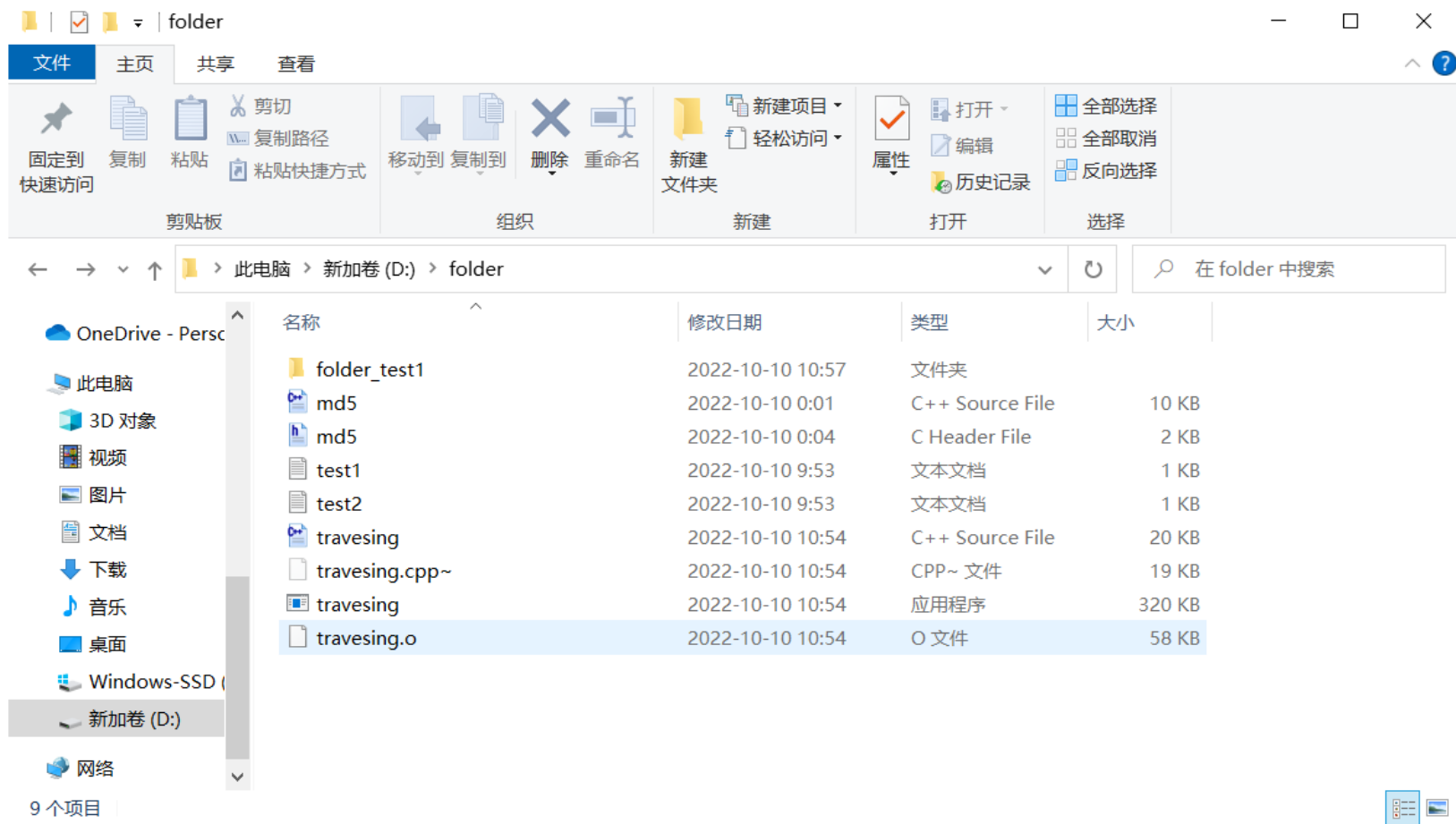
