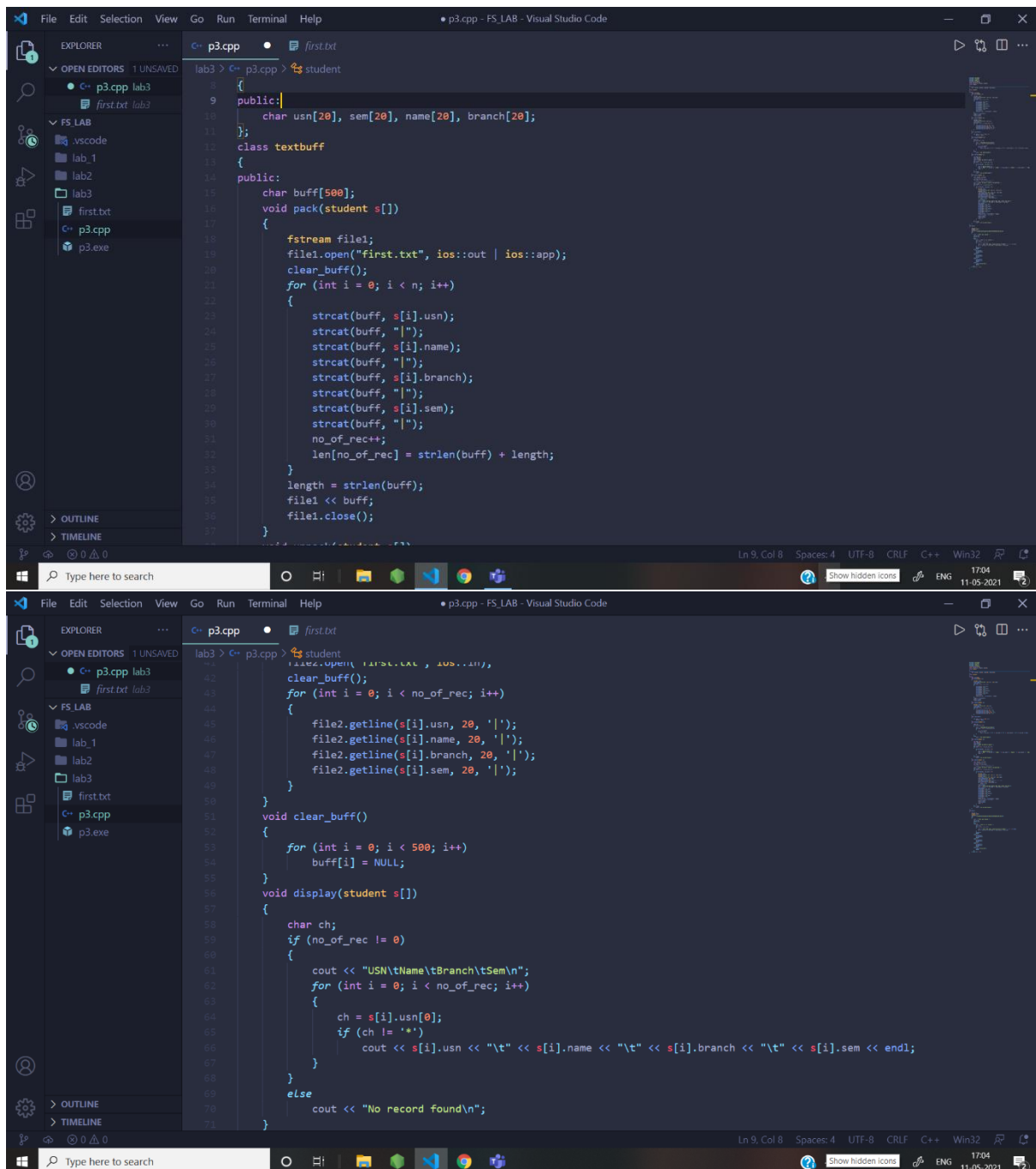


# PROGRAM3

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1BI18IS067

## CODE:-



```
8 {
9 public:
10     char usn[20], sem[20], name[20], branch[20];
11 };
12 class textbuff
13 {
14 public:
15     char buff[500];
16     void pack(student s[])
17     {
18         fstream file1;
19         file1.open("first.txt", ios::out | ios::app);
20         clear_buff();
21         for (int i = 0; i < n; i++)
22         {
23             strcat(buff, s[i].usn);
24             strcat(buff, "|");
25             strcat(buff, s[i].name);
26             strcat(buff, "|");
27             strcat(buff, s[i].branch);
28             strcat(buff, "|");
29             strcat(buff, s[i].sem);
30             strcat(buff, "|");
31             no_of_rec++;
32             len[no_of_rec] = strlen(buff) + length;
33         }
34         length = strlen(buff);
35         file1 << buff;
36         file1.close();
37     }
38 };
39
40 // Read Data from File
41 void read_data(student s[], int &no_of_rec)
42 {
43     fstream file2;
44     file2.open("first.txt", ios::in);
45     if (file2.is_open())
46     {
47         for (int i = 0; i < no_of_rec; i++)
48         {
49             file2.getline(s[i].usn, 20, '|');
50             file2.getline(s[i].name, 20, '|');
51             file2.getline(s[i].branch, 20, '|');
52             file2.getline(s[i].sem, 20, '|');
53         }
54     }
55 }
56
57 void clear_buff()
58 {
59     for (int i = 0; i < 500; i++)
60         buff[i] = NULL;
61 }
62
63 void display(student s[])
64 {
65     char ch;
