#include<iostream>

Source Code

#include<fstream>

#include<string>

using *namespace* std;

*class* Employee{

*public:*

    string Name,Department,Address,Email\_Id,Position;

*long* *long* Id,Salary,Contact\_No,Experience;

    Employee(){

        Name="";

        Id=0;

        Department="";

        Salary=0;

        Address="";

        Contact\_No=0;

        Email\_Id="";

        Position="";

        Experience=0;

    }

*void* insert(){

        // Name

        cout<<"Enter the Name: ";

        cin>>this->Name;

        // ID

*int* check=1,num;

        while(check){

            cout<<"Enter the ID(4-Digit): ";

            cin>>num;

            if(999<num && num<10000){

                this->Id=num;

                check=0;

            }

            else{

                cout<<"Please enter valid Id!!!!!"<<endl;

            }

        }

        // Department

        cout<<"Department: ";

        cin>>this->Department;

        //Salary

        cout<<"Enter the Salary: ";

        cin>>this->Salary;

        //Address

*int* flag=1;

        string addr="";

        while(flag){

            cout<<"Enter the Address: ";

            cin>>addr;

            if(addr.length()<=12){

                this->Address=addr;

                flag=0;

            }

            else{

                cout<<"Alert! Address exceed the range."<<endl;

            }

        }

        // Contact\_No

        cout<<"Enter the Contact\_No: ";

        cin>>this->Contact\_No;

        //Email\_Id

        cout<<"Enter the Email\_Id: ";

        cin>>this->Email\_Id;

        //Position

        cout<<"Enter the Position: ";

        cin>>this->Position;

       // Experience in Years

        cout<<"Enter the Experience(years) ";

        cin>>this->Experience;

    }

*void* PrintList(){

        // cout<<"Details: ";

        cout<<"Name: "<<this->Name<<" ID: "<<this->Id<<" Department: "<<this->Department<<" Salary: "<<this->Salary<<" Address: "<<this->Address<<" Contact\_No: "<<this->Contact\_No<<" Email\_Id: "<<this->Email\_Id<<" Position: "<<this->Position<<" Experience: "<<this->Experience<<endl;

    }

};

*void* deleteList(Employee \**ob*,*int* \**idx*,*int* *i*, *int* \**shifts*){

        if(i < 1 || i > (\*idx)){

            cout<<"Data doesn't exist.\n";

            return;

        }

        for(*int* k=i-1;k<(\*idx);k++){

            (\*ob)=\*(ob+1);

            ob++;

            (\*shifts)++;

        }

        (\*idx)--;

        cout<<"Delete Sucessfull\n";

}

*int* main(){

*char* ch,n;

*int* idx=0;

    Employee ob[20];

    fstream fout,fin;

    // for read

    fin.open("temp.txt",ios::in);

    string str;

*char* alpha;

    while(!fin.eof())

    {

        fin.get(alpha);

        while(true){

            if(alpha==' ' || alpha=='\n'  || alpha=='\r' || fin.eof()){

                break;

            }

            str+=alpha;

            fin.get(alpha);

        }

        if(ob[idx].Name==""){

            // cout<<"Name:"<<str<<endl;

            ob[idx].Name=str;

            str.erase();

            continue;

        }

        else if(ob[idx].Id==0){

            // cout<<"Id:"<<str<<endl;

            ob[idx].Id=stoll(str);

            str.erase();

            continue;

        }

        else if(ob[idx].Department==""){

            // cout<<"DPT:"<<str<<endl;

            ob[idx].Department=str;

            str.erase();

            continue;

        }

        else if(ob[idx].Salary==0){

            // cout<<"SAL:"<<str<<endl;

            ob[idx].Salary=stoll(str);

            str.erase();

            continue;

        }

        else if(ob[idx].Address==""){

            // cout<<"Address:"<<str<<endl;

            ob[idx].Address=str;

            str.erase();

            continue;

        }

        else if(ob[idx].Contact\_No==0){

            // cout<<"CN:"<<str<<endl;

            ob[idx].Contact\_No=stoll(str);

            str.erase();

            continue;

        }

        else if(ob[idx].Email\_Id==""){

            // cout<<"EI:"<<str<<endl;

            ob[idx].Email\_Id=str;

            str.erase();

            continue;

        }

        else if(ob[idx].Position==""){

        //    cout<<"PS:"<<str<<endl;

            ob[idx].Position=str;

            str.erase();

            continue;

        }

        else if(ob[idx].Experience==0){

            // cout<<"Experience:"<<str<<endl;

            ob[idx].Experience=stoll(str);

            idx++;

            str.erase();

            continue;

