

Admission Portal

(Innovative Assignment)

2CS101 Computer Programming

21ECL085 Aashvi Patel

21ECL086 Pratham Chhajed

21ECL087 Vedanti Patel

Admission Portal

- 1)For loop
- 2)If...else
- 3)Switch case
- 4)Functions
- 5)Structure

Details Entry

Sorting based on JEE rank

Branch Allocation

Display number of students allocated in each branch

Search by Admission number

Code

```
1  #include<stdio.h>
2
3  struct student
4  {
5      int percentile,jee,addno,p1,p2;
6      char name[80];
7      char branch[2];
8  };
9
10 void accept(struct student[],int);
11 void search(struct student[],int, int);
12 void display(struct student[],int);
13 void jee(struct student[],int );
14
15 int main()
16 {
17
18     int a;
19     printf("\n\n\t\tWelcome to Admission portal\n\n");
20     struct student data[20];
21     int n,choice,addno,p;
22     printf("Number of student taking admission: ");
23     scanf("%d",&n);
24
25     accept(data, n);
26     jee(data, n);
27     printf("\n");
28     display(data, n);
29     printf("\nDo you want to search by admission no. (1=yes,0=no)?\n");
30     scanf("%d",&a);
```

1. Start
2. Structure
3. Global declaration
4. Main body (Welcome, details, Search by admission no.)

5. Switch(for search)

```
31     switch(a)
32     {
33         case 1:printf("Enter Admission no. to search: ");
34                 scanf("%d",&addno);
35                 search(data, n, addno);
36                 break;
37         case 0:printf("Thank you");
38                 break;
39         default:printf("Thank you");
40     }
41     return 0;
42 }
```

6. Accepting details

```
43
44 void accept(struct student list[80],int s)
45 {
46     int i;
47     for(i=0;i<s;i++)
48     {
49         printf("Enter data for Admission Process #%d\n",i+1);
50         printf("Enter Admission no.: ");
51         scanf("%d",&list[i].addno);
52         fflush(stdin);
53         printf("Name: ");
54         gets(list[i].name);
55
56         printf("Percentile in 12th Board: ");
57         scanf("%d",&list[i].percentile);
58         printf("JEE rank: ");
59         scanf("%d",&list[i].jee);
60         printf("Branch Preference (1-CS,2-EC,3-IC): ");
61         scanf("%d %d",&list[i].p1,&list[i].p2);
62     }
63 }
```

7. Search function

```
65 void search(struct student list[80],int s,int number)
66 {
67     int i;
68     for(i=0;i<s;i++)
69     {
70         if(list[i].addno==number)
71         {
72             printf("\nAdmission no.: %d\nName: %s\nPercentile in 12th: %d\nJEE rank:%d\nBranch Allocated:%s",list[i].addno,list[i].name,list[i].percentile,list[i].jee,list[i].branch);
73             return ;
74         }
75     }
76     printf("\nRecord not found\n");
77 }
```

8. Display function (Details according to JEE Rank)

```
79 void display(struct student list[80],int s)
80 {
81     int i;
82     printf("\n\nAdd no.\tName\t\tPercentile\tJee\t\tBranch Allocated\n");
83     for(i=0;i<s;i++)
84     {
85         printf("%d\t%s\t\t%d\t\t#%6d\t\t%s\n",list[i].addno,list[i].name,list[i].percentile,list[i].jee,list[i].branch);
86     }
87 }
88
```

9. Sorting according to JEE Rank

```
92 void jee(struct student list[80],int s)
93 {
94     int i,j,cs=0,ec=0,ic=0;
95     struct student temp;
96
97     for(i=0;i<s-1;i++)
98     {
99         for(j=0;j<(s-1-i);j++)
100         {
101             if(list[j].jee > list[j+1].jee)
102             {
103                 temp=list[j];
104                 list[j]=list[j+1];
105                 list[j+1]=temp;
106             }
107         }
108     }
```

10.Branch Allocation

```
109     for(i=0;i<s;i++)
110     {if (list[i].p1==1 && cs>=4)
111     {
112         list[i].p1=list[i].p2;|
113     }
114     else if(list[i].p1==2 && ec>=4)
115     {
116         list[i].p1=list[i].p2;
117     }
118     else if(list[i].p1==3 && ic>=4)
119     {
120         list[i].p1=list[i].p2;
121     }
122 }
```

11.Branch Name(for display)

```
123     if(list[i].p1==1)
124     {
125         strcpy(list[i].branch,seat1);
126     }
127     else if(list[i].p1==2)
128     {
129         strcpy(list[i].branch,seat2);
130     }
131     else if(list[i].p1==3)
132     {
133         strcpy(list[i].branch,seat3);
134     }
```

12.To count number of students allocated in a branch

```
136     switch(list[i].p1)
137     {   case 1:
138         cs++;
139         break;
140         case 2:
141         ec++;
142         break;
143         case 3:
144         ic++;
145         break;
146     }
147
148     printf("Number of students allocated to\nComputer Science:%d\nElectronic and Communication:%d\n");
149
150 }
```

INPUT/OUTPUT

1)

"C:\Users\vedan\Desktop\SEM 1\CP\CP Assignment.exe"

```

Welcome to Admission portal

Number of student taking admission: 7
Enter data for Admission Process #1
Enter Admission no.: 1
Name: abc
Percentile in 12th Board: 78
JEE rank: 445775
Branch Preference (1-CS,2-EC,3-IC): 1 2
Enter data for Admission Process #2
Enter Admission no.: 2
Name: def
Percentile in 12th Board: 89
JEE rank: 245663
Branch Preference (1-CS,2-EC,3-IC): 2 3
Enter data for Admission Process #3
Enter Admission no.: 3
Name: ghi
Percentile in 12th Board: 67
JEE rank: 534675
Branch Preference (1-CS,2-EC,3-IC): 1 3
Enter data for Admission Process #4
Enter Admission no.: 4
Name: jkl
Percentile in 12th Board: 45
JEE rank: 869123
Branch Preference (1-CS,2-EC,3-IC): 1 2
```

2)

"C:\Users\vedan\Desktop\SEM 1\CP\CP Assignment.exe"

```

Enter data for Admission Process #5
Enter Admission no.: 5
Name: mno
Percentile in 12th Board: 99
JEE rank: 12345
Branch Preference (1-CS,2-EC,3-IC): 3 1
Enter data for Admission Process #6
Enter Admission no.: 6
Name: pqr
Percentile in 12th Board: 78
JEE rank: 454212
Branch Preference (1-CS,2-EC,3-IC): 1 3
Enter data for Admission Process #7
Enter Admission no.: 7
Name: stu
Percentile in 12th Board: 98
JEE rank: 23415
Branch Preference (1-CS,2-EC,3-IC): 1 2
```


INPUT/OUTPUT

3)

"C:\Users\vedan\Desktop\SEM 1\CP\CP Assignment.exe"

Number of students allocated to
Computer Science:4
Electronic and Communication:2
Instrumentation and Control:1

Add no.	Name	Percentile	Jee	Branch Allocated
5	mno	99	# 12345	IC
7	stu	98	# 23415	CS
2	def	89	#245663	EC
1	abc	78	#445775	CS
6	pqr	78	#454212	CS
3	ghi	67	#534675	CS
4	jkl	45	#869123	EC

Do you want to search by admission no. (1=yes,0=no)?

1

Enter Admission no. to search: 5

Admission no.: 5

Name: mno

Percentile in 12th: 99

JEE rank:12345

Branch Allocated:IC

Process returned 0 (0x0) execution time : 139.512 s

Press any key to continue.