

Assignment10.cpp

```
1  #include <iostream>
2  #include <fstream>
3  #include <algorithm>
4  #include <string>
5  using namespace std;
6
7  void add_record(){
8      fstream file;
9      file.open("StudentRecord.txt", ios::app);
10     string name, address;
11     int roll;
12     char division;
13     cout << "Enter name: (Use underscore instead of space) ";
14     cin >> name;
15     for(int i = 0; i < name.length(); i++){
16         if(name[i] == '_'){
17             name[i] = ' ';
18         }
19     }
20     cout << "Enter address: (Use underscore instead of space) ";
21     cin >> address;
22     for(int i = 0; i < address.length(); i++){
23         if(address[i] == '_'){
24             address[i] = ' ';
25         }
26     }
27
28     cout << "Enter roll no: ";
29     cin >> roll;
30     cout << "Enter division: ";
31     cin >> division;
32     file << roll << " " << name << " " << division << " " << address << endl;
33     file.close();
34 }
35
36 string search(){
37     fstream file;
38     file.open("StudentRecord.txt");
39     int roll;
40     cout<<"Enter roll number of student to be found: ";
41     cin>>roll;
42     string line;
43     while(getline(file,line)){
44         string temp = line.substr(0,4);
45         if(temp == to_string(roll)){
46             return line;
47             break;
48         }
49     }
50     return "Record not found";
```

```
51
52
53 }
54 void display(){
55     fstream file;
56     file.open("StudentRecord.txt");
57     string line;
58     while(getline(file, line)){
59         cout << line << endl;
60     }
61     file.close();
62 }
63
64 void deleteLine(){
65     bool found = false;
66     fstream file,tempf,f2;
67     file.open("StudentRecord.txt");
68     int roll;
69     cout<<"Enter roll number of student to be deleted: ";
70     cin>>roll;
71     string line;
72     tempf.open("temp.txt",std::ios::out);
73     while(getline(file,line)){
74         string temp = line.substr(0,4);
75         if(temp == to_string(roll)){
76             found = true;
77             continue;
78         }
79         }else{
80             tempf << line << endl;
81         }
82     }
83     file.close();
84     remove("StudentRecord.txt");
85     tempf.close();
86     rename("temp.txt","StudentRecord.txt");
87     if(found){
88         cout<<"Record deleted successfully\n";
89     }else{
90         cout<<"Record not found\n";
91     }
92 }
93
94 }
95
96 int main(){
97     int choice;
98     do{
99         cout << "1. Add record\n2. Search record\n3. Display all records\n4.
Delete\n5.Exit\nEnter your choice: ";
100         cin >> choice;
101         switch(choice){
102             case 1:
```

```
103         add_record();
104         break;
105     case 2:
106         cout << search() << endl;
107         break;
108     case 3:
109         display();
110         break;
111     case 4:
112         deleteLine();
113         break;
114     case 5:
115         cout << "Exiting\n";
116         break;
117
118     default:
119         cout << "Invalid choice\n";
120     }
121     }while(choice != 5);
122     return 0;
123
124
125 }
126
127 /*
128 Output:
129 1. Add record
130 2. Search record
131 3. Display all records
132 4. Delete
133 5.Exit
134 Enter your choice: 1
135 Enter name: (Use underscore instead of space) Neevan_Redkar
136 Enter address: (Use underscore instead of space) Sinhagad_Road,Pune-30
137 Enter roll no: 3069
138 Enter division: B
139 1. Add record
140 2. Search record
141 3. Display all records
142 4. Delete
143 5.Exit
144 Enter your choice: 1
145 Enter name: (Use underscore instead of space) Aryan_Parihar
146 Enter address: (Use underscore instead of space) Dhayri_Phata,Pune-41
147 Enter roll no: 3030
148 Enter division: C
149 1. Add record
150 2. Search record
151 3. Display all records
152 4. Delete
153 5.Exit
154 Enter your choice: 1
155 Enter name: (Use underscore instead of space) Aryan_Dhamdhere
```

```
156 Enter address: (Use underscore instead of space) Warje,Pune-52
157 Enter roll no: 3074
158 Enter division: H
159 1. Add record
160 2. Search record
161 3. Display all records
162 4. Delete
163 5.Exit
164 Enter your choice: 2
165 Enter roll number of student to be found: 3080
166 Record not found
167 1. Add record
168 2. Search record
169 3. Display all records
170 4. Delete
171 5.Exit
172 Enter your choice: 2
173 Enter roll number of student to be found: 3030
174 3030 Aryan Parihar C Dhayri Phata,Pune-41
175 1. Add record
176 2. Search record
177 3. Display all records
178 4. Delete
179 5.Exit
180 Enter your choice: 1
181 Enter name: (Use underscore instead of space) Riddhi_Shete
182 Enter address: (Use underscore instead of space) ???
183 Enter roll no: 3067
184 Enter division: ?
185 1. Add record
186 2. Search record
187 3. Display all records
188 4. Delete
189 5.Exit
190 Enter your choice: 1
191 Enter name: (Use underscore instead of space) Chirag_Budhbaware
192 Enter address: (Use underscore instead of space) Near_PVG,Pune-09
193 Enter roll no: 3059
194 Enter division: B
195 1. Add record
196 2. Search record
197 3. Display all records
198 4. Delete
199 5.Exit
200 Enter your choice: 4
201 Enter roll number of student to be deleted: 3067
202 Record deleted successfully
203 1. Add record
204 2. Search record
205 3. Display all records
206 4. Delete
207 5.Exit
208 Enter your choice: 3
```

```
209 3069 Neevan Redkar B Sinhagad Road,Pune-30
210 3030 Aryan Parihar C Dhayri Phata,Pune-41
211 3074 Aryan Dhamdhare H Warje,Pune-52
212 3059 Chirag Budhbaware B Near PVG,Pune-09
213 1. Add record
214 2. Search record
215 3. Display all records
216 4. Delete
217 5.Exit
218 Enter your choice: 4
219 Enter roll number of student to be deleted: 3069
220 Record deleted successfully
221 1. Add record
222 2. Search record
223 3. Display all records
224 4. Delete
225 5.Exit
226 Enter your choice: 3
227 3030 Aryan Parihar C Dhayri Phata,Pune-41
228 3074 Aryan Dhamdhare H Warje,Pune-52
229 3059 Chirag Budhbaware B Near PVG,Pune-09
230 1. Add record
231 2. Search record
232 3. Display all records
233 4. Delete
234 5.Exit
235 Enter your choice: 1
236 Enter name: (Use underscore instead of space) Neevan_Redkar
237 Enter address: (Use underscore instead of space) Sinhagad_Road,Pune-30
238 Enter roll no: 3069
239 Enter division: B
240 1. Add record
241 2. Search record
242 3. Display all records
243 4. Delete
244 5.Exit
245 Enter your choice: 2
246 Enter roll number of student to be found: 3067
247 Record not found
248 1. Add record
249 2. Search record
250 3. Display all records
251 4. Delete
252 5.Exit
253 Enter your choice: 3
254 3030 Aryan Parihar C Dhayri Phata,Pune-41
255 3074 Aryan Dhamdhare H Warje,Pune-52
256 3059 Chirag Budhbaware B Near PVG,Pune-09
257 3069 Neevan Redkar B Sinhagad Road,Pune-30
258 1. Add record
259 2. Search record
260 3. Display all records
261 4. Delete
```

```
262 | 5.Exit
263 | Enter your choice: 5
264 | Exiting
265 |
266 |
267 |
268 | */
```

