Program 7: Electives

```c
#include <stdio.h>
#include <string.h>
struct Student
{
    char name[20];
    int choice;
}s[10];

void main()
{
    int i, n, c1 = 0, c2 = 0, c3 = 0, c4 = 0;
    printf("enter no of students:\n");
    scanf("%d",&n);
    for(i = 0; i < n; i++){
        printf("enter the name:\n");
        scanf("%s",&s[i].name);
        printf("select your preferred elective:\n");
        printf("1-IOT\t2-Advanced Java\t3-J2EE\t4-Advanced DS\n");
        scanf("%d",&s[i].choice);
    }
    printf("\n\n");
    printf("Students enrolled in IOT:\n");
    for (i = 0; i < n; i++){
        if(s[i].choice == 1){
            printf("%s\n",s[i].name);

            c1++;
        }
    }
    printf("No of students enrolled in elective:IOT: %d\n",c1);
    if (c1 < 3){
        printf("This course will not be streamed as total count is less than 3\n");
        for (i = 0; i < n; i++)
        {
            if (s[i].choice == 1)
            {
                printf("Please select other electives:\n");
                printf("Choose available electives\n");
                scanf("%d",&s[i].choice);
            }
        }
    }
    printf("Students enrolled in Advanced Java:\n");
    for (i = 0; i < n; i++)
    {
        if (s[i].choice == 2)
        {
            printf("%s\n",s[i].name);
            c2++;
        }
    }
    printf("No of students enrolled in elective:Advanced Java: %d\n", c2);
    if (c2 < 3)
```

```c
{
    printf("This course will not be streamed as total count is less than 3\n");
    for (i = 0; i < n; i++)
    {
        if (s[i].choice == 2)
        {
            printf("Please select other electives:\n");
            printf("Choose available electives\n");
            scanf("%d", &s[i].choice);
        }
    }
}
printf("Students enrolled in J2EE:\n");
for (i = 0; i < n; i++)
{
    if (s[i].choice == 3)
    {
        printf("%s\n",s[i].name);
        c3++;
    }
}
printf("No of students enrolled in elective:J2EE: %d\n\n", c3);

if (c3 < 3)
{
    printf("This course will not be streamed as total count is less than 3\n");
    for (i = 0; i < n; i++)
    {
        if (s[i].choice == 3)
        {
            printf("Please select other electives:\n");
            printf("Choose available electives  \n");
            scanf("%d", &s[i].choice);
        }
    }
}
printf("Students enrolled in Advanced DS\n");
for (i = 0; i < n; i++)
{
    if (s[i].choice == 4)
    {
        printf("%s\n",s[i].name);
        c4++;
    }
}
printf("No of students enrolled in elective: Advanced DS: %d\n", c4);
if (c4 < 3)
{
    printf("This course will not be streamed as total count is less than 3\n");
    for (i = 0; i < n; i++)
    {
        if (s[i].choice == 4)
        {
            printf("Please select other electives:\n");
            printf("Choose available electives\n");
            scanf("%d", &s[i].choice);
```

```
                }
            }
        }
}
```

OUTPUT:

```
enter no of students:
10
enter the name:
AMAN
select your preferred elective:
1-IOT    2-Advanced Java 3-J2EE  4-Advanced DS
1
enter the name:
ASHISH
select your preferred elective:
1-IOT    2-Advanced Java 3-J2EE  4-Advanced DS
1
enter the name:
BHUVAN
select your preferred elective:
1-IOT    2-Advanced Java 3-J2EE  4-Advanced DS
1
enter the name:
ABHYUDAY
select your preferred elective:
1-IOT    2-Advanced Java 3-J2EE  4-Advanced DS
2
enter the name:
GAUTAMI
select your preferred elective:
1-IOT    2-Advanced Java 3-J2EE  4-Advanced DS
2
enter the name:
NISCHAY
select your preferred elective:
1-IOT    2-Advanced Java 3-J2EE  4-Advanced DS
2
enter the name:
ABHISHEK
select your preferred elective:
1-IOT    2-Advanced Java 3-J2EE  4-Advanced DS
3
```

```
enter the name:
AJEY
select your preferred elective:
1-IOT    2-Advanced Java 3-J2EE  4-Advanced DS
4
enter the name:
GAURAV
select your preferred elective:
1-IOT    2-Advanced Java 3-J2EE  4-Advanced DS
4
enter the name:
AMIT
select your preferred elective:
1-IOT    2-Advanced Java 3-J2EE  4-Advanced DS
4


Students enrolled in IOT:
AMAN
ASHISH
BHUVAN
No of students enrolled in elective:IOT: 3
Students enrolled in Advanced Java:
ABHYUDAY
GAUTAMI
NISCHAY
No of students enrolled in elective:Advanced Java: 3
Students enrolled in J2EE:
ABHISHEK
No of students enrolled in elective:J2EE: 1

This course will not be streamed as total count is less than 3
Please select other electives:
Choose available electives
2
Students enrolled in Advanced DS
AJEY
GAURAV
AMIT
```

```
Students enrolled in Advanced DS
AJEY
GAURAV
AMIT
No of students enrolled in elective: Advanced DS: 3


...Program finished with exit code 52
Press ENTER to exit console.
```