66     if (no_of_rec != 0)
67     {
68         cout << "USN\tName\tBranch\tSem\n";
69         for (int i = 0; i < no_of_rec; i++)
70         {
71             ch = s[i].usn[0];
72             if (ch != '*')
73                 cout << s[i].usn << "\t" << s[i].name << "\t" << s[i].branch << "\t" << s[i].sem << endl;
74         }
75     }
76     else
77         cout << "No record found\n";
78 }
```

```
File Edit Selection View Go Run Terminal Help
p3.cpp - FS_LAB - Visual Studio Code

EXPLORER
  OPEN EDITORS 1 UNSAVED
    p3.cpp lab3
    first.txt lab3
  FS_LAB
    vscode
    lab_1
    lab2
    lab3
    first.txt
    p3.cpp
    p3.exe

  > OUTLINE
  > TIMELINE

p3.cpp
70      cout << "No record found\n";
71    }
72    void search(student s[])
73    {
74        int flag = 0;
75        char key[20];
76        clear_buff();
77        cout << "Enter the USN for search: ";
78        cin >> key;
79        for (int i = 0; i < no_of_rec; i++)
80        {
81            if (strcmp(key, s[i].usn) == 0)
82            {
83                cout << "Record found!\n";
84                cout << "USN: " << s[i].usn << ", Name: " << s[i].name << ", Branch: " << s[i].branch << ", Sem: " <<
85                flag = 1;
86            }
87        }
88        if (!flag)
89            cout << "No such USN found\n";
90    }
91    void modify(student s[])
92    {
93        char key[20], cvar[20];
94        /*int len1[20];*/
95        int flag = 0, len_field;
96        /*for(int i = 1; i <= no_of_rec; i++)
97            len1[i] = len[i] - len[i-1];*/
98        cout << "Enter the USN of record to be modified: ";
