**ASSIGNMENT NO.-12**

**Program Statement:**

Company maintains employee information as employee ID,name, designation and salary. Allow user to add, delete information of employee.Display information of particular employee. If employee does not exist an appropriate message is displayed. If it is, then the system displays the employee details. Use index sequential file to maintain the data.

**Program:**

#include <iostream>

#include <fstream>

#include <cstring>

using namespace std;

class Emp

{

int empid;

char name[20];

char design[20];

float salary;

public:

Emp()

{

empid=0;

strcpy(name,“”);

strcpy(design,"");

salary=0.0;

}

int acceptempid()

{

return(empid);

}

void getdata()

{

cout<<"\nEnter Emp details:";

cout<<"\nEnter emp id:";

cin>>empid;

cout<<"Enter emp name : ";

cin>>name;

cout<<"Enter Designation : ";

cin>>design;

cout<<"Enter salary: ";

cin>>salary;

}

void display()

{

cout<<"\n Emp Details";

cout<<"\n Emp id = "<<empid;

cout<<"\n Emp Name = "<<name;

cout<<"\n Designation = "<<design;

cout<<"\n Salary = "<<salary;

}

};

class fileop

{

ifstream fin;

ofstream fout;

fstream fs;

public:

void insert();

void show();

void search(int);

int deleterecord(int);

int append(int);

};

void fileop::insert()

{

Emp obj;

obj.getdata();

fout.open("data.txt",ios::ate|ios::app);

fout.write((char\*)&obj,sizeof(obj));

fout.close();

}

void fileop::show()

{

Emp obj;

fin.open("data.txt");

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

while(fin.read((char\*)&obj,sizeof(obj)))

{

obj.display();

}

fin.close();

}

void fileop::search(int rno)

{

Emp obj;

int flag=0;

fin.open("data.txt");

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

while(fin.read((char\*)&obj,sizeof(obj)))

{

if(obj. acceptempid()==rno)

{

flag=1;

break;

}

}

fin.close();

if(flag==1)

{

cout<<"\n Emp found";

obj.display();

}

else

{

cout<<"\n Emp not found";

}

}

int fileop::deleterecord(int rno)

{

Emp obj;

int flag=0;

fin.open("data.txt");

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

while(fin.read((char\*)&obj,sizeof(obj)))

{

if(obj. acceptempid()==rno)

{

flag=1;

}

else

{

fout.write((char\*)&obj,sizeof(obj));

}

}

fin.close();

fout.close();

remove("data.txt");

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

return(flag);

}

int fileop::append(int rno)

{

Emp obj;

int flag=0;

fs.open("data.txt");

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

while(fs.read((char\*)&obj,sizeof(obj)))

{

if(obj. acceptempid()==rno)

{

flag=1;

cout<<"\n Enter new details: ";

obj.getdata();

fs.seekp((int)fs.tellg()-sizeof(obj),ios::beg);

fs.write((char\*)&obj,sizeof(obj));

}

}

fs.close();

return(flag);

}

int main()

{

fileop fobj;

char ch='y';

int choice,key, n;

do{

cout<<"\n Main Menu";

cout<<"\n 1. Create";

cout<<"\n 2. Display";

cout<<"\n 3. Search";

cout<<"\n 4. Delete";

cout<<"\n 5. Append";

cout<<"\n 6. Exit";

cout<<"\n Enter your choice:";

cin>>choice;

switch(choice)

{

case 1: fobj.insert();

break;

case 2: fobj.show();

break;

case 3:

cout<<"\n Enter emp id to search : ";

cin>>n;

fobj.search(n);

break;

case 4:

cout<<"\n Enter emp id to delete : ";

cin>>n;

fobj.deleterecord(n);

break;

case 5:

cout<<"\n Enter emp id to edit : ";

cin>>n;

fobj.append(n);

break;

case 6: exit(0);

}

cout<<"\n Do you want to continue:";

cin>>ch;

}while(ch=='y');

return 0;

}

