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Ans 7: #include <stdio.h>
#include <stdlib.h>
struct student {
    char name[40];
    int elective;
};

int main() {
    int i, j, choice, n, least, temp;
    int count[3] = {0, 0, 0};
    char electives[3][40] = {"IoT", "Advanced Java", "J2EE"};
    printf("Enter number of students: ");
    scanf("%d", &n);

    struct student student[n];
    for (i = 0; i < 3; i++) {
        printf("\n %d - %s", i+1, electives[i]);
    }

    for (i = 0; i < n; i++) {
        if (student[i].elective == 1) {
            count[0]++;
        } else if (student[i].elective == 2) {
            count[1]++;
        } else {
            count[2]++;
        }
    }

    printf("\n Operation 1: \n");
    printf("Enter the choice of elective you want to get the list for: \n");
    int x;
    scanf("%d", &x);

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for (i = 0; i < n; i++) {
    if (student[i].elective == 1) {
        printf("> &s\n", student[i].name);
    }
}

printf("Operation 2\n");
printf("Number of students in %s elective: %d\n", electives[0], count[0]);
printf("Number of students in %s elective: %d\n", electives[1], count[1]);
printf("Number of students in %s elective: %d\n", electives[2], count[2]);
printf("Operation 3\n");

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if (count[0] < 3) {
    printf("%s students must choose another elective due to less  

    number\n", electives[0]);
    printf("Choose between Advanced Java JSP (1) and J2EE (3)\n");
    scanf("%d", &choice);
    for (i = 0; i < n; i++) {
        if (student[i].elective == 1) {
            student[i].elective == choice;
            count[0]--;
            count[choice - 1]++;
        }
    }
}

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if (count[1] < 3) {
    printf("%s students must choose another elective due to less number\n",
    electives[1]);
    printf("Choose between IOT (1) and J2EE (3)\n");
    scanf("%d", &choice);
    for (i = 0; i < n; i++) {
        if (student student[i].elective == 2) {

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    student[i].elective = choice ;
}
count[0] -- ;
count[choice - 1] ++ ;
}
}
if (count[2] < 3) {
    printf (" %s students must chose another elective due to  
less number \n", electives[2] );
    printf (" Choose between Advanced Java(1) and J2EE(2) \n");
    scanf ("%d", &choice);
    for (i = 0 ; i < n ; i++) {
        if (student[i].elective == 3) {
            at student[i].elective = choice ;
        }
        count[0] -- ;
        count[choice - 1] ++ ;
    }
}
printf ("Number of students in %s elective: %d \n", electives[0], count[0]);
printf ("Number of students in %s elective: %d \n", electives[1], count[1]);
printf ("Number of students in %s elective: %d \n", electives[2], count[2]);
printf ("Operation 4 \n");
for (i = 0 ; i < 3 ; i++) {
    printf (" \n Students in %s : \n", electives[i]);
    for (j = 0 ; j < n ; j++) {
        if (student[j].elective == (i + 1)) {
            printf (" > %s \n", student[j].name) ;
        }
    }
}
}
return 0 ;
}

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