

22. Write a C program to implement the two-level directory system.

Test Case:

6

3 user directories have to be created with name of user1, user2, user3 and also to create 3 files with user1 directory, 2 files with user2 and user3 directory

(globals)

TDM-GCC 4.9.2 64-bit Release

Project Classes Debug consumer and producer problem.cpp creating threads.cpp worst fit algorithm.cpp TWO LEVEL DIRECTORY 2.C two level directory.cpp

```
1 #include<string.h>
2 #include<stdlib.h>
3 #include<stdio.h>
4 struct
5 {
6     char dname[10],fname[10][10];
7     int fcnt;
8     }dir[10];
9 void main()
10 {
11     int i,ch,dcnt,k;
12     char f[30], d[30];
13     dcnt=0;
14     while(1)
15     {
16         printf("\n1. Create Directory\t2. Create File\t3. Delete File");
17         printf("\n4. Search File\t\t5. Display\t6. Exit\tEnter your choice -- ");
18         scanf("%d",&ch);
19         switch(ch)
20         {
21             case 1: printf("\nEnter name of directory -- ");
22                     scanf("%s", dir[dcnt].dname);
23                     dir[dcnt].fcnt=0;
24                     dcnt++;
25                     printf("Directory created");
26                     break;
27             case 2: printf("\nEnter name of the directory -- ");
28                     scanf("%s",d);
29                     for(i=0;i<dcnt;i++)
30                         if(strcmp(d,dir[i].dname)==0)
31                         {
32                             printf("Enter name of the file -- ");
33                             scanf("%s",dir[i].fname[dir[i].fcnt]);
34                             printf("File created");
35                             break;
36                         }
37                     if(i==dcnt)
```

Compiler (5) Resources Compile Log Debug Find Results

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ENG

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C:\Users\hp\Desktop\OPERATING SYSTEMS LAB\two level directory.cpp - Dev-C++ 5.11

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(globals)

TDH-GCC 4.9.2 64-bit Release

Project Classes Debug

consumer and producer problem.cpp creating threads.cpp worst fit algorithm.cpp TWO LEVEL DIRECTORY 2.C two level directory.cpp

```
38 printf("Directory %s not found",d);
39 break;
40 case 3: printf("\nEnter name of the directory -- ");
41 scanf("%s",d);
42 for(i=0;i<dcnt;i++)
43 {
44 if(strcmp(d,dir[i].dname)==0)
45 {
46 printf("Enter name of the file -- ");
47 scanf("%s",f);
48 for(k=0;k<dir[i].fcnt;k++)
49 {
50 if(strcmp(f, dir[i].fname[k])==0)
51 {
52 printf("File %s is deleted ",f);
53 dir[i].fcnt--;
54 strcpy(dir[i].fname[k],dir[i].fname[dir[i].fcnt]);
55 goto jmp;
56 }
57 }
58 printf("File %s not found",f);
59 goto jmp;
60 }
61 }
62 printf("Directory %s not found",d);
63 jmp : break;
64 case 4: printf("\nEnter name of the directory -- ");
65 scanf("%s",d);
66 for(i=0;i<dcnt;i++)
67 {
68 if(strcmp(d,dir[i].dname)==0)
69 {
70 printf("Enter the name of the file -- ");
71 scanf("%s",f);
72 for(k=0;k<dir[i].fcnt;k++)
73 {
74 if(strcmp(f, dir[i].fname[k])==0)
```

Compiler (5) Resources Compile Log Debug Find Results

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(globals)

TDM-GCC 4.9.2 64-bit Release

Project Classes Debug consumer and producer problem.cpp creating threads.cpp worst fit algorithm.cpp TWO LEVEL DIRECTORY 2.C two level directory.cpp

```
60 {  
61 }  
62 printf("Directory %s not found",d);  
63 jmp : break;  
64 case 4: printf("\nEnter name of the directory -- ");  
65 scanf("%s",d);  
66 for(i=0;i<dcnt;i++)  
67 {  
68 if(strcmp(d,dir[i].dname)==0)  
69 {  
70 printf("Enter the name of the file -- ");  
71 scanf("%s",f);  
72 for(k=0;k<dir[i].fcnt;k++)  
73 {  
74 if(strcmp(f, dir[i].fname[k])==0)  
75 {  
76 printf("File %s is found ",f);  
77 goto jmp1;  
78 }  
79 }  
80 printf("File %s not found",f);  
81 goto jmp1;  
82 }  
83 }  
84 printf("Directory %s not found",d);  
85 jmp1: break;  
86 case 5: if(dcnt==0)  
87 printf("\nNo Directory's ");  
88 else  
89 {  
90 printf("\nDirectory\tFiles");  
91 for(i=0;i<dcnt;i++)  
92 {  
93 printf("\n%s\t\t",dir[i].dname);  
94 for(k=0;k<dir[i].fcnt;k++)  
95 printf("\t%s",dir[i].fname[k]);  
96 }
```

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