

Assignment No. 12

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Programme:

```
#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;

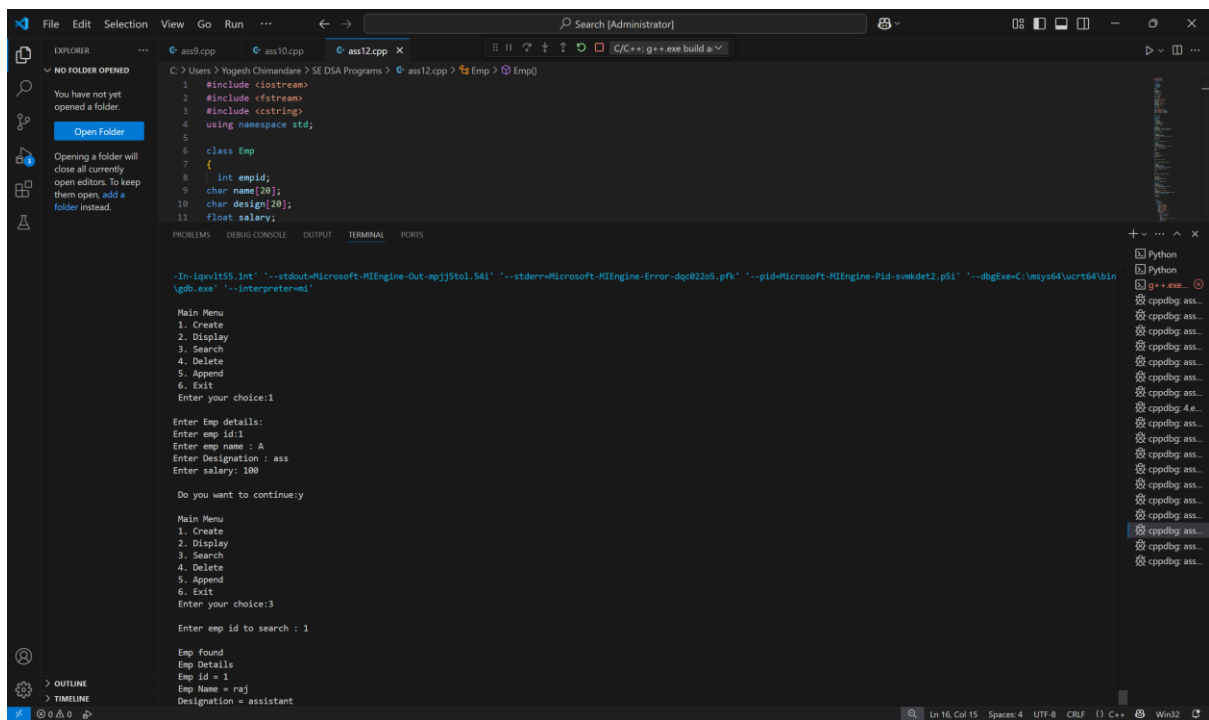
    }while(ch=='y');

return 0;

}

```

Output:



The screenshot displays the Visual Studio Code interface with a C++ file named `ass12.cpp` open. The code defines an `Emp` class with attributes `empid`, `name`, `design`, and `salary`. The terminal window shows the program's execution, which includes a menu-driven interface for creating, displaying, searching, deleting, and appending employee records. The user has entered the following data:

- Enter emp id: 1
- Enter emp name : A
- Enter Designation : ass
- Enter salary: 100
- Do you want to continue: y
- Enter emp id to search : 1

The output shows that the employee was successfully found with the details: Emp id = 1, Emp Name = raj, and Designation = assistant.

```
1 #include <iostream>
2 #include <fstream>
3 #include <cstring>
4 using namespace std;
5
6 class Emp
7 {
8     int empid;
9     char name[20];
10    char design[20];
11    float salary;
12 }
13
14 int main()
15 {
16     Emp e;
17     int choice;
18     while (1)
19     {
20         cout << "Main Menu\n";
21         cout << "1. Create\n";
22         cout << "2. Display\n";
23         cout << "3. Search\n";
24         cout << "4. Delete\n";
25         cout << "5. Append\n";
26         cout << "6. Exit\n";
27         cout << "Enter your choice: ";
28         cin >> choice;
29
30         switch (choice)
31         {
32             case 1:
33                 e.create();
34                 break;
35             case 2:
36                 e.display();
37                 break;
38             case 3:
39                 e.search();
40                 break;
41             case 4:
42                 e.delete();
43                 break;
44             case 5:
45                 e.append();
46                 break;
47             case 6:
48                 exit(0);
49         }
50     }
51 }
```

```
-In-ixqvl55.int' '--stdout=Microsoft-MIEngine-Out-mpj5to1.54i' '--stderr=Microsoft-MIEngine-Error-dqo02zo5.pfk' '--pid=Microsoft-MIEngine-Pid-svskdet2.p5i' '--dbgExe=C:\msys64\ucrt64\bin\gdb.exe' '--interpreter=mi'
Main Menu
1. Create
2. Display
3. Search
4. Delete
5. Append
6. Exit
Enter your choice:1

Enter Emp details:
Enter emp id:1
Enter emp name : A
Enter Designation : ass
Enter salary: 100

Do you want to continue:y

Main Menu
1. Create
2. Display
3. Search
4. Delete
5. Append
6. Exit
Enter your choice:3

Enter emp id to search : 1

Emp found
Emp Details
Emp id = 1
Emp Name = raj
Designation = assistant
```