

Q7

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

```
struct getName {
    char name [10];
```

```
};
```

```
int main() {
```

```
    struct getName arr[100];
    int n;
```

```
    int cnt1=0, cnt2=0, cnt3=0;
    int a[100];
```

```
    printf("Enter your name and elective choice\n");
```

```
    printf("Choices: \n");
```

```
    printf("1. Internet of Things \n
           2. Adv. Java \n 3. Adv. DS \n");
```

```
    int num;
```

```
    printf("Enter number of students);
    scanf("%d", &num);
```

```
    for(int i=0; i<num; i++){
        printf("Enter name: ");
        scanf("%s", &arr[i].name);
        printf("Elective: ");
        scanf("%d", &n);
        a[i] = n;
        if(a[i] == 1) {
            cnt1++;
        }
    }
```

```

else if (a[i] == 2)
    cnt2++;
else if (a[i] == 3)
    cnt3++;
}
printf("Operation 1\n");
int x;
printf("Enter the choice of elective your  
want names list for: ");
scanf("%d", &x);
for (int i=0; i<num; i++){
    if (a[i] == x) {
        printf("%s\n", ar[i].name);
    }
}
printf("Operation 2\n");
if (cnt1 < 3) {
    cnt1 = 0;
    printf("Elective one students  
will have to change  
their choice\n");
    for (int i=0; i<num; i++) {
        if (a[i] == 1)
            printf("Select from 2 or 3: ", ar[i].name);
        scanf("%d", &n);
        a[i] = n;
        if (n == 3)
            cnt3++;
        else if (n == 2)
            cnt2++;
    }
}
}
}

```

```

if (cnt3 < 3) {
    cnt3 = 0;
    printf("ELECTIVE 3 students need  
to change their choice\n");
    for (int i = 0; i < n; i++) {
        if (a[i] == 3) {
            printf("%s select from  
2 or 1", arr[i].name);
            scanf("%d", &n);
            a[i] = n;
            if (n == 1)
                cnt1++;
            else if (n == 2)
                cnt2++;
        }
    }
}

printf("Operation 3\n");
printf("Students in E1 = %d\n", cnt1);
printf("Students in E2 = %d\n", cnt2);
printf("Students in E3 = %d\n", cnt3);

printf("Operation 4\n");
printf("List of students in E1: \n");
for (int i = 0; i < n; i++) {
    if (a[i] == 1) {
        printf("> %s\n", arr[i].name);
    }
}
}

```

```
printf("List of students in E3:\n");  
for(int i=0; i<num; i++){  
    if (a[i] == 3) {  
        printf("%d is \n", arr[i].name);  
    }  
}  
return 0;  
}
```