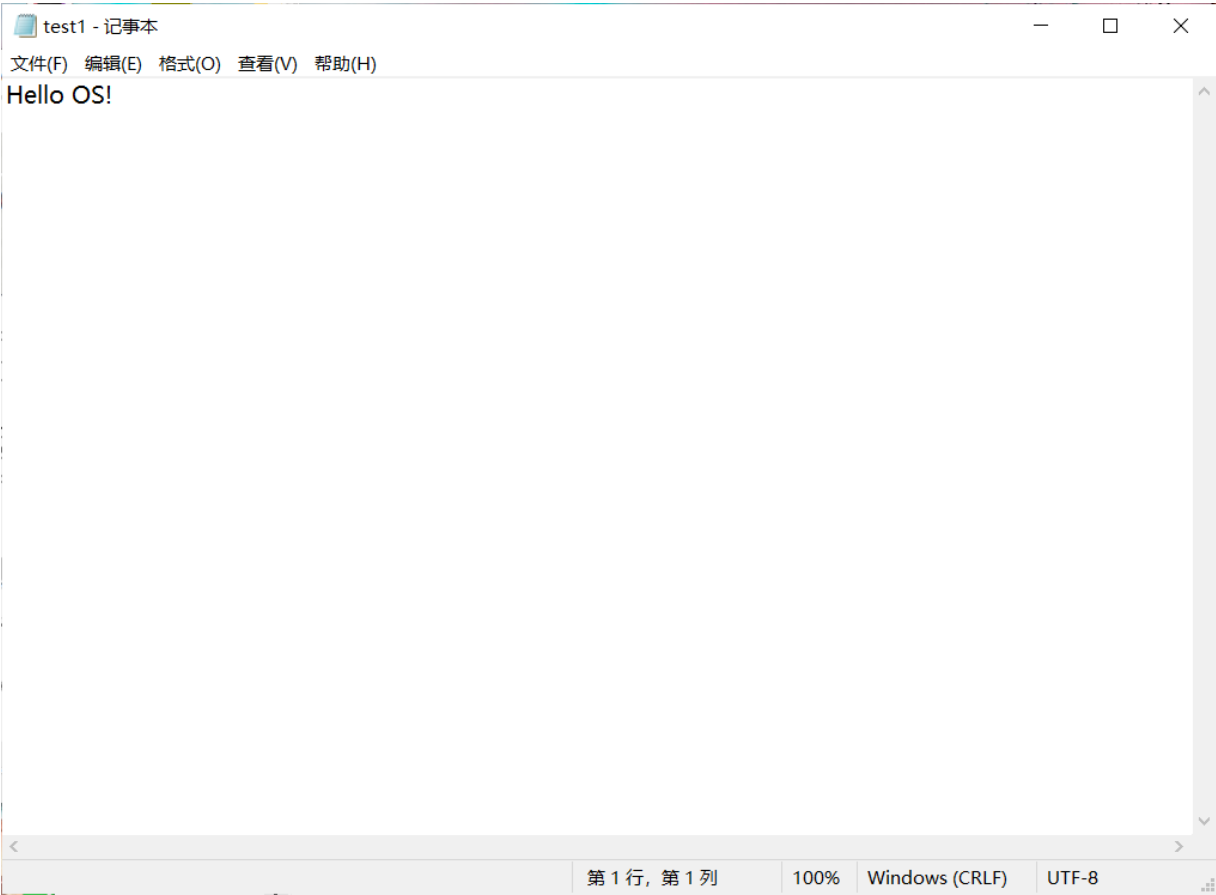


