

Note: minimum 30, count will be require huge input for convinence. I took minimum count of course = 4.

```
7. #include <stdio.h>
struct course
{
    char name[20];
};

int main()
{
    struct course s[4][100];
    int n, i, j, c[3] = {0, 0, 0}, choice;
    char cn[3][10] = {"IOT", "JAVA", "J2EE", "DS"};
    printf("Enter no. of students: \n");
    scanf("Enter student details: \n");
    for (i = 0; i < n; i++)
    {
        printf("----- \n");
        printf("Press code to select course: \n");
        printf("1) IOT \n 2) ADVANCED JAVA \n 3) J2EE \n 4) DATA STRUCTURES \n");
        scanf("%d", &choice);
        if (choice < 0 || choice > 4)
        {
            printf("INVALID CHOICE!");
            continue;
        }
        printf("Enter name of student %d: \n", i + 1);
    }
}
```



```

scanf("%d", &c[choice-1]);
c[choice-1]++;
}
disp:
for(i=0; i<4; i++)
{
    if(c[i] >= 0)
    {
        printf("List of Students of course\n", c[i]);
        for(j=0; j<c[i]; j++)
        {
            printf("%d %d\n", j+1, s[i][j]);
        }
    }
}
if(i==0)
for(i=0; i<4; i++)
{
    if(i==0)
    {
        if((c[0]>4) || (c[0]==-1) || (c[0]>4))
        || (c[1]==-1) || (c[2]>4) || (c[2]==-1)
        || (c[3]>4) || (c[3]==-1))
        {
            exit(0);
        }
    }
}
}

```



```
if (c[i] < 4 & c[i] != -1)
{
    printf("Numbers of people less than 4 in  
course %s, please change the  
course: \n", cn[i]);
    for (j = 0; j < c[i]; j++)
    {
        printf("Enter course code: \n");
        scanf("%d", &choice);
        if (choice == j+1)
        {
if
            printf("Enter other course! \n");
            continue;
        }
        printf("Enter name: \n");
        scanf("%s", &s[choice-1][c[choice-1]  
• name]);
        c[choice-1]++;
    }
    n = c[i];
    c c[i] = -1;
}
goto disp;
}
```

week2e3.c > main0

```
1  #include <stdio.h>
2  struct course
3  {
4  char name[20];
5  } s[4][100];
6  void main()
7  {
8
9  int n,i,j,c[4]={0,0,0,0},choice;
10 char cn[4][10]="IOT","JAVA","J2EE","DS";
11 printf("Enter number of students:\n");
12 scanf("%d",&n);
13 printf("Enter student details:\n");
14 for(i=0;i<n;i++)
15 {
16 printf("-----\n");
17 printf("Press code to select course:\n1 ) IOT\n2 ) ADVANCED JAVA\n3 ) J2EE\n4 ) DATA STRUCTURES\n");
18 scanf("%d",&choice);
19 if(choice<0||choice>4)
20 {
21 printf("INVALID CHOICE!");
22 continue;
23 }
24 printf("Enter name of student %d:\n",i+1);
25 scanf("%s",&s[choice-1][c[choice-1]].name);
26 c[choice-1]++;
27 }
28
29 disp:
```

```
1 // C program to demonstrate the use of struct
2 // to store student details
3 #include <stdio.h>
4
5 // Define the structure of student details
6 struct student
7 {
8     char name[50];
9     int roll_no;
10    float marks;
11 };
12
13 // Function to add student details
14 void add_student(struct student s[])
15 {
16     int i;
17     for(i=0; i<10; i++)
18     {
19         printf("Enter name of student %d: ", i+1);
20         scanf("%s", s[i].name);
21         printf("Enter roll number of student %d: ", i+1);
22         scanf("%d", &s[i].roll_no);
23         printf("Enter marks of student %d: ", i+1);
24         scanf("%f", &s[i].marks);
25     }
26 }
27
28 // Function to display student details
29 void display_student(struct student s[])
30 {
31     int i;
32     for(i=0; i<10; i++)
33     {
34         printf("Name: %s, Roll No: %d, Marks: %f\n", s[i].name, s[i].roll_no, s[i].marks);
35     }
36 }
37
38 // Driver program
39 int main()
40 {
41     struct student s[10];
42     add_student(s);
43     display_student(s);
44     return 0;
45 }
```

