***OOJ LAB-WEEK 2-PROGRAM 7***

***Program and Output***

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***Program 7-***

*#include <stdio.h>*

*#include <stdlib.h>*

*struct Student {*

*char name[40];*

*int elective;*

*};*

*int main(){*

*int i,j,choice,n;*

*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++){*

*printf("\nEnter the name of student: ");*

*scanf("%s",student[i].name);*

*printf("\nEnter the choice: ");*

*scanf("%d",&student[i].elective);*

*}*

*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");*

*printf("Enter the choice of elective you want to get the list for: \n");*

*int x;*

*scanf("%d",&x);*

*for(i=0;i<n;i++){*

*if(student[i].elective == x){*

*printf(" %s\n",student[i].name);*

*}*

*}*

*printf("\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("\n");*

*if(count[0] < 3){*

*printf("%s Less number of students, please pick another elective\n",electives[0]);*

*printf("choose between Advanced 2-Java and 3-J2EE\n");*

*scanf("%d",&choice);*

*for(i=0;i<n;i++){*

*if(student[i].elective == 1){*

*student[i].elective = choice;*

*count[0]--;*

*count[choice-1]++;*

*}*

*}*

*}*

*if(count[1] < 3){*

*printf("%s Less number of students, please pick another elective\n",electives[1]);*

*printf("choose between 1-IOT and 3-J2EE\n");*

*scanf("%d",&choice);*

*for(i=0;i<n;i++){*

*if(student[i].elective == 2){*

*student[i].elective = choice;*

*count[1]--;*

*count[choice-1]++;*

*}*

*}*

*}*

*if(count[2] < 3){*

*printf("%s Less number of students, please pick another elective\n",electives[2]);*

