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#include <stdio.h>
#include <stdlib.h>
#include <string.h>
#define MAX_FILES 100
#define MAX_FILENAME_LENGTH 50
typedef struct {
  char name[MAX_FILENAME_LENGTH];
  int size;
} File;
File directory[MAX_FILES];
int fileCount = 0;
void createFile(const char* name, int size) {
  if (fileCount < MAX_FILES) {</pre>
    strcpy(directory[fileCount].name, name);
    directory[fileCount].size = size;
    printf("File created: %s (%d bytes)\n", name, size);
    fileCount++;
  } else {
    printf("Directory is full. Cannot create file.\n");
  }
}
void deleteFile(const char* name) {
  int found = 0;
  for (int i = 0; i < fileCount; i++) {
    if (strcmp(directory[i].name, name) == 0) {
      found = 1;
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printf("File '%s' deleted successfully.\n", name);
       for (int j = i; j < fileCount - 1; j++) {
         strcpy(directory[j].name, directory[j + 1].name);
         directory[j].size = directory[j + 1].size;
       }
       fileCount--;
       break;
    }
  }
  if (!found) {
    printf("File '%s' not found.\n", name);
  }
}
void listFiles() {
  if (fileCount == 0) {
    printf("No files in the directory.\n");
  } else {
    printf("Files in the directory:\n");
    for (int i = 0; i < fileCount; i++) {
       printf("%s (%d bytes)\n", directory[i].name, directory[i].size);
    }
  }
}
void searchFile(const char* name) {
  int found = 0;
  for (int i = 0; i < fileCount; i++) {
    if (strcmp(directory[i].name, name) == 0) {
       found = 1;
       printf("File '%s' found. Size: %d bytes\n", name, directory[i].size);
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break;
    }
  }
  if (!found) {
    printf("File '%s' not found.\n", name);
  }
}
int main() {
  int choice;
  char filename[MAX_FILENAME_LENGTH];
  while (1) {
    printf("\n1. Create a file\n");
    printf("2. Delete a file\n");
    printf("3. List all files\n");
    printf("4. Search for a file\n");
    printf("5. Exit\n");
    printf("Enter your choice: ");
    scanf("%d", &choice);
    switch (choice) {
       case 1:
         printf("Enter filename: ");
         scanf("%s", filename);
         printf("Enter file size: ");
         int size;
         scanf("%d", &size);
         createFile(filename, size);
         break;
       case 2:
```

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printf("Enter filename to delete: ");
         scanf("%s", filename);
         deleteFile(filename);
         break;
       case 3:
         listFiles();
         break;
       case 4:
         printf("Enter filename to search: ");
         scanf("%s", filename);
         searchFile(filename);
         break;
       case 5:
         exit(0);
       default:
         printf("Invalid choice!\n");
    }
  }
  return 0;
}
```