C week2e3.c > main0

```
30 for(i=0;i<4;i++)
31 { if(c[i]>=0)
32 {
33 printf("LIST OF STUDENTS OF COURSE %s :\n",cn[i]);
34 for(j=0;j<c[i];j++)
35 {
36 printf("%d) %s \n",j+1,s[i][j]);
37 }
38 }
39 }
40 for(i=0;i<4;i++)
41 { if(i==0){
42     if (((c[0] > 4) || (c[0] == -1)) && ((c[1] > 4) || (c[1] == -1)) && ((c[2] > 4) || (c[2] == -1)) && ((c[3] > 4) ||
43         | (c[3] == -1)))
44     {
45         exit(0);
46     }
47 if(c[i]<4&&c[i]!=-1)
48 {
49 printf("Number of people less than 4 in course %s,please change the course:\n",cn[i]);
50 for(j=0;j<c[i];j++)
51 {
52 printf("Enter course code:\n");
53 scanf("%d",&choice);
54 if(choice==i+1){
55 printf("ENTER OTHER course!\n");
56 continue;
57 }
58 printf("Enter name:\n");
59 scanf("%s",&s[choice-1][c[choice-1]].name);
60 c[choice-1]++;
61 }
```

```
61  }  
62  n=c[i];  
63  c[i]=-1;  
64  }  
65  }  
66  
67  goto disp;  
68  []
```


TERMINAL PROBLEMS OUTPUT DEBUG CONSOLE

1: C/C++ Compile Run ▾



PS E:\jdk8\bin\ooj lab> cmd /c .\"week2e3.exe"

Enter number of students:

10

Enter student details:

Press code to select course:

1) IOT

2) ADVANCED JAVA

3) J2EE

4) DATA STRUCTURES

2

Enter name of student 1:

niru

Press code to select course:

1) IOT

2) ADVANCED JAVA

3) J2EE

4) DATA STRUCTURES

3

Enter name of student 2:

mani

Press code to select course:

1) IOT

2) ADVANCED JAVA

3) J2EE

4) DATA STRUCTURES

1

Enter name of student 3:

thor

Press code to select course:

1) IOT

2) ADVANCED JAVA

3) J2EE

4) DATA STRUCTURES

TERMINAL PROBLEMS OUTPUT DEBUG CONSOLE

1: C/C++ Compile Run



Enter name of student 3:

thor

Press code to select course:

1) IOT

2) ADVANCED JAVA

3) J2EE

4) DATA STRUCTURES

1

Enter name of student 4:

loki

Press code to select course:

1) IOT

2) ADVANCED JAVA

3) J2EE

4) DATA STRUCTURES

1

Enter name of student 5:

odin

Press code to select course:

1) IOT

2) ADVANCED JAVA

3) J2EE

4) DATA STRUCTURES

1

Enter name of student 6:

hela

Press code to select course:

1) IOT

2) ADVANCED JAVA

3) J2EE

4) DATA STRUCTURES

4

Enter name of student 7:

TERMINAL PROBLEMS OUTPUT DEBUG CONSOLE

1: C/C++ Compile Run



```
-----
Press code to select course:
1 ) IOT
2 ) ADVANCED JAVA
3 ) J2EE
4 ) DATA STRUCTURES
4
Enter name of student 7:
flash
-----
Press code to select course:
1 ) IOT
2 ) ADVANCED JAVA
3 ) J2EE
4 ) DATA STRUCTURES
4
Enter name of student 8:
mike
-----
Press code to select course:
1 ) IOT
2 ) ADVANCED JAVA
3 ) J2EE
4 ) DATA STRUCTURES
4
Enter name of student 9:
chuck
-----
Press code to select course:
1 ) IOT
2 ) ADVANCED JAVA
3 ) J2EE
4 ) DATA STRUCTURES
4
Enter name of student 10:
django
LIST OF STUDENTS OF COURSE IOT :
```

TERMINAL PROBLEMS OUTPUT DEBUG CONSOLE

1: C/C++ Compile Run



LIST OF STUDENTS OF COURSE IOT :

- 1) thor
- 2) loki
- 3) odin
- 4) hela

LIST OF STUDENTS OF COURSE JAVA :

- 1) niru

LIST OF STUDENTS OF COURSE J2EE :

- 1) mani

LIST OF STUDENTS OF COURSE DS :

- 1) flash
- 2) mike
- 3) chuck
- 4) django

Number of people less than 4 in course JAVA,please change the course:

Enter course code:

1

Enter name:

niru

Number of people less than 4 in course J2EE,please change the course:

Enter course code:

4

Enter name:

mani

LIST OF STUDENTS OF COURSE IOT :

- 1) thor
- 2) loki
- 3) odin
- 4) hela
- 5) niru

LIST OF STUDENTS OF COURSE DS :

- 1) flash
- 2) mike
- 3) chuck
- 4) django
- 5) mani

PS E:\jdk8\bin\ooj lab>