```
    {
}
```

7. #include <stdio.h>
int main()
{
    int n, i, e1=0, e2=0, e3=0, x, p, min, l=0;
    struct student
    {
        int elec;
        char name[20];
    }ar[100];
    printf("Enter the number of the students\n");
    scanf("%d", &n);
    printf("Choice of elective:\n 1-IOT, 2-Advanced Java and J2EE, 3-Advanced data structures\n");
    for(i=0; i<n; i++)
    {
        printf("Enter %d students name and the choice of elective\n", i+1);

```
fscanf("%s%d", ar[i].name, &ar[i].elec
if (ar[i].elec == 1)
    e1++;
if (ar[i].elec == 2)
    e2++;
    if (ar[i].elec == 3)
        e3++;
}
if(e1<=e2 && e1<=e3)
min = e1;
if(e2<=e1 && e2<=e3)
min = e2;
if(e3<=e2 && e3<=e1)
min = e3;
printf("Enter the course number\n");
scanf("%d", &x);
printf("Names of students who have opted for %d:\n", x);
for(i=0; i<n; i++)
{
    if(ar[i].elec == x)
        printf("%s\n", ar[i].name);
}
printf("Total number of students in 1st course is %d\n", e1);
printf("Total number of students in 2nd course is %d\n", e2);
printf("Total number of students in 3rd course is %d\n", e3);
if(e1<3 && e2>=3 && e3>=3)
{
    printf("Course 1 will not be floated.
```

```
Please select from the other 2 courses\n");
        p=1;
        l=1;
    if (e2<3&&e1>=3&&e3>=3)
    {
        printf("Course 2 will not be floated.....");
        p=2;
        l=1;
    }
    if(e3<3&&e1>=3&&e2>=3)
    {
        printf("Course 3 will not be floated.....");
        p=3;
        l=1;
    }
    if(l==0)
    {
        if(min==e1)
        {
            printf("Please select from course 2 and 3\n
            p=1;
        }
        else if(min==e2)
        {
            printf("Please select from course 1 and 3\n"
            p=2;
        }
        else if(min==e3)
        {
            printf("Please select from course 1 and 2\n"
            p=3;
        }
    }
```

```
if(p==1)
{
for(i=0;i<n;i++)
{
if(arr[i].elec==1)
{
printf("Enter a different course Name
:%s\n",arr[i].name);
scanf("%d",&arr[i].elec);
}}}
else if(p==2)
{
for(i=0;i<n;i++)
{
if(arr[i].elec==2)
{
printf("Enter a different course Name
%s\n",arr[i].name);
scanf("%d",&arr[i].elec);
}}}
else if(p==3)
{
for(i=0;i<n;i++)
{
if(arr[i].elec==3)
{
printf("Enter a different
course Name %s\n",arr[i].name);
scanf("%d",&arr[i].elec);
}}}
printf("Students in elective 1\n");
for(i=0;i<n;i++)
```

```
{
    if (ar[i].elec==1)
    printf("%s\n", ar[i].name);
}
printf("Students in 2 elective\n");
for(i=0; i<n; i++)
{
    if (ar[i].elec ==2)
    printf("%s\n", ar[i].name);
}
printf("Students in 3 elective\n");
for(i=0; i<n; i++)
{
    if (ar[i].elec == 3)
    printf("%s\n", ar[i].name);
}
return 0;
}
```