**ASSIGNMENT: 8**

**AIM:**

Department maintains a student information. The file contains roll number, name, division and address.

Allow user to add, delete information of student. Display information of particular employee. If record of

student does not exist an appropriate message is displayed. If it is, then the system displays the student details Use Sequential file to maintain data

**CODE:**

#include<iostream>

#include<fstream>

using namespace std;

class student

{

int roll\_num;

char div;

string name;

string address;

public:

void getdata()

{

cout<<"\n Enter the Roll Number: ";

cin>>roll\_num;

cout<<"Enter the division: ";

cin>>div;

cout<<"Enter the Name: ";

fflush(stdin);

getline(cin,name);

cout<<"Enter the Address: ";

fflush(stdin);

getline(cin,address);

}

void putdata(int n)

{

student st[n];

ifstream infile;

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

for(int i=0;i<n;i++)

{

infile.read((char \*)&st[i],sizeof(st[i]));

cout<<"\n Roll Number: "<<st[i].roll\_num;

cout<<"\n Division: "<<st[i].div;

fflush(stdin);

cout<<"\n Name: "<<st[i].name;

fflush(stdin);

cout<<"\n Address: "<<st[i].address;

cout<<"\n \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \n";

}

infile.close();

}

void search\_(int n)

{

student st[n];

ifstream infile;

cout<<"\n Enter the Roll Number to be searched: ";

int r;

cin>>r;

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

for(int i=0;i<n;i++)

{

infile.read((char \*)&st[i],sizeof(st[i]));

if(st[i].roll\_num==r)

{

cout<<"\n Found";

cout<<"\n Details: "<<endl;

cout<<"\n Roll Number: "<<st[i].roll\_num;

cout<<"\n Division: "<<st[i].div;

fflush(stdin);

cout<<"\n Name: "<<st[i].name;

fflush(stdin);

cout<<"\n Address: "<<st[i].address;

cout<<"\n \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \n";

infile.close();

return;

}

}

cout<<"\n Not Found";

infile.close();

}

void del(int n)

{

student st[n];

int r;

cout<<"\n Enter the roll number to be deleted ";

cin>>r;

ifstream infile;

ofstream outfile;

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

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

for(int i=0;i<n;i++)

{

infile.read((char \*)&st[i],sizeof(st[i]));

if(st[i].roll\_num==r)

{

continue;

}

else

{

outfile.write((char \*)&st[i],sizeof(st[i]));

}

}

outfile.close();

infile.close();

remove("student.dat");

int re=rename("temp.dat","student.dat");

cout<<"Data deleted";

}

};

int main()

{

int n;

cout<<"\nEnter the Number of Students: ";

cin>>n;

student s[n];

ofstream outfile;

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

for(int i=0;i<n;i++)

{

cout<<"\n Enter the information of Students: ";

s[i].getdata();

outfile.write((char \*)&s[i],sizeof(s[i]));

}

outfile.close();

int c;

student d;

do

{

cout<<"\n 1.Search";

cout<<"\n 2.Delete";

cout<<"\n 3.Display";

cout<<"\n 4.Exit";

cout<<"\n Enter Your Choice";

cin>>c;

switch(c)

{

case 1:d.search\_(n);break;

case 2:d.del(n);n=n-1;break;

case 3:d.putdata(n);break;

case 4:break;

}

}

while(c!=4);

}