        }

    }

    fin.close();

*int* n\_shifts[] = {-1, -1, -1, -1, -1, -1, -1, -1, -1};

    do{

    cout<<"// -------------------"<<endl;

    cout<<("LIST:");

    for (*int* j = 0; j < idx; j++){

        cout<<"\n"<<j+1<<".)"<<ob[j].Name;

    }

    // cout<<"//----------------------"<<endl;

    cout<<("\n\*\*\*\*\*\*\*Menu\*\*\*\*\*\n");

    cout<<"1. Search for 4th person ( by ID) and print name of the employee";

    cout<<"\n2. Print data for the first employee";

    cout<<"\n3. Print data for the last employee";

    cout<<"\n4. Delete data for the employee at last position";

    cout<<"\n5. Delete data for the employee at first position";

    cout<<"\n6. Delete data for the employee at third position";

    cout<<"\n7. Insert data for a new employee at last position";

    cout<<"\n8. Insert data for a new employee at first position";

    cout<<"\n9. Insert data for a new employee at second position"<<endl;

    cout<<"Enter your choice\n";

    cin>>n;

    switch(n){

        case '1':{

            //Search by id

*int* id;

            cout<<"Enter the ID: ";

            cin>>id;

            for(*int* i=0;i<idx;i++){

                if(ob[i].Id==id){

                    cout<<"Name: "<<ob[i].Name<<endl;

                }

            }

            n\_shifts[0] = 0;

            break;

        }

        case '2':{

            //Details of 1st Employee

            cout<<"Details of Empolyee 1: ";

            ob[0].PrintList();

            // cout<<endl;

            n\_shifts[1] = 0;

            break;

        }

        case '3':{

            //Details of last Employee

            cout<<"Details of Empolyee "<<idx<<": ";

            ob[idx-1].PrintList();

            // cout<<endl;

            n\_shifts[2] = 0;

            break;

        }

        case '4':{

            //Delete from last

*int* i=idx;

            n\_shifts[3] = 0;

            deleteList(&ob[i-1],&idx,i, &n\_shifts[3]);

            break;

        }

        case '5':{

            // Delete First

*int* i=1;

            n\_shifts[4] = 0;

            deleteList(&ob[i-1],&idx,i, &n\_shifts[4]);

            break;

        }

        case '6':{

            // Delete Third

            n\_shifts[5] = 0;

*int* i=3;

            deleteList(&ob[i-1],&idx,i, &n\_shifts[5]);

            break;

        }

        case '7': {

            //insert data at last

                    cout<<"Enter Details ---- Employee serialNumber"<<idx+1<<endl;

                    ob[idx].insert();

                    idx++;

                    break;

                    n\_shifts[6] = 0;

                }

        case '8':{

            //insert data at first

            n\_shifts[7] = 0;

            Employee temp[20];

            for(*int* i=0;i<=idx;i++){

                temp[i]=ob[i];

            }

            ob[0].insert();

            idx++;

            for(*int* i=1;i<=idx+1;i++){

                ob[i]=temp[i-1];

                n\_shifts[7]++;

            }

            break;

        }

        case '9':{

            //insert data at second

            n\_shifts[8] = 0;

            Employee temp[20];

            for(*int* i=0;i<=idx;i++){

                temp[i]=ob[i];

            }

            ob[1].insert();

            idx++;

            for(*int* i=0;i<=idx+1;i++){

                if(i<1){

                    ob[i]=temp[i];

                }

                if(i>1){

                    ob[i]=temp[i-1];

                    n\_shifts[8]++;

                }

            }

            break;

        }

        default:{

            cout<<"Enter the valid choice!!\n";

            break;

        }

    }

    cout<<"\nDo you wish to continue.y/n: ";

    cin>>ch;

    }while(ch!='n');

    cout<<"option\t\tN shifts";

    for(*int* i=0; i<9; i++){

        if(n\_shifts[i] != -1){

            cout<<endl<<i+1<<"\t\t"<<n\_shifts[i];

        }

    }

    return 0;

}

Output

// -------------------

LIST:

1.)Rohan

2.)Mohan

3.)Sohan

4.)Rahul

5.)Raju

6.)Ram

7.)Ranjeet

8.)Shayam

9.)Ajay

10.)Titu

\*\*Menu\*\*

1. Search for 4th person ( by ID) and print name of the employee

2. Print data for the first employee

3. Print data for the last employee

4. Delete data for the employee at last position

5. Delete data for the employee at first position

6. Delete data for the employee at third position

7. Insert data for a new employee at last position

8. Insert data for a new employee at first position

9. Insert data for a new employee at second position

Enter your choice

1

Enter the ID: 1236

Name: Sohan

Do you wish to continue.y/n: y

// -------------------

LIST:

