

Assignment no 1 1

/*Department maintains a student information. The file contains roll number, name, division and address. Allow user to add, delete information of student. Display information of particular employee. If record of student does not exist an appropriate message is displayed. If it is, then the system displays the student details. Use sequential file to main the data.*/

```
#include<iostream>
#include<fstream> using
namespace std; class student
```

```
public:
char name[10]; int roll;
void getdata()
```

```
cout<<"\n Enter the roll no and name:" ; cin>>roll>>name;
```

```
void putdata()
```

```
cout<<"\n The roll no and name:" ; cout<<roll<<" "<<n
```

class file

```
fstream fp; public:
void create()
```

```
char ans; student s;
fp.open("stu.dat",ios::out); do
```

```
s.getdata(); fp.write((char
*)&s,sizeof(s)); cout<<"\n More?" •
```

```
cin>>ans; }
```

```
while(ans=='Y'||ans 'y'); fp.close(); void
append()
```

```
char ans; student s;
fp.open("stu.dat",ios::app); do
```

```
s.getdata(); fp.write((char
*)&s,sizeof(s)); cout<<"\n More?"•
cin>>ans;
```

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

```

        fp.close(); void

display()

        student s; fp.open("stu.dat",ios::in);
        while(!fp.eof())

                fp.read((char *)&s,sizeof(s)); if(!fp.eof()
                s.putdata());

fp.close(); void search()

        student s; int flag=0; int r; cout <<"\n Enter
        roll to be searched:"; cin >> r;
        fp.open("stu.dat",ios::in); while(!fp.eof())

                fp.read((char *)&s,sizeof(s)); if(!fp.eof() &&
                s.roll==r)
                { flag=1; s.putdata(); break; }
        if cout << "\n Not found"; fp.close(); void
update()

        student s; int flag=0; int r; cout <<"\n
        Enter roll to be updated:"; cin >> r;
        fp.open("stu.dat",ios::in);
        while(!fp.eof())

                fp.read((char *)&s,sizeof(s)); if(!fp.eof() && s.roll
                r)

                flag=1; cout <<"\n Enter new data\n";
                s.getdata(); fp.seekp(-1*sizeof(s)
                fp.write((char *)&s,sizeof(s)); break;

        if cout << "\n Not found"; fp.close(); void
deletel ()

        student s; int flag=0; fstream fp1 ; cout <<"\n
        Enter roll to be deleted: "; int r; cin r;
        fp.open("stu.dat",ios::in); fp1
        .open("temp.dat",ios::out);
        while(fp.read((char *)&s,sizeof(s)))

                if( s.roll!=r)

                        flag=1; fp1 .write((char *)&s,sizeof(s));
        if cout << "\n Not found"; fp.close(); fp1
        .close(); remove("stu.dat");
        rename("temp.dat","stu.dat");

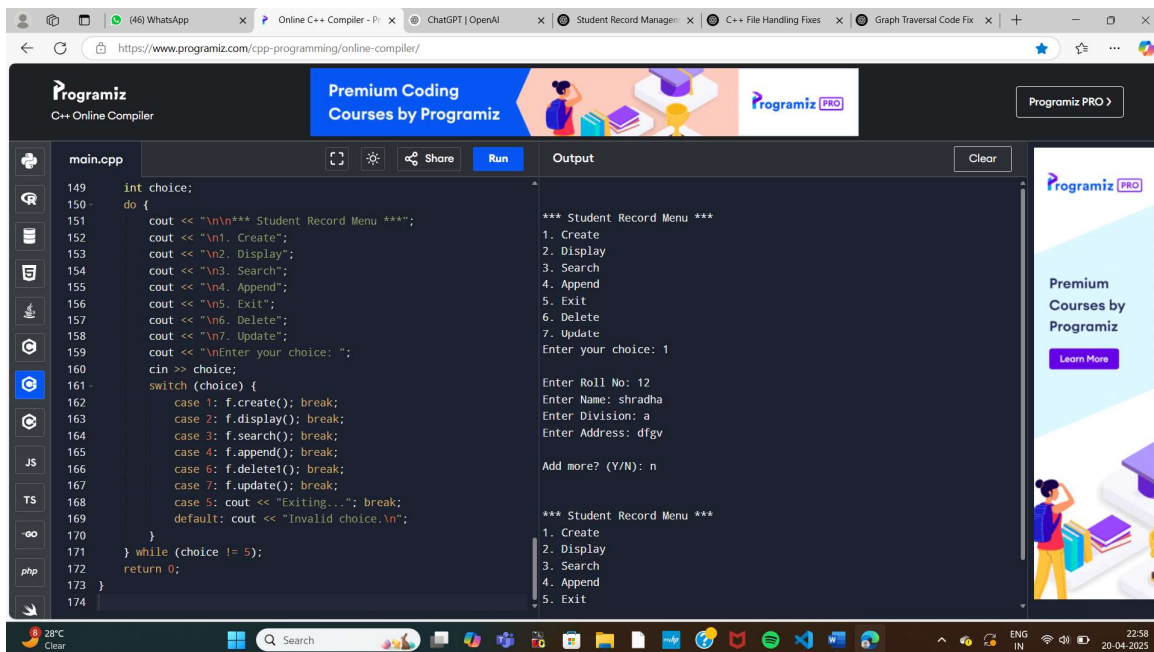
```

```
int main()
```

```
    file f; int choice; do { cout << "\n\n1 create \n 2 display \n 3 Search \n 4 Append";  
    cout << " \n 6 delete In 7 Update"; cout << "\n Enter choice: "; cin >> choice;  
    switch(choice)
```

```
        case 1:f.create(); break; case  
        2:f.display(); break; case 3:f.search();  
        break; case 4:f.append(); break; case  
        6:f.delete1();break; case  
        7:f.update();break;
```

```
    }while(choice< 8);  
    }return 0;}
```



The screenshot shows the Programiz C++ Online Compiler interface. The code editor on the left contains a C++ program for a student record menu. The program prompts the user to enter a choice from 1 to 7. The output window on the right shows the program's execution, displaying the menu, taking user input for roll number, name, division, and address, and then displaying the menu again.

```
main.cpp  
149 int choice;  
150 do {  
151     cout << "\n\n*** Student Record Menu ***";  
152     cout << "\n1. Create";  
153     cout << "\n2. Display";  
154     cout << "\n3. Search";  
155     cout << "\n4. Append";  
156     cout << "\n5. Exit";  
157     cout << "\n6. Delete";  
158     cout << "\n7. Update";  
159     cout << "\nEnter your choice: ";  
160     cin >> choice;  
161     switch (choice) {  
162         case 1: f.create(); break;  
163         case 2: f.display(); break;  
164         case 3: f.search(); break;  
165         case 4: f.append(); break;  
166         case 6: f.delete1(); break;  
167         case 7: f.update(); break;  
168         case 5: cout << "Exiting..."; break;  
169         default: cout << "Invalid choice.\n";  
170     }  
171 } while (choice != 5);  
172 return 0;  
173 }  
174
```

Output

```
*** Student Record Menu ***  
1. Create  
2. Display  
3. Search  
4. Append  
5. Exit  
6. Delete  
7. Update  
Enter your choice: 1  
  
Enter Roll No: 12  
Enter Name: shradha  
Enter Division: a  
Enter Address: dfgv  
  
Add more? (Y/N): n  
  
*** Student Record Menu ***  
1. Create  
2. Display  
3. Search  
4. Append  
5. Exit
```