99        cin >> key;
100        for (int i = 0; i < no_of_rec; i++)
```

```
File Edit Selection View Go Run Terminal Help
p3.cpp - FS_LAB - Visual Studio Code

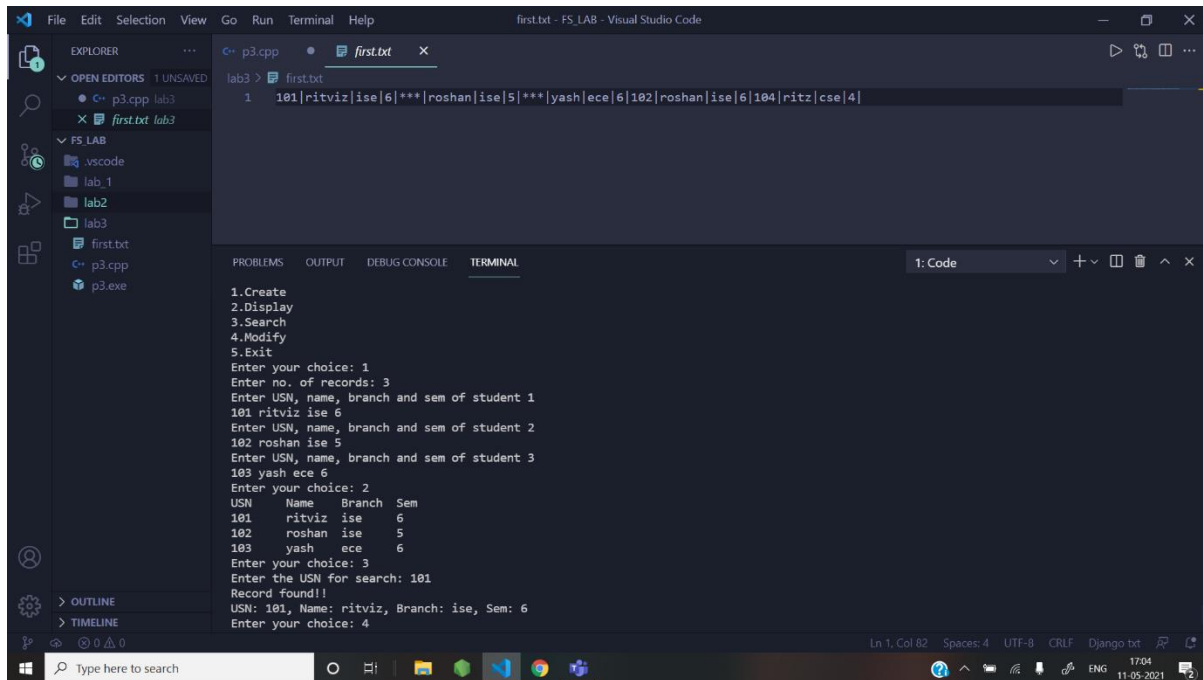
EXPLORER
  OPEN EDITORS 1 UNSAVED
    p3.cpp lab3
    first.txt lab3
  FS_LAB
    vscode
    lab_1
    lab2
    lab3
    first.txt
    p3.cpp
    p3.exe

  > OUTLINE
  > TIMELINE

p3.cpp
91    void modify(student s[])
92    {
93        char key[20], cvar[20];
94        /*int len1[20];*/
95        int flag = 0, len_field;
96        /*for(int i = 1; i <= no_of_rec; i++)
97            len1[i] = len[i] - len[i-1];*/
98        cout << "Enter the USN of record to be modified: ";
99        cin >> key;
100        for (int i = 0; i < no_of_rec; i++)
101        {
102            if (strcmp(key, s[i].usn) == 0)
103            {
104                fstream file3;
105                file3.open("first.txt", ios::in | ios::out);
106                fstream file4;
107                file4.open("first.txt", ios::out | ios::app);
108                file3.seekg(len[i], ios::beg);
109                file3.getline(cvar, 20, '|');
110                len_field = strlen(cvar); //length of 1 field
111                file3.seekp(len[i], ios::beg);
112                for (int j = 0; j < len_field; j++)
113                    file3 << '*';
114                file3.close();
115                cout << "Enter new data:\nEnter USN, name, branch and sem:\n";
116                cin >> s[i].usn >> s[i].name >> s[i].branch >> s[i].sem;
117                clear_buff();