1.)Rohan

2.)Mohan

3.)Sohan

4.)Rahul

5.)Raju

6.)Ram

7.)Ranjeet

8.)Shayam

9.)Ajay

10.)Titu

\*\*Menu\*\*

1. Search for 4th person ( by ID) and print name of the employee

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5. Delete data for the employee at first position

6. Delete data for the employee at third position

7. Insert data for a new employee at last position

8. Insert data for a new employee at first position

9. Insert data for a new employee at second position

Enter your choice

2

Details of Empolyee 1: Name: Rohan ID: 1234 Department: ComputerScience Salary: 1000000 Address: Xyz Contact\_No: 7838197234 Email\_Id: abc@gamil.com Position: SoftwareEngineer Experience: 4

Do you wish to continue.y/n: y

// -------------------

LIST:

1.)Rohan

2.)Mohan

3.)Sohan

4.)Rahul

5.)Raju

6.)Ram

7.)Ranjeet

8.)Shayam

9.)Ajay

10.)Titu

\*\*Menu\*\*

1. Search for 4th person ( by ID) and print name of the employee

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4. Delete data for the employee at last position

5. Delete data for the employee at first position

6. Delete data for the employee at third position

7. Insert data for a new employee at last position

8. Insert data for a new employee at first position

9. Insert data for a new employee at second position

Enter your choice

3

Details of Empolyee 10: Name: Titu ID: 1243 Department: BusinessManagement Salary: 1500000 Address: fkh Contact\_No: 5538197234 Email\_Id: jtc@gamil.com Position: Manager Experience: 4

Do you wish to continue.y/n: y

// -------------------

LIST:

1.)Rohan

2.)Mohan

3.)Sohan

4.)Rahul

5.)Raju

6.)Ram

7.)Ranjeet

8.)Shayam

9.)Ajay

10.)Titu

\*\*Menu\*\*

1. Search for 4th person ( by ID) and print name of the employee

2. Print data for the first employee

3. Print data for the last employee

4. Delete data for the employee at last position

5. Delete data for the employee at first position

6. Delete data for the employee at third position

7. Insert data for a new employee at last position

8. Insert data for a new employee at first position

9. Insert data for a new employee at second position

Enter your choice

4

Delete Sucessfull

Do you wish to continue.y/n: y

// -------------------

LIST:

1.)Rohan

2.)Mohan

3.)Sohan

4.)Rahul

5.)Raju

6.)Ram

7.)Ranjeet

8.)Shayam

9.)Ajay

\*\*Menu\*\*

1. Search for 4th person ( by ID) and print name of the employee

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5. Delete data for the employee at first position

6. Delete data for the employee at third position

7. Insert data for a new employee at last position

8. Insert data for a new employee at first position

9. Insert data for a new employee at second position

Enter your choice

5

Delete Sucessfull

Do you wish to continue.y/n: y

// -------------------

LIST:

1.)Mohan

2.)Sohan

3.)Rahul

4.)Raju

5.)Ram

6.)Ranjeet

7.)Shayam

8.)Ajay

\*\*Menu\*\*

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4. Delete data for the employee at last position

5. Delete data for the employee at first position

6. Delete data for the employee at third position

7. Insert data for a new employee at last position

8. Insert data for a new employee at first position

9. Insert data for a new employee at second position

Enter your choice

6

Delete Sucessfull

Do you wish to continue.y/n: y

// -------------------

LIST:

1.)Mohan

2.)Sohan

3.)Raju

4.)Ram

5.)Ranjeet

6.)Shayam

7.)Ajay

\*\*Menu\*\*

1. Search for 4th person ( by ID) and print name of the employee

2. Print data for the first employee

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4. Delete data for the employee at last position

5. Delete data for the employee at first position

6. Delete data for the employee at third position

7. Insert data for a new employee at last position

8. Insert data for a new employee at first position

9. Insert data for a new employee at second position

Enter your choice

8

Enter the Name: Golu

Enter the ID(4-Digit): 4321

Department: Tech

Enter the Salary: 12318

Enter the Address: 123-ABCVIHAR

Enter the Contact\_No: 9281841721

Enter the Email\_Id: 12jsad@fjak.com

Enter the Position: Head

Enter the Experience(years) 8

Do you wish to continue.y/n: n

option N shifts

1 0

2 0

3 0

4 1

5 9

6 6

8 9