⑦ Write a c program to count the number of students registered for three elective courses. Accept the names of n students, their choice of the elective (Say, the electives courses offered are Internet of Things, Advanced java and J2EE and Advanced Data structures).

Include the following operations:

① Accept say x from the user. Display the names of the students who have opted for elective x.

② Count and display the total number of students present in each elective.

③ If count is less than 30, inform that the course will not be floated and ask the students who have opted the course to reselect their electives from the other two. Count and display the counts again.

④ Display the name of the students in each elective.

[★NOTE:- In order to check the 3rd condition, as the given limit is 30, a very huge data need to be given as the input. So to avoid this, I have considered the limit to be 3]

```
#include <stdio.h>
struct course
{
  char name[20];
};
int main()
{
 struct course s[3][100];
 int n, i, j, c[3] = {0,0,0}, choice;
 char cn[3][10] = {"IOT", "JAVA", "DS"};
 printf("Enter number of students:\n");
 scanf("%d", &n);
```

```
printf("Enter student details:\n");
for(i=0; i<n; i++)
{
printf("----------\n");
printf("Press code to select course:\n1. Internet of things\n2. Advanced java and J2EE\n3. Advanced Data structures\n");
scanf("%d", &choice);
if(choice<0 || choice>3)
{
printf("Invalid choice!\n");
continue;
}
printf("Enter the name of the student %d\n", i+1);
scanf("%s", &s[choice-1][c[choice-1]].name);
c[choice-1]++;
}
disp:
for(i=0; i<3; i++)
{
if(c[i]>=0)
```

```
{
    printf("list of students of course %s:\n", cn[i]);
    for(j=0; j<c[i]; j++)
    {
        printf("%d)%s\n", j+1, s[i][j].name);
    }
    printf("Number of students in the course %s
is %d\n", cn[i], j);
    }
}
for(i=0; i<3; i++)
{
    if(c[i]<3 && c[i]!=-1)
    {
    printf("Number of people less than 3 in course
%s, so the students in the course %s please
change the course:\n", cn[i], cn[i]);
    for(j=0; j<c[i]; j++)
{
    printf("Enter course code:\n");
    scanf("%d", &choice);
```

```
        if (choice==i+1)
        {
          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[i]=-1;
      goto disp;
    }
  }
  return 0;
}
```