

```

1 #include <stdio.h>
2 #include <stdlib.h>
3 #include <string.h>
4 #include <dirent.h>
5 #include <sys/stat.h>
6
7 void create_directory(const char *path) {
8     struct stat st = {0};
9     if (stat(path, &st) == -1) {
10         mkdir(path, 0700);
11     }
12 }
13
14 void organize_files(const char *base_dir) {
15     DIR *dir;
16     struct dirent *entry;
17
18     if ((dir = opendir(base_dir)) == NULL) {
19         perror("opendir");
20         return;
21     }
22
23     while ((entry = readdir(dir)) != NULL) {
24         if (entry->d_type == DT_REG) {
25             char *ext = strrchr(entry->d_name, '.');
26             if (ext) {
27                 char dir_name[256];
28                 snprintf(dir_name, sizeof(dir_name), "%s/%s", base_dir, ext + 1);
29                 create_directory(dir_name);
30                 char old_path[512], new_path[512];
31                 snprintf(old_path, sizeof(old_path), "%s/%s", base_dir, entry->d_name);
32                 snprintf(new_path, sizeof(new_path), "%s/%s/%s", base_dir, ext + 1, entry->d_name);
33                 rename(old_path, new_path);
34             }
35         }
36     }
37     closedir(dir);
38 }
39
40 int main() {
41     const char *base_directory = "my_files";
42     create_directory(base_directory);
43     organize_files(base_directory);
44     return 0;
45 }

```

opendir: No such file or directory

=== Code Execution Successful ===

```

1 #include <stdio.h>
2 #include <stdlib.h>
3 #include <string.h>
4
5 struct Employee {
6     int id;
7     char name[50];
8     float salary;
9 };
10
11 void writeEmployee(FILE *file, struct Employee emp, int index) {
12     fseek(file, index * sizeof(struct Employee), SEEK_SET);
13     fwrite(&emp, sizeof(struct Employee), 1, file);
14 }
15
16 void readEmployee(FILE *file, struct Employee *emp, int index) {
17     fseek(file, index * sizeof(struct Employee), SEEK_SET);
18     fread(emp, sizeof(struct Employee), 1, file);
19 }
20
21 int main() {
22     FILE *file;
23     struct Employee emp;
24
25     file = fopen("employees.dat", "wb+");
26     if (file == NULL) {
27         perror("Unable to open file!");
28         return 1;
29     }
30
31     // Writing employee details
32     emp.id = 1;
33     strcpy(emp.name, "John Doe");
34     emp.salary = 50000.00;
35     writeEmployee(file, emp, 0);
36
37     emp.id = 2;
38     strcpy(emp.name, "Jane Smith");
39     emp.salary = 60000.00;
40     writeEmployee(file, emp, 1);
41
42     // Reading employee details
43     for (int i = 0; i < 2; i++) {
44         readEmployee(file, &emp, i);
45         printf("Employee ID: %d, Name: %s, Salary: %.2f\n", emp.id, emp.name, emp.salary);
46     }
47
48     fclose(file);
49     return 0;
50 }

```

Unable to open file!: Permission denied

--- Code Exited With Errors ---