# 遍历文件夹并删除重复文件程序

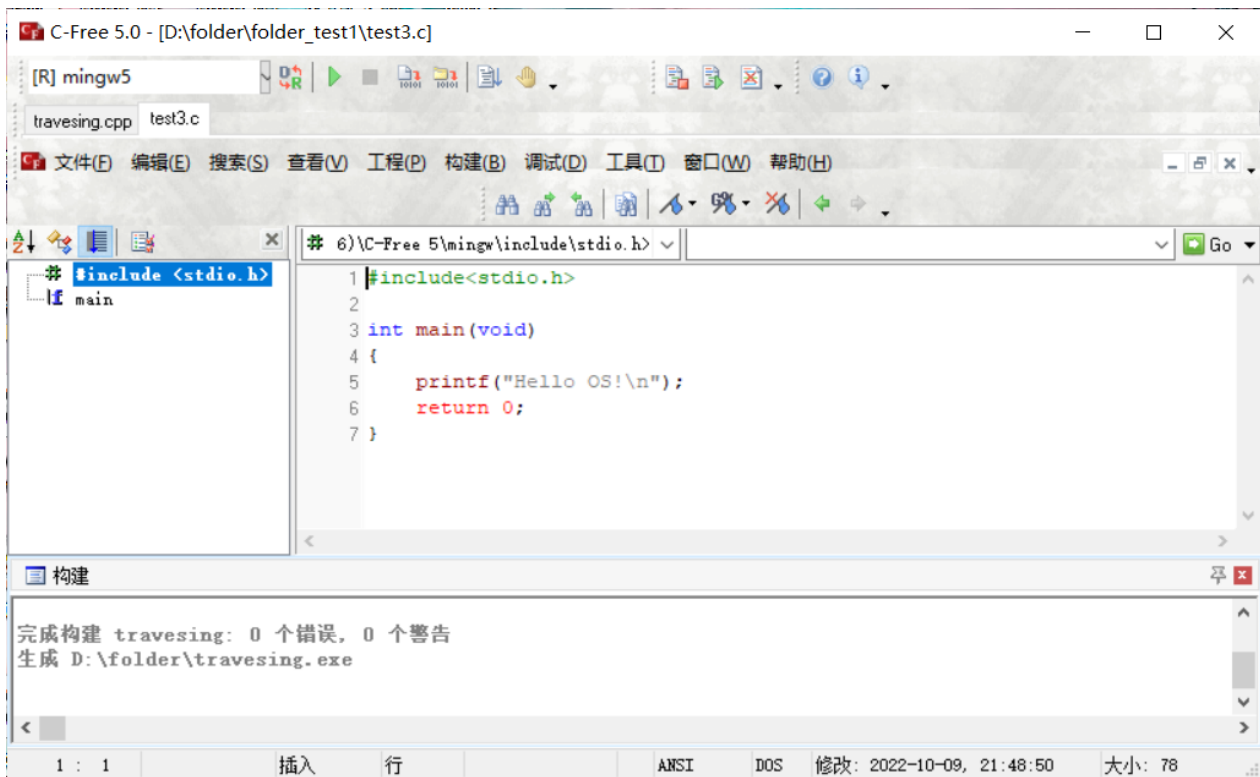
- 主体程序: `./folder/traversing.cpp`
- 头文件: `./folder/md5.h`
- 其他源文件: `./folder/md5.cpp`



测试文件： ./folder/test1.txt和./folder/test2.txt， 两者都是txt文档， 内容相同



测试文件： ./folder/folder\_test1/test3.c和./folder/folder\_test1/test3.c  
