

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.).

~~Java~~

```
#include <stdio.h>
```

```
struct course
```

```
{
```

```
    char name[30];
```

```
};
```

```
int main()
```

```
{
```

```
    struct course s[3][100];
```

```
    int i, n, j, c[3] = {0, 0, 0}, choice;
```

```
    char cr[3][10] = {"IOT", "JAVA", "DS"};
```

```
    printf("Enter the number of students: \n");
```

```
    scanf("%d", &n);
```

```
    printf("Enter student details: \n");
```

```
    for(i=0; i<n; i++)
```

```
    {
```

```
        printf("select your choice: \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, sc[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 are less than
               3 in the Course %s, so the students in
               course %s please change the course:\n",
               cn[i], cn[i]);

        for(j=0; j<c[i]; j++)
        {
            printf("Enter your choice\n");
            scanf("%d", &choice);
        }
    }
}

```

```

if (choice == z + 1)
{
    printf("Enter other course\n");
    continue;
}
printf("Enter name: \n");
scanf("%s", &c[choice - 1]);
c[choice - 1]++;
}

n = c[i];
c[i] = -1;
goto disp;
}

return 0;
}

```