118                strcat(buff, s[i].usn);
119                strcat(buff, "|");
120                strcat(buff, s[i].name);
```



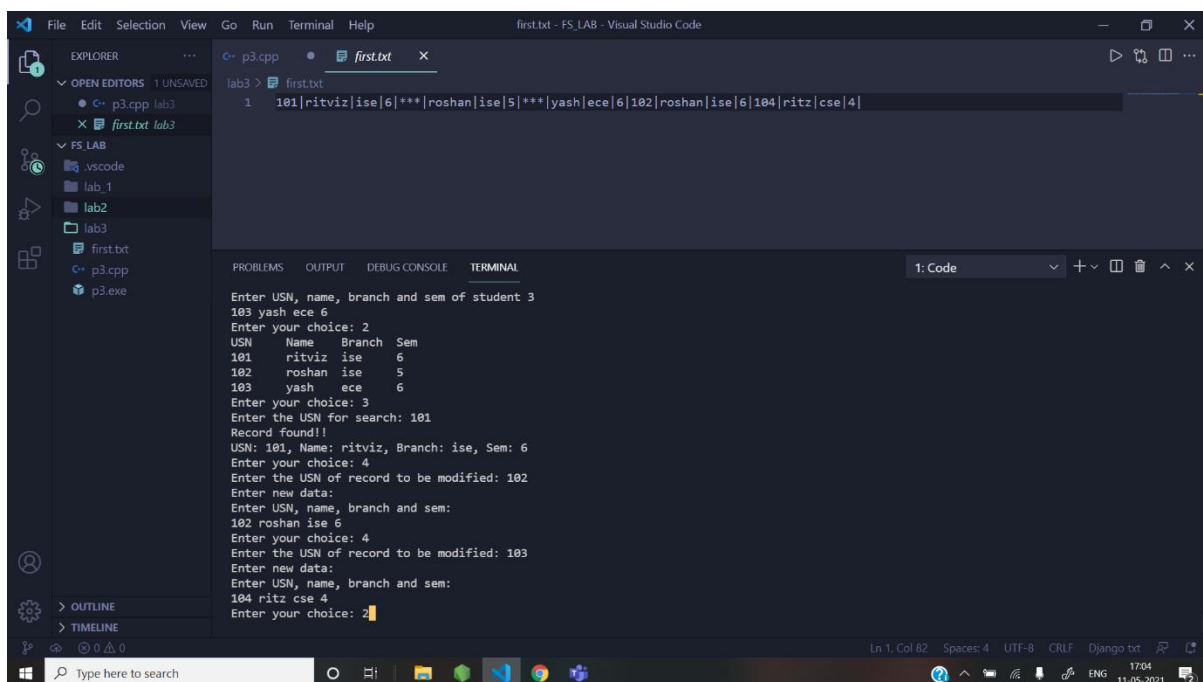
## OUTPUT:-



```
lab3 > first.txt
1 101|ritviz|ise|6|***|roshan|ise|5|***|yash|ece|6|102|roshan|ise|6|104|ritz|cse|4|

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL
1: Code

1.Create
2.Display
3.Search
4.Modify
5.Exit
Enter your choice: 1
Enter no. of records: 3
Enter USN, name, branch and sem of student 1
101 ritviz ise 6
Enter USN, name, branch and sem of student 2
102 roshan ise 5
Enter USN, name, branch and sem of student 3
103 yash ece 6
Enter your choice: 2
USN Name Branch Sem
101 ritviz ise 6
102 roshan ise 5
103 yash ece 6
Enter your choice: 3
Enter the USN for search: 101
Record found!!
USN: 101, Name: ritviz, Branch: ise, Sem: 6
Enter your choice: 4
```



```
lab3 > first.txt
1 101|ritviz|ise|6|***|roshan|ise|5|***|yash|ece|6|102|roshan|ise|6|104|ritz|cse|4|

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL
1: Code

Enter USN, name, branch and sem of student 3
103 yash ece 6
Enter your choice: 2
USN Name Branch Sem
101 ritviz ise 6
102 roshan ise 5
103 yash ece 6
Enter your choice: 3
Enter the USN for search: 101
Record found!!
USN: 101, Name: ritviz, Branch: ise, Sem: 6
Enter your choice: 4
Enter the USN of record to be modified: 102
Enter new data:
Enter USN, name, branch and sem:
102 roshan ise 6
Enter your choice: 4
Enter the USN of record to be modified: 103
Enter new data:
Enter USN, name, branch and sem:
104 ritz cse 4
Enter your choice: 2
```