#include<iostream.h>

#include<stdio.h>

#include<fstream.h>

#include<stdlib.h>

#include<string.h>

# include<conio.h>

class Person

{

char emp\_id[30];

char emp\_name[30];

char emp\_address[30];

char position[30];

char department[30];

char buffer[100];

public:

void input();

void output();

void search();

void modify();

void pack();

void unpack();

void Write();

};

void Person :: input()

{

cout<<"Enter EMP\_ID"<<endl;

cin>>emp\_id;

cout<<"Enter Name"<<endl;

cin>>emp\_name;

cout<<"Enter Address"<<endl;

cin>>emp\_address;

cout<<"Enter position"<<endl;

cin>>position;

cout<<"Enter department"<<endl;

cin>>department;

}

void Person :: output()

{

istream& flush();

cout<<"EMP\_ID:";

puts(emp\_id);

cout<<"emp\_Name :";

puts(emp\_name);

cout<<"emp\_Address :";

puts(emp\_address);

cout<<"position :";

puts(position);

cout<<"department :";

puts(department);

}

void Person::pack()

{

strcpy(buffer,emp\_id); strcat(buffer,"|");

strcat(buffer,emp\_name); strcat(buffer,"|");

strcat(buffer,emp\_address); strcat(buffer,"|");

strcat(buffer,position); strcat(buffer,"|");

strcat(buffer,department); strcat(buffer,"|");

strcat(buffer,"#");

}

void Person::unpack()

{

char \*ptr = buffer;

while(\*ptr!='#')

{

if(\*ptr == '|')

\*ptr = '\0';

ptr++;

}

ptr = buffer;

strcpy(emp\_id,ptr);

ptr = ptr +strlen(ptr)+1;

strcpy(emp\_name,ptr);

ptr = ptr +strlen(ptr)+1;

strcpy(emp\_address,ptr);

ptr = ptr +strlen(ptr)+1;

strcpy(position,ptr);

ptr = ptr+strlen(ptr)+1;

strcpy(department,ptr);

}

void Person:: Write()

{

fstream os("p.txt",ios::out|ios::app);

os.write(buffer,strlen(buffer));

os<<endl;

os.close();

}

void Person :: search()

{

int found = 0;

char key[30];

fstream is("p.txt",ios::in);

cout<<"Enter The emp\_id Of The Record To Be Searched "<<endl;

cin>>key;

while(!is.eof() && !found)

{

is.getline(buffer,'#');

unpack();

if(strcmp(emp\_id,key) == 0)

{

cout<<"Record Found!!! "<<endl;

output();

found = 1;

}

}

if(!found)

cout<<"Record Not Found!!!"<<endl;

is.close();

}

void Person :: modify()

{

char key[30];

char del='$';

cout<<"Enter The emp\_id Of The Record To Be Modified"<<endl;

cin>>key;

int found = 0;

fstream is;

is.open("p.txt",ios::in|ios::out);

while(!is.eof() && !found)

{

is.getline(buffer,'#');

int len=strlen(buffer);

unpack();

if(strcmp(emp\_id,key) == 0)

{

int pos=is.tellg();

pos=pos-len;

is.seekg(pos,ios::beg);

is<<del;

cout<<"ENTER 1:EMP\_ID\n2:EMP\_NAME\n3:EMP\_ADDRESS \n4:POSITION \n 5:DEPARTMENT\n";

cout<<"Enter What to modify ? ";

int ch;

cin>>ch;

switch(ch)

{

case 1:

cout<<"EMP\_ID :";

cin>>emp\_id;

break;

case 2 :

cout<<"\nEMP\_NAME :";

cin>>emp\_name;

break;

case 3:

cout<<"\n POSITION :";

cin>>position;

break;

case 4:

cout<<"\nEMP\_ADDRESS :";

cin>>emp\_address;

break;

case 5:

cout<<"\n DEPARTMENT :";

cin>>department;

break;

default :

cout<<"wrong choice !!!";

break;

}

found = 1;

pack();

Write();

}

}

if(!found)

cout<<"The Record with the given emp\_id does not exist "<<endl;

is.close();

}

void main()

{

int choice = 1;

clrscr();

Person ob;

//istream& flush();

//ostream& flush();

//char filename[] = "p.txt";

while(choice < 4)

{

cout<<"1> Insert A Record "<<endl;

cout<<"2> Search For A Record "<<endl;

cout<<"3> Modify A Record "<<endl;

cout<<"4> Exit "<<endl;

cin>> choice;

switch(choice)

{

case 1: ob.input();

ob.pack();

ob.Write();

break;

case 2: ob.search();

break;

case 3: ob.modify();

break;

}

} getch();

}