两者都是C语言文件，内容相同



C-Free 5.0 - [D:\folder\folder\_test1\test3.c]

[R] mingw5

travesing.cpp test3.c

文件(F) 编辑(E) 搜索(S) 查看(V) 工程(P) 构建(B) 调试(D) 工具(T) 窗口(W) 帮助(H)

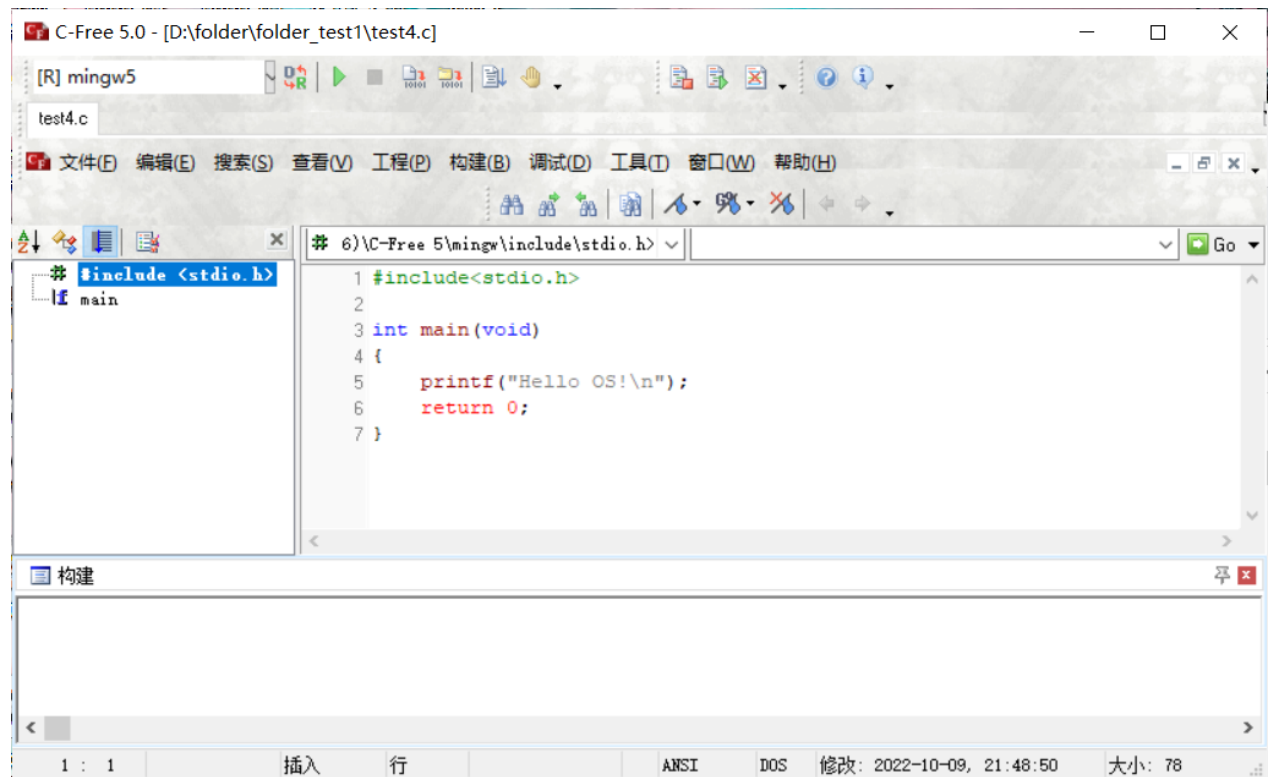
```
#include <stdio.h>

int main(void)
{
    printf("Hello OS!\n");
    return 0;
}
```