*printf("choose between 1-IOT and Advanced 2-Java\n");*

*scanf("%d",&choice);*

*for(i=0;i<n;i++){*

*if(student[i].elective == 3){*

*student[i].elective = choice;*

*count[2]--;*

*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("\n");*

*for(i=0;i<3;i++){*

*printf("\nStudents in %s: \n",electives[i]);*

*for(j=0;j<n;j++){*

*if(student[j].elective == (i+1)){*

*printf(" %s\n",student[j].name);*

*}*

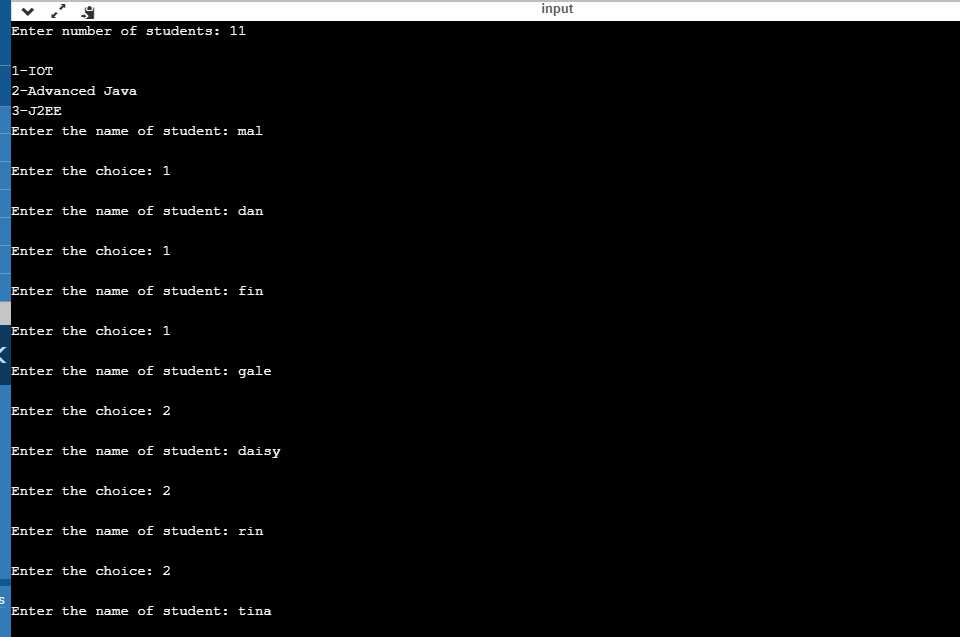
*}*

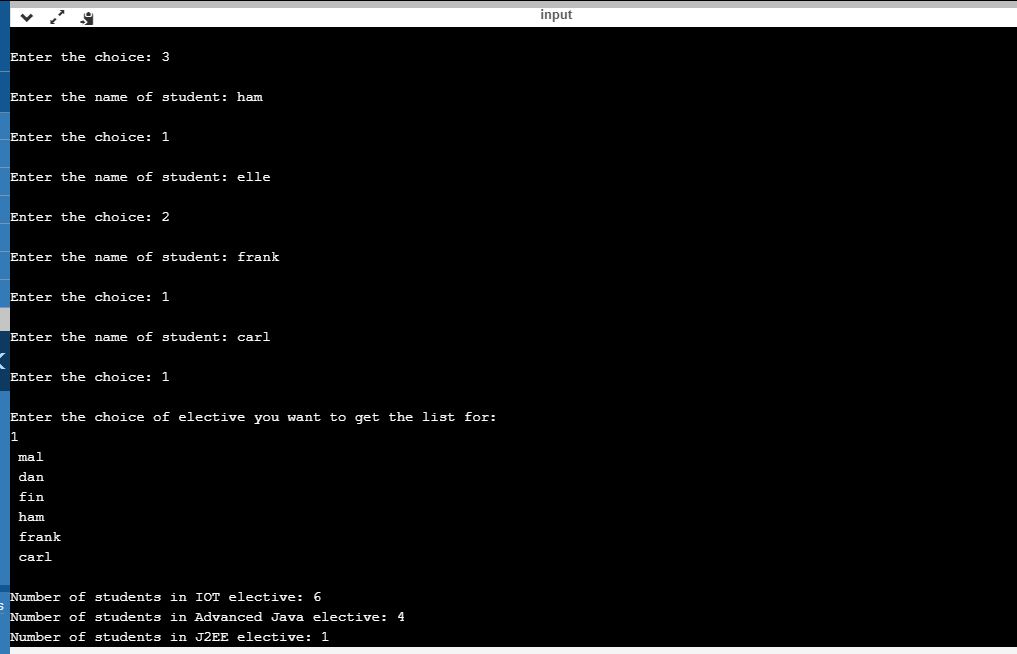
*}*

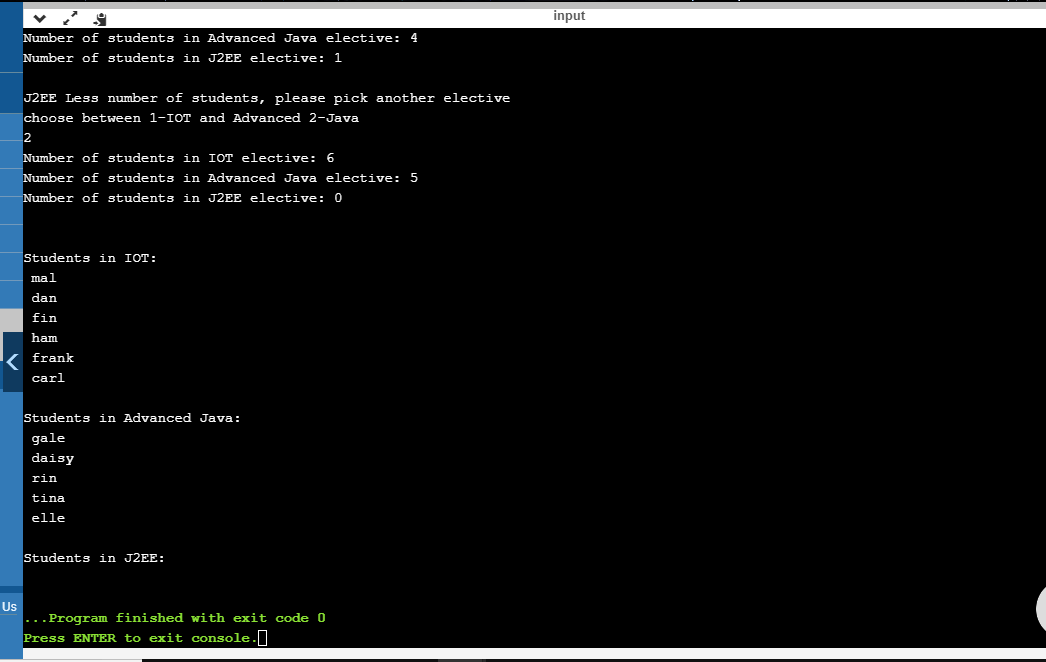
*return 0;*

*}*

***Output-***

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