



main.c

Run

Output

Clear

```
1 #include <stdio.h>
2 #include <stdlib.h>
3 #include <string.h>
4 #define MAX_DIRS 100
5 #define MAX_FILES 100
6 typedef struct {
7     char name[20];
8     int file_count;
9     char files[MAX_FILES][20];
10 } Directory;
11 Directory directories[MAX_DIRS];
12 int dir_count = 0;
13 void create_directory(char* name) {
14     if (dir_count >= MAX_DIRS) {
15         printf("Directory limit exceeded.\n");
16         return;
17     }
18     Directory new_dir;
19     strcpy(new_dir.name, name);
20     new_dir.file_count = 0;
21     directories[dir_count] = new_dir;
22     dir_count++;
23     printf("Directory '%s' created successfully.\n", name);
24 }
25 void create_file(char* dir_name, char* file_name) {
26     int i;
27     Directory* dir = NULL;
28     for (i = 0; i < dir_count; i++) {
```

```
/tmp/LOhfxva1M9.o
Directory 'user1' created successfully.
Directory 'user2' created successfully.
Directory 'user3' created successfully.
File 'file1' created successfully in directory 'user1'.
File 'file2' created successfully in directory 'user1'.
File 'file3' created successfully in directory 'user1'.
File 'file4' created successfully in directory 'user2'.
File 'file5' created successfully in directory 'user2'.
File 'file6' created successfully in directory 'user3'.
File 'file7' created successfully in directory 'user3'.
Files in directory 'user1':
- file1
- file2
- file3
Files in directory 'user2':
- file4
- file5
Files in directory 'user3':
- file6
- file7
```

```

main.c
27 Directory* dir = NULL;
28- for (i = 0; i < dir_count; i++) {
29-     if (strcmp(directories[i].name, dir_name) == 0) {
30-         dir = &directories[i];
31-         break;
32-     }
33- }
34- if (dir == NULL) {
35-     printf("Directory '%s' does not exist.\n", dir_name);
36-     return;
37- }
38- if (dir->file_count >= MAX_FILES) {
39-     printf("File limit exceeded in directory '%s'.\n", dir_name);
40-     return;
41- }
42- for (i = 0; i < dir->file_count; i++) {
43-     if (strcmp(dir->files[i], file_name) == 0) {
44-         printf("File '%s' already exists in directory '%s'.\n", file_name
            , dir_name);
45-         return;
46-     }
47- }
48- strcpy(dir->files[dir->file_count], file_name);
49- dir->file_count++;
50- printf("File '%s' created successfully in directory '%s'.\n", file_name,
    dir_name);
51- }
52- void list_files(char* dir_name) {
        
```

Output

Clear

```

/tmp/L0hfxva1M9.o
Directory 'user1' created successfully.
Directory 'user2' created successfully.
Directory 'user3' created successfully.
File 'file1' created successfully in directory 'user1'.
File 'file2' created successfully in directory 'user1'.
File 'file3' created successfully in directory 'user1'.
File 'file4' created successfully in directory 'user2'.
File 'file5' created successfully in directory 'user2'.
File 'file6' created successfully in directory 'user3'.
File 'file7' created successfully in directory 'user3'.
Files in directory 'user1':
- file1
- file2
- file3
Files in directory 'user2':
- file4
- file5
Files in directory 'user3':
- file6
- file7
        
```

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```
51 }
52 void list_files(char* dir_name) {
53     int i;
54     Directory* dir = NULL;
55     for (i = 0; i < dir_count; i++) {
56         if (strcmp(directories[i].name, dir_name) == 0) {
57             dir = &directories[i];
58             break;
59         }
60     }
61     if (dir == NULL) {
62         printf("Directory '%s' does not exist.\n", dir_name);
63         return;
64     }
65     printf("Files in directory '%s':\n", dir_name);
66     for (i = 0; i < dir->file_count; i++) {
67         printf("- %s\n", dir->files[i]);
68     }
69 }
70 int main() {
71     create_directory("user1");
72     create_directory("user2");
73     create_directory("user3");
74     create_file("user1", "file1");
75     create_file("user1", "file2");
76     create_file("user1", "file3");
77     create_file("user2", "file4");
78     create_file("user2", "file5");
```

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/tmp/L0hfxva1M9.o
Directory 'user1' created successfully.
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File 'file6' created successfully in directory 'user3'.
File 'file7' created successfully in directory 'user3'.
Files in directory 'user1':
- file1
- file2
- file3
Files in directory 'user2':
- file4
- file5
Files in directory 'user3':
- file6
- file7
```

main.c

59 }

60 }

61 - if (dir == NULL) {

62 printf("Directory '%s' does not exist.\n", dir_name);

63 return;

64 }

65 printf("Files in directory '%s':\n", dir_name);

66 - for (i = 0; i < dir->file_count; i++) {

67 printf("- %s\n", dir->files[i]);

68 }

69 }

70 - int main() {

71 create_directory("user1");

72 create_directory("user2");

73 create_directory("user3");

74 create_file("user1", "file1");

75 create_file("user1", "file2");

76 create_file("user1", "file3");

77 create_file("user2", "file4");

78 create_file("user2", "file5");

79 create_file("user3", "file6");

80 create_file("user3", "file7");

81 list_files("user1");

82 list_files("user2");

83 list_files("user3");

84 return 0;

85 }

86 }

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Output

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Directory 'user1' created successfully.

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File 'file1' created successfully in directory 'user1'.

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Files in directory 'user1':

- file1

- file2

- file3

Files in directory 'user2':

- file4

- file5

Files in directory 'user3':

- file6

- file7

Mac OS dock with various application icons including Safari, Messages, WhatsApp, Photos, Mail, Calendar, Music, App Store, and others.