.dat",ios::in| ios::binary);

if(!fil)

{

cout<<"File not Found";

exit(0);

}

else

{

fil.read((char\*)&fileobj, sizeof(fileobj));

while(!fil.eof())

{

fileobj.show();

fil.read((char\*)&fileobj, sizeof(fileobj));

}

}

fil.close();

}

void DisplayP() //Function to Display particular Record from Data File

{

char n[100];

cout<<"Enter Name that should be searched:";

cin>>n;

fil.open("binary.dat",ios::in| ios::binary);

if(!fil)

{

cout<<"File not Found";

exit(0);

}

else

{

fil.read((char\*)&fileobj, sizeof(fileobj));

while(!fil.eof())

{

if(strcmp(n,fileobj.getn())==0)

{

fileobj.show();

fil.close();

return;

}

fil.read((char\*)&fileobj, sizeof(fileobj));

}

cout<<"Record not found\n";

}

fil.close();

}

void Modify() //Function to Modify Particular Record from Data File

{

char n[100];

cout<<"Enter Name that should be searched:";

cin>>n;

fil.open("binary.dat",ios::in| ios::out|ios::binary);

if(!fil)

{

cout<<"File not Found";

exit(0);

}

else

{

fil.read((char\*)&fileobj, sizeof(fileobj));

while(!fil.eof())

{

if(strcmp(n,fileobj.getn())==0)

{

fil.seekg(0,ios::cur);

cout<<"Enter New Record.."<<endl;

fileobj.input();

int p=fil.tellg();

int q=sizeof(fileobj);

fil.seekp(p-q);

fil.write((char\*)&fileobj, sizeof(fileobj));

fil.close();

return;

}

fil.read((char\*)&fileobj, sizeof(fileobj));

}

cout<<"Record not found\n";

}

fil.close();

}

void Delete() //Function to Delete Particular Record from Data File

{

int flag=0;

char n[100];

cout<<"Enter Name that should be Deleted :";

cin>>n;

ofstream o;

o.open("new.dat",ios::out|ios::binary);

fil.open("binary.dat",ios::in| ios::binary);

if(!fil)

{

cout<<"File not Found";

exit(0);

}

else

{

fil.read((char\*)&fileobj, sizeof(fileobj));

while(!fil.eof())

{

if(strcmp(n,fileobj.getn())!=0)

o.write((char\*)&fileobj, sizeof(fileobj));

else

flag=1;

fil.read((char\*)&fileobj, sizeof(fileobj));

}

if(flag==0)

cout<<"Record not found\n";

}

o.close();

fil.close();

remove("binary.dat");

rename("new.dat", "binary.dat");

}

main()

{

int opt;

while(1)

{

cout<<"1.Create Data File"<<endl;

cout<<"2.Add New Record in Data File"<<endl;

cout<<"3.Display Record From Data File"<<endl;

cout<<"4.Display Particular Record From Data File"<<endl;

cout<<"5.Modify Paricular Record From Data File"<<endl;

cout<<"6.Delete Particular Record From Data File"<<endl;

cout<<"7.Exit From the Program"<<endl;

cout<<"Enter your Option : "<<endl;

cin>>opt;

switch(opt)

{

case 1:

Create();

cout<<"Display Main Menu"<<endl;

break;

case 2:

Add();

cout<<"Display Main Menu"<<endl;

break;

case 3:

Display();

cout<<"Display Main Menu"<<endl;

break;

case 4:

DisplayP();

cout<<"Display Main Menu"<<endl;

break;

case 5:

Modify();

cout<<"Display Main Menu"<<endl;

break;

case 6:

Delete();

cout<<"Display Main Menu"<<endl;

break;

case 7:

exit(0);

default:

cout<<"Wrong Choice....Press Key For View the Main Menu";

}

}

}