FILE HANDLING EMPLOYEE

```
#include<iostream>
#include<fstream>
#include<stdio.h>

using namespace std;

//Employee class Declaration
class Employee{
    private:
        int code;
        char name[20];
        float salary;
    public:
        void read();
        void display();
        //will return employee code
        int getEmpCode()            { return code;}
        //will return employee salary
        int getSalary()             { return salary;}
        //will update employee salary
        void updateSalary(float s)  { salary=s;}
};

//Read employee record
void Employee::read(){
    cout<<"Enter employee code: ";
    cin>>code;
    cout<<"Enter name: ";
    cin.ignore(1);
    cin.getline(name,20);
    cout<<"Enter salary: ";
    cin>>salary;
}

//Display employee record
void Employee::display()
{
    cout<<code<<" "<<name<<"\t"<<salary<<endl;
}

//global declaration
fstream file;

//Will delete file when program is being executed
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//because we are create file in append mode
void deleteExistingFile(){
    remove("EMPLOYEE.DAT");
}

//function to append record into file
void appendToFille(){
    Employee    x;

    //Read employee record from user
    x.read();

    file.open("EMPLOYEE.DAT",ios::binary|ios::app);
    if(!file){
        cout<<"ERROR IN CREATING FILE\n";
        return;
    }
    //write into file
    file.write((char*)&x,sizeof(x));
    file.close();
    cout<<"Record added sucessfully.\n";
}

void displayAll(){
    Employee    x;

    file.open("EMPLOYEE.DAT",ios::binary|ios::in);
    if(!file){
        cout<<"ERROR IN OPENING FILE \n";
        return;
    }
    while(file){
    if(file.read((char*)&x,sizeof(x)))
        if(x.getSalary()>=10000 && x.getSalary()<=20000)
            x.display();
    }
  file.close();
}

void searchForRecord(){
    //read employee id
    Employee    x;
    int c;
    int isFound=0;

    cout<<"Enter employee code: ";
    cin>>c;
```

```
    file.open("EMPLOYEE.DAT",ios::binary|ios::in);
    if(!file){
        cout<<"ERROR IN OPENING FILE \n";
        return;
    }
    while(file){
        if(file.read((char*)&x,sizeof(x))){
            if(x.getEmpCode()==c){
                cout<<"RECORD FOUND\n";
                x.display();
                isFound=1;
                break;
            }
        }
    }
    if(isFound==0){
        cout<<"Record not found!!!\n";
    }
    file.close();
}

//Function to increase salary
void increaseSalary(){
    //read employee id
    Employee    x;
    int c;
    int isFound=0;
    float sal;

    cout<<"enter employee code \n";
    cin>>c;


    file.open("EMPLOYEE.DAT",ios::binary|ios::in);
    if(!file){
        cout<<"ERROR IN OPENING FILE \n";
        return;
    }
    while(file){
        if(file.read((char*)&x,sizeof(x))){
            if(x.getEmpCode()==c){
                cout<<"Salary hike? ";
                cin>>sal;
                x.updateSalary(x.getSalary()+sal);
                isFound=1;
```

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                break;
            }
        }
    }
    if(isFound==0){
        cout<<"Record not found!!!\n";
    }
    file.close();
    cout<<"Salary updated successfully."<<endl;
}

//Insert record by assuming that records are in
//ascending order
void insertRecord(){
    //read employee record
    Employee    x;
    Employee newEmp;

    //Read record to insert
    newEmp.read();

    fstream fin;
    //read file in input mode
    file.open("EMPLOYEE.DAT",ios::binary|ios::in);
    //open file in write mode
    fin.open("TEMP.DAT",ios::binary|ios::out);

    if(!file){
        cout<<"Error in opening EMPLOYEE.DAT file!!!\n";
        return;
    }
    if(!fin){
        cout<<"Error in opening TEMP.DAT file!!!\n";
        return;
    }
    while(file){
        if(file.read((char*)&x,sizeof(x))){
            if(x.getEmpCode()>newEmp.getEmpCode()){
                fin.write((char*)&newEmp, sizeof(newEmp));
            }
            //no need to use else
            fin.write((char*)&x, sizeof(x));
        }
    }

    fin.close();
    file.close();
```

```
    rename("TEMP.DAT","EMPLOYEE.DAT");
    remove("TEMP.DAT");
    cout<<"Record inserted successfully."<<endl;
}

int main()
{
     char ch;

    //if required then only remove the file
     deleteExistingFile();

     do{
     int n;

     cout<<"ENTER CHOICE\n"<<"1.ADD AN
EMPLOYEE\n"<<"2.DISPLAY\n"<<"3.SEARCH\n"<<"4.INCREASE SALARY\n"<<"5.INSERT
RECORD\n";
     cout<<"Make a choice: ";
     cin>>n;

     switch(n){
          case 1:
            appendToFille();
            break;
          case 2 :
            displayAll();
            break;
          case 3:
            searchForRecord();
            break;
        case 4:
            increaseSalary();
            break;
        case 5:
            insertRecord();
            break;

          default :
                cout<<"Invalid Choice\n";
     }

     cout<<"Do you want to continue ? : ";
     cin>>ch;

     }while(ch=='Y'||ch=='y');
```

```
    return 0;
}
```