

Practical 8

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```
#include <iostream>
```

```
#include<string>
```

```
#include<fstream>
```

```
using namespace std;
```

```
class Employee{
```

```
    int emp_id,age;
```

```
    char name[30],department[30],post[30];
```

```
    float salery;
```

```
public:
```

```
    void read(){
```

```
        cout<<"\n\nEnter Employee Id :";
```

```
        cin>>emp_id;
```

```
        cout<<"\n\nEnter Employee Name :";
```

```
        cin>>name;
```

```
        cout<<"\n\nEnter Employee Salary :";
```

```
        cin>>salery;
```

```
        cout<<"\n\nEnter Employee Department:";
```

```
        cin>>department;
```

```
        cout<<"\n\nEnter Employee Post :";
```

```
        cin>>post;
```

```
    }
```

```
    void display(){
```

```
        cout<<"\n"<<emp_id<<"\t"<<name<<"\t"
        <<salery<<"\t"<<department<<"\t"<<post;
```

```
    }
```

```
    int getEmpId(){
```

```
        return emp_id;
```

```
    }
```

```
};
```

```
void writeInFile(){
```

```
    Employee e;
```

```
    ofstream ofs;
```

```
    e.read(); //accept data from user
```

```
    ofs.open("emp.dat",ios::binary|ios::app);
```

```
    ofs.write((char*)&e,sizeof(e)); //write
    data into the file
```

```
    ofs.close();
```

```
}
```

```
void readFromFile(){
```

```

Employee e;

ifstream ifs;
ifs.open("emp.dat",ios::binary);

while(ifs.read((char*)&e,sizeof(e))){
    e.display();
}
ifs.close();
}

void search( int id){
    ifstream fin;
    int flag=0;
    fin.open("emp.dat",ios::binary);

    Employee e;

    while(fin.read((char *)&e,sizeof(e))){
        if(id==e.getEmpId()){
            cout<<"\n\nEmployee Id
found..";
            flag=1;
            e.display();
        }
    }
    if(flag==0){
        cout<<"\nEmployee Not Found....";
    }
    fin.close();
}

```

```

void updateFile( int id){

    int pos, flag = 0;

    fstream fs;
    Employee e;

    fs.open("emp.dat",ios::in | ios::binary |
ios::out);

    while (!fs.eof()) {

        // storing the position of current file
        pointer i.e. at the end of previously read
        record

        pos = fs.tellg();

        fs.read((char*)&e, sizeof(e));
        if (fs) {

            if (id == e.getEmpId()) {
                flag = 1;

                e.read();

                // placing the put(writing)
                pointer at the starting of the record

                fs.seekp(pos);

                fs.write((char*)&e, sizeof(e));

                e.display();
                break;
            }
        }
    }
}

```

```

    }
}
fs.close();

if (flag == 1)
    cout << "\nRecord successfully
modified \n";
else
    cout << "\nRecord not found \n";

}
int main()
{
    int ch,id;
    while(1){
        cout<<"\nSelect from below
choices";

        cout<<"\n1.Insert Data \n2.Display
\n3.Search\n4.Update Reord\n5.Exit";
        cout<<"\nEnter Your Choice:";
        cin>>ch;

        switch(ch){

            case 1:
                writeInFile();

                break;

            case 2:

                cout<<"\nEmpId\tEmpName\tSalary\tDept
\tPost";

```

```

                cout<<"\n-----
-----";
                readFromFile();

                break;

            case 3:
                cout<<"\n\nEnter Employee
Id to Find Employee:";
                cin>>id;

                cout<<"\nEmpId\tEmpName\tSalary\tDept
\tPost";

                cout<<"\n-----
-----";
                search(id);

                break;

            case 4:
                cout<<"\nEnter employee
id for updateFile:";
                cin>>id;
                updateFile(id);

                break;

            case 5:
                exit(0);

                break;

        }

    }

    return 0;
}

```

Output

Select from below choices

1.Insert Data

2.Display

3.Search

4.Update Reord

5.Exit

Enter Your Choice:1

Enter Employee Id :101

Enter Employee Name :sau

Enter Employee Salary :100

Enter Employee Department:comp

Enter Employee Post :hod

Select from below choices

1.Insert Data

2.Display

3.Search

4.Update Reord

5.Exit

Enter Your Choice:2

EmpId	EmpName	Salary	Dept	Post
-------	---------	--------	------	------

101	sau	100	comp	hod
-----	-----	-----	------	-----

Select from below choices

1.Insert Data

2.Display

3.Search

4.Update Reord

5.Exit

Enter Your Choice:1

Enter Employee Id :102

Enter Employee Name :om

Enter Employee Salary :2000

Enter Employee Department:it

Enter Employee Post :developer

Select from below choices

1.Insert Data

2.Display

3.Search

4.Update Reord

5.Exit

Enter Your Choice:3

Enter Employee Id to Find Employee:101

EmpId	EmpName	Salary	Dept	Post

Employee Id found..

101 sau 100 comp hod

Select from below choices

1.Insert Data

2.Display

3.Search

4.Update Reord

5.Exit

Enter Your Choice:4

Enter employee id for updateFile:101

Enter Employee Id :101

Enter Employee Name :saurabh

Enter Employee Salary :4000

Enter Employee Department:comp

Enter Employee Post :hod

101 saurabh 4000 comp hod

Record successfully modified