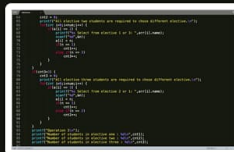


```
1  #include<stdio.h>
2  #include<string.h>
3
4  struct getname {
5      char name[10];
6  };
7  int main() {
8      struct getname arr[100];
9      int n;
10     int cnt1 = 0,cnt2 = 0,cnt3 = 0;
11     int a[100];
12     printf("Students are required to fill in their details and choice of electives\n");
13     printf("Choices for electives: \n");
14     printf("1.Internet of things\n2.Advanced Java\n3.Advance DS\n");
15
16     int num;
17     printf("Enter the total number of students: ");
18     scanf("%d",&num);
19     for(int i=0;i<num;i++) {
20         printf("Enter the name of student : ");
21         scanf("%s",&arr[i].name);
22         printf("Enter your choice : ");
23         scanf("%d",&n);
24         a[i] = n;
25         if(a[i] == 1) {
26             cnt1++;
27         }
28         else if(a[i] == 2) {
29             cnt2++;
30         }
31         else if(a[i] == 3) {
32             cnt3++;
33         }
34     }
```

```
34     }
35
36     printf("Operation 1\n");
37     int x;
38     printf("Enter the choice of elective you want to get the list for: ");
39     scanf("%d",&x);
40     for (int i = 0; i < num; i++)
41     {
42         if(a[i] == x) {
43             printf(">%s\n",arr[i].name);
44         }
45     }
46
47     printf("Operation 2\n");
48     if(cnt1<3) {
49         cnt1 = 0;
50         printf("All elective one students are required to chose different elective.\n");
51         for(int i=0;i<num;i++) {
52             if(a[i] == 1) {
53                 printf("%s Select from elective 2 or 3: ",arr[i].name);
54                 scanf("%d",&n);
55                 a[i] = n;
56                 if(n == 3)
57                     cnt3++;
58                 else if(n == 2)
59                     cnt2++;
60             }
61         }
62     }
63     if(cnt2<3) {
64         cnt2 = 0;
65         printf("All elective two students are required to chose different elective.\n");
66         for(int i=0;i<num;i++) {
67             if(a[i] == 2) {
```

```
64 cnt2 = 0;
65 printf("All elective two students are required to chose different elective.\n");
66 for(int i=0;i<num;i++) {
67     if(a[i] == 2) {
68         printf("%s Select from elective 1 or 3: ",arr[i].name);
69         scanf("%d",&n);
70         a[i] = n;
71         if(n == 1)
72             cnt1++;
73         else if(n == 3)
74             cnt3++;
75     }
76 }
77 }
78 if(cnt3<3) {
79     cnt3 = 0;
80     printf("All elective three students are required to chose different elective.\n");
81     for(int i=0;i<num;i++) {
82         if(a[i] == 3) {
83             printf("%s Select from elective 2 or 1: ",arr[i].name);
84             scanf("%d",&n);
85             a[i] = n;
86             if(n == 1)
87                 cnt1++;
88             else if(n == 2)
89                 cnt2++;
90         }
91     }
92 }
93 printf("Operation 3\n");
94 printf("Number of students in elective one : %d\n",cnt1);
95 printf("Number of students in elective two : %d\n",cnt2);
96 printf("Number of students in elective three : %d\n",cnt3);
97
```

```
90     }
91 }
92 }
93 printf("Operation 3\n");
94 printf("Number of students in elective one : %d\n",cnt1);
95 printf("Number of students in elective two : %d\n",cnt2);
96 printf("Number of students in elective three : %d\n",cnt3);
97
98 printf("Operation 4\n");
99 printf("List of students in elective 1: \n");
100 for (int i = 0; i < num; i++)
101 {
102     if(a[i] == 1) {
103         printf(">%s\n",arr[i].name);
104     }
105 }
106
107 printf("List of students in elective 2: \n");
108 for (int i = 0; i < num; i++)
109 {
110     if(a[i] == 2) {
111         printf(">%s\n",arr[i].name);
112     }
113 }
114
115 printf("List of students in elective 3: \n");
116 for (int i = 0; i < num; i++)
117 {
118     if(a[i] == 3) {
119         printf(">%s\n",arr[i].name);
120     }
121 }
122
123 }
```



Students are required to fill in their details and choice of electives

Choices for electives:

1.Internet of things

2.Advanced Java

3.Advance DS

Enter the total number of students: 15

Enter the name of student : Jim

Enter your choice : 1

Enter the name of student : Pam

Enter your choice : 2

Enter the name of student : Dwight

Enter your choice : 3

Enter the name of student : Mike

Enter your choice : 2

Enter the name of student : angela

Enter your choice : 1

Enter the name of student : ross

Enter your choice : 3

Enter the name of student : rachael

Enter your choice : 2

Enter the name of student : kevin

Enter your choice : 1

Enter the name of student : rahul

Enter your choice : 2

Enter the name of student : Dhoni

Enter your choice : 3

Enter the name of student : Kohli

Enter your choice : 2

Enter the name of student : Ram

Enter your choice : 1

Enter the name of student : Shyam

Enter your choice : 1

Enter the name of student : Kartik

Enter your choice : 2

Enter the name of student : Oscar

Enter your choice : 1

Operation 1

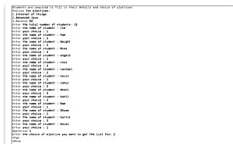
Enter the choice of elective you want to get the list for: 2

>Pam

>Mike

```
Enter your choice : 1
Enter the name of student : Kartik
Enter your choice : 2
Enter the name of student : Oscar
Enter your choice : 1
Operation 1
Enter the choice of elective you want to get the list for: 2
>Pam
>Mike
>rachael
>rahul
>Kohli
>Kartik
Operation 2
Operation 3
Number of students in elective one : 6
Number of students in elective two : 6
Number of students in elective three : 3
Operation 4
List of students in elective 1:
>Jim
>angela
>kevin
>Ram
>Shyam
>Oscar
List of students in elective 2:
>Pam
>Mike
>rachael
>rahul
>Kohli
>Kartik
List of students in elective 3:
>Dwight
>ross
>Dhoni

[Process completed]
```



The screenshot shows a terminal window with the same text as the main block, but with a small error in the last line: "[Process completed]" instead of "[Process completed]".

Line	Input	Output
1	Enter your choice : 1	
2	Enter the name of student : Kartik	
3	Enter your choice : 2	
4	Enter the name of student : Oscar	
5	Enter your choice : 1	
6	Operation 1	
7	Enter the choice of elective you want to get the list for: 2	
8	>Pam	
9	>Mike	
10	>rachael	
11	>rahul	
12	>Kohli	
13	>Kartik	
14	Operation 2	
15	Operation 3	
16	Number of students in elective one : 6	
17	Number of students in elective two : 6	
18	Number of students in elective three : 3	
19	Operation 4	
20	List of students in elective 1:	
21	>Jim	
22	>angela	
23	>kevin	
24	>Ram	
25	>Shyam	
26	>Oscar	
27	List of students in elective 2:	
28	>Pam	
29	>Mike	
30	>rachael	
31	>rahul	
32	>Kohli	
33	>Kartik	
34	List of students in elective 3:	
35	>Dwight	
36	>ross	
37	>Dhoni	
38		
39	[Process completed]	