构建

完成构建 travesing: 0 个错误, 0 个警告  
生成 D:\folder\travesing.exe

1 : 1 插入 行 ANSI DOS 修改: 2022-10-09, 21:48:50 大小: 78



C-Free 5.0 - [D:\folder\folder\_test1\test4.c]

[R] mingw5

test4.c

文件(F) 编辑(E) 搜索(S) 查看(V) 工程(P) 构建(B) 调试(D) 工具(T) 窗口(W) 帮助(H)

```
#include <stdio.h>

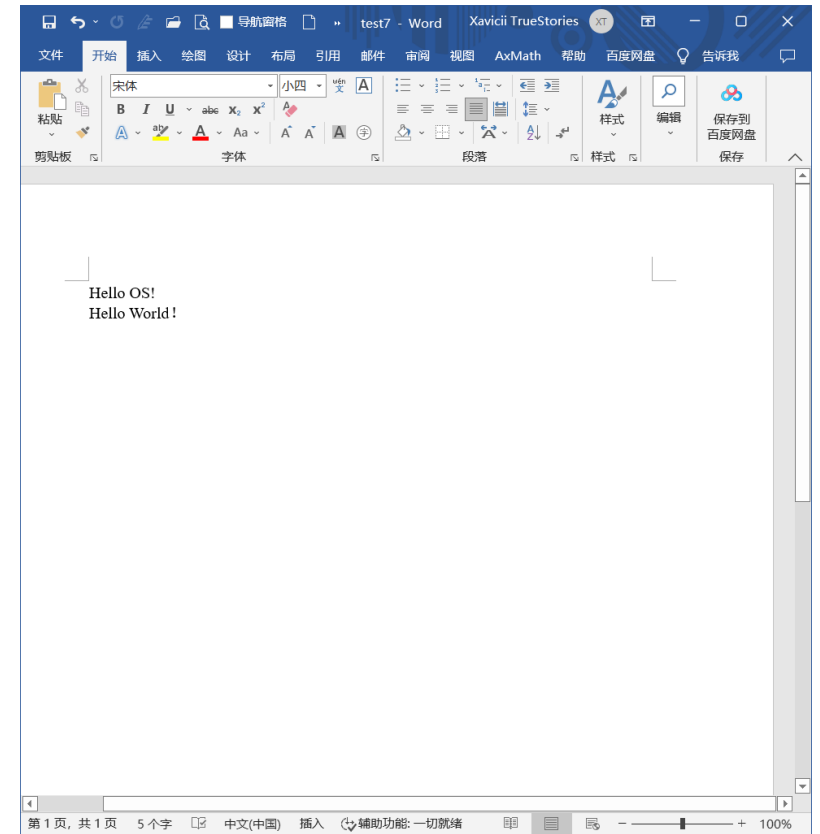
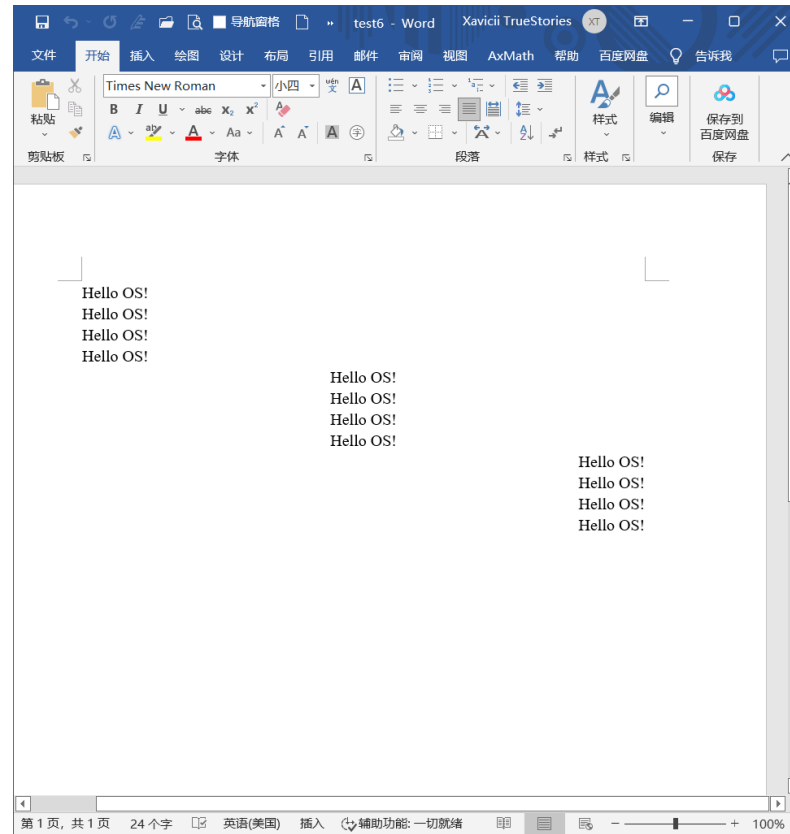
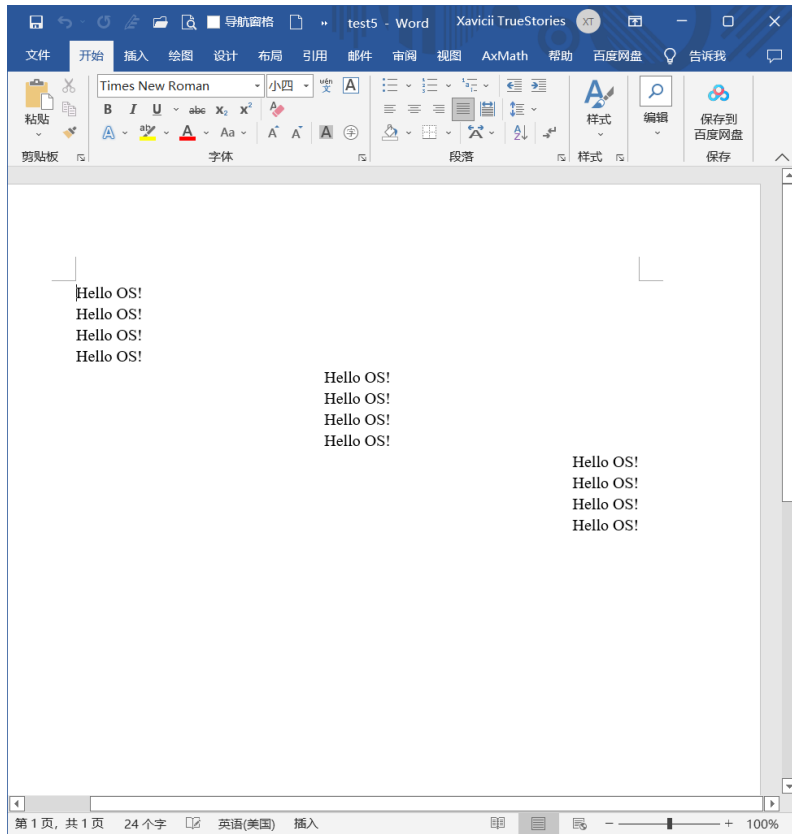
int main(void)
{
    printf("Hello OS!\n");
    return 0;
}
```

