13.directory system

#include <stdio.h>

#include <string.h>

#define MAX\_FILES 100

#define MAX\_FILENAME\_LENGTH 20

struct file {

char name[MAX\_FILENAME\_LENGTH];

int size;

};

struct file files[MAX\_FILES];

int numFiles = 0;

void createFile(char name[], int size)

{

if (numFiles >= MAX\_FILES) {

printf("Error: Maximum number of files reached.\n");

return;

}

strcpy(files[numFiles].name, name);

files[numFiles].size = size;

numFiles++;

printf("File '%s' created with size %d.\n", name, size);

}

void deleteFile(char name[])

{

int i;

for (i = 0; i < numFiles; i++) {

if (strcmp(files[i].name, name) == 0) {

printf("File '%s' deleted.\n", name);

files[i] = files[numFiles - 1];

numFiles--;

return;

}

}

printf("Error: File '%s' not found.\n", name);

}

void displayFiles()

{

int i;

printf("Filename\tSize\n");

for (i = 0; i < numFiles; i++) {

printf("%s\t\t%d\n", files[i].name, files[i].size);

}

}

int main()

{

int choice, size;

char name[MAX\_FILENAME\_LENGTH];

do {

printf("\nSingle-level Directory System\n");

printf("1. Create a file\n");

printf("2. Delete a file\n");

printf("3. Display all files\n");

printf("4. Exit\n");

printf("Enter your choice: ");

scanf("%d", &choice);

switch (choice) {

case 1:

printf("Enter filename: ");

scanf("%s", name);

printf("Enter size: ");

scanf("%d", &size);

createFile(name, size);

break;

case 2:

printf("Enter filename: ");

scanf("%s", name);

deleteFile(name);

break;

case 3:

displayFiles();

break;

case 4:

printf("Exiting...");

break;

default:

printf("Invalid choice.\n");

}

} while (choice != 4);

return 0;

}

OUTPUT

