#include <stdio.h>

#include <stdlib.h>

#include <string.h>

#define MAX\_USERS 3

#define MAX\_FILES\_PER\_USER 3

#define MAX\_FILENAME\_LENGTH 20

struct File {

char name[MAX\_FILENAME\_LENGTH];

};

struct Directory {

char name[MAX\_FILENAME\_LENGTH];

struct File files[MAX\_FILES\_PER\_USER];

};

struct User {

char name[MAX\_FILENAME\_LENGTH];

struct Directory directory;

};

int main() {

struct User users[MAX\_USERS];

int i, j;

for (i = 0; i < MAX\_USERS; i++) {

printf("Enter name for user %d: ", i+1);

scanf("%s", users[i].name);

strcpy(users[i].directory.name, users[i].name);

for (j = 0; j < MAX\_FILES\_PER\_USER; j++) {

struct File file;

printf("Enter name for file %d for user %d: ", j+1, i+1);

scanf("%s", file.name);

users[i].directory.files[j] = file;

}

}

printf("\nDirectory structure:\n");

for (i = 0; i < MAX\_USERS; i++) {

printf("%s:\n", users[i].directory.name);

for (j = 0; j < MAX\_FILES\_PER\_USER; j++) {

printf("\t%s\n", users[i].directory.files[j].name);

}

}

return 0;

}

OUTPUT

Enter name for user 1: 2

Enter name for file 1 for user 1: 3

Enter name for file 2 for user 1: 9

Enter name for file 3 for user 1: 5

Enter name for user 2: 7

Enter name for file 1 for user 2: 5

Enter name for file 2 for user 2: 5

Enter name for file 3 for user 2: 9

Enter name for user 3: 4

Enter name for file 1 for user 3: 1

Enter name for file 2 for user 3: 8

Enter name for file 3 for user 3: 6

Directory structure:

2:

3

9

5

7:

5

5

9

4:

1

8

6