**Group A: Assignment No:11**

### Department maintains student information .The file contains rool number,division and address.Allow the user to add,delete information of student.Display Information of particular employee.If the record of student does not exist an appropriate message is displayed.If it is,then the system displays the details.Use sequential file to maintain the data.

#include<iostream>

#include<fstream>

#include<cstring>

using namespace std;

class tel

{

public:

int rollNo,roll1;

char name[10];

char div;

char address[20];

void accept()

{

cout<<"\n\tEnter Roll Number:";

cin>>rollNo;

cout<<"\n\tEnter the Name:";

cin>>name;

cout<<"\n\tEnter the Division:";

cin>>div;

cout<<"\n\tEnter the Address:";

cin>>address;

}

void accept2()

{

cout<<"\n\tEnter the Roll No. to modify:";

cin>>rollNo;

}

void accept3()

{

cout<<"\n\tEnter the name to modify:";

cin>>name;

}

int getRollNo()

{

return rollNo;

}

void show()

{

cout<<"\n\t"<<rollNo<<"\t\t"<<name<<"\t\t"<<div<<"\t\t"<<address;

}

};

int main()

{

int i,n,ch,ch1,rec,start,count,add,n1,add2,start2,n2,y,a,b,on,oname,add3,start3,n3,y1,add4,start4,n4;

char name[20],name2[20];

tel t1;

count=0;

fstream g,f;

do

{

cout<<"\n>>>>>>>>>>>>>>>>>>>>>>MENU<<<<<<<<<<<<<<<<<<<<";

cout<<"\n1.Insert and overwrite\n2.Show\n3.Search & Edit(number)\n4.Search & Edit(name)\n5.Search & Edit(onlynumber)\n6.Search & edit(only name)\n7.Delete a Student Record\n8.Exit\nEnter the Choice:";

cin>>ch;

switch(ch)

{

case 1:

f.open("StuRecord.txt",ios::out);

x:t1.accept();

f.write((char\*) &t1,(sizeof(t1)));

cout<<"\nDo you want to enter more records?\n1.Yes\n2.No";

cin>>ch1;

if(ch1==1)

goto x;

else

{

f.close();

break;

}

case 2:

f.open("StuRecord.txt",ios::in);

f.read((char\*) &t1,(sizeof(t1)));

//cout<<"\n\tRoll No.\t\tName \t\t Division \t\t Address";

while(f)

{

t1.show();

f.read((char\*) &t1,(sizeof(t1)));

}

f.close();

break;

case 3:

cout<<"\nEnter the roll number you want to find:";

cin>>rec;

f.open("StuRecord.txt",ios::in|ios::out);

f.read((char\*)&t1,(sizeof(t1)));

while(f)

{

if(rec==t1.rollNo)

{

cout<<"\nRecord found";

add=f.tellg();

f.seekg(0,ios::beg);

start=f.tellg();

n1=(add-start)/(sizeof(t1));

f.seekp((n1-1)\*sizeof(t1),ios::beg);

t1.accept();

f.write((char\*) &t1,(sizeof(t1)));

f.close();

count++;

break;

}

f.read((char\*)&t1,(sizeof(t1)));

}

if(count==0)

cout<<"\nRecord not found";

f.close();

break;

case 4:

cout<<"\nEnter the name you want to find and edit:";

cin>>name;

f.open("StuRecord.txt",ios::in|ios::out);

f.read((char\*)&t1,(sizeof(t1)));

while(f)

{

y=(strcmp(name,t1.name));

if(y==0)

{

cout<<"\nName found";

add2=f.tellg();

f.seekg(0,ios::beg);

start2=f.tellg();

n2=(add2-start2)/(sizeof(t1));

f.seekp((n2-1)\*sizeof(t1),ios::beg);

t1.accept();

f.write((char\*) &t1,(sizeof(t1)));

f.close();

break;

}

f.read((char\*)&t1,(sizeof(t1)));

}

break;

case 5:

cout<<"\n\tEnter the roll number you want to modify:";

cin>>on;

f.open("StuRecord.txt",ios::in|ios::out);

f.read((char\*) &t1,(sizeof(t1)));

while(f)

{

if(on==t1.rollNo)

{

cout<<"\n\tNumber found";

add3=f.tellg();

f.seekg(0,ios::beg);

start3=f.tellg();

n3=(add3-start3)/(sizeof(t1));

f.seekp((n3-1)\*(sizeof(t1)),ios::beg);

t1.accept2();

f.write((char\*)&t1,(sizeof(t1)));

f.close();

break;

}

f.read((char\*)&t1,(sizeof(t1)));

}

break;

case 6:

cout<<"\nEnter the name you want to find and edit:";

cin>>name2;

f.open("StuRecord.txt",ios::in|ios::out);

f.read((char\*)&t1,(sizeof(t1)));

while(f)

{

y1=(strcmp(name2,t1.name));

if(y1==0)

{

cout<<"\nName found";

add4=f.tellg();

f.seekg(0,ios::beg);

start4=f.tellg();

n4=(add4-start4)/(sizeof(t1));

f.seekp((n4-1)\*sizeof(t1),ios::beg);

t1.accept3();

f.write((char\*) &t1,(sizeof(t1)));

f.close();

break;

}

f.read((char\*)&t1,(sizeof(t1)));

}

break;

case 7:

int roll;

cout<<"Please Enter the Roll No. of Student Whose Info You Want to Delete:";

cin>>roll;

f.open("StuRecord.txt",ios::in);

g.open("temp.txt",ios::out);

f.read((char \*)&t1,sizeof(t1));

while(!f.eof())

{

if (t1.getRollNo() != roll)

g.write((char \*)&t1,sizeof(t1));

f.read((char \*)&t1,sizeof(t1));

}

cout << "The record with the roll no" << roll << "has been deleted" << endl;

f.close();

g.close();

remove("StuRecord.txt");

rename("temp.txt","StuRecord.txt");

break;

case 8:

cout<<"\n\tThank you";

break;

}

}while(ch!=8);

}