构建

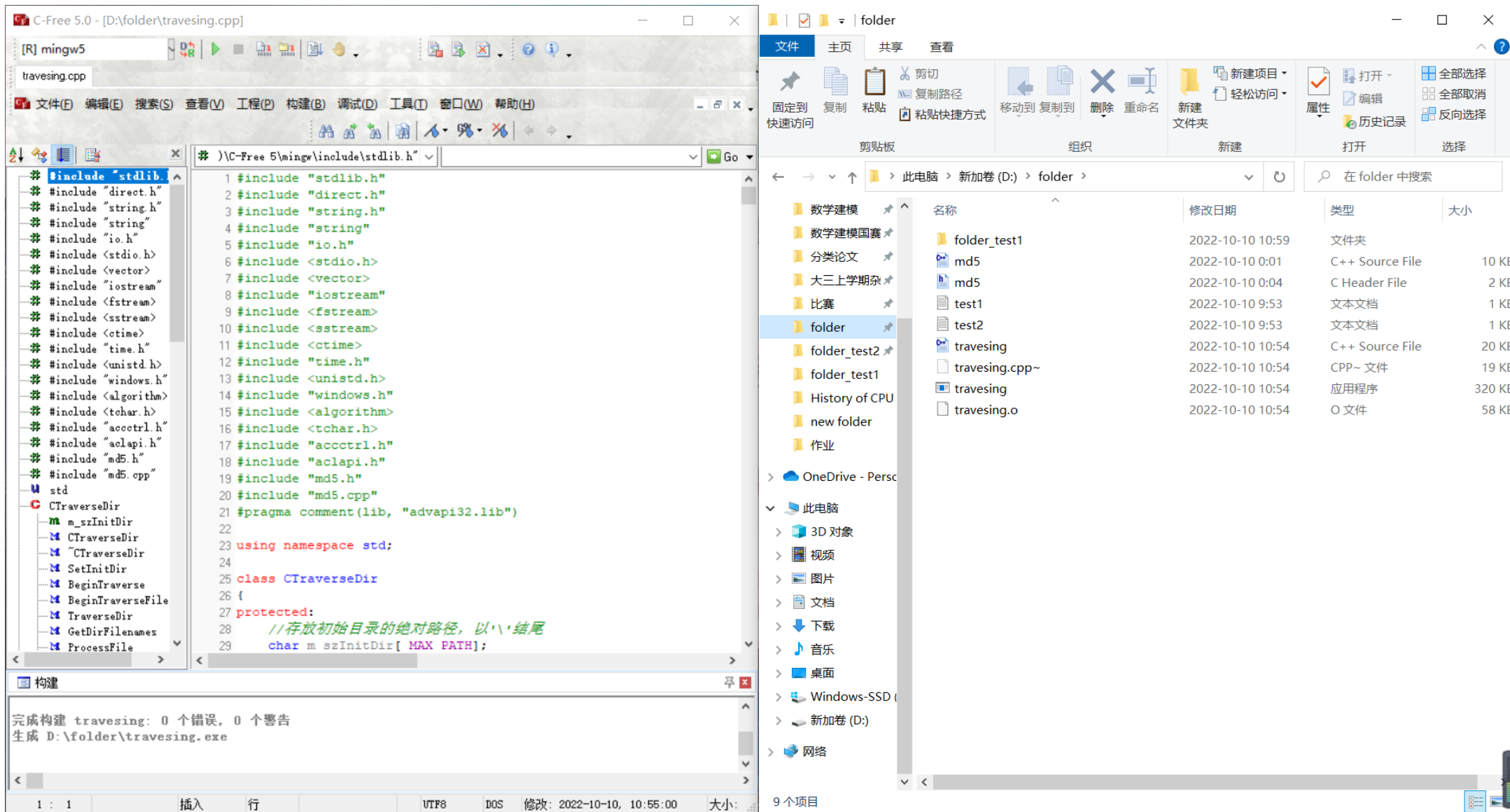
完成构建 travesing: 0 个错误, 0 个警告  
生成 D:\folder\travesing.exe

1 : 1 插入 行 ANSI DOS 修改: 2022-10-09, 21:48:50 大小: 78

测试文件：folder\_test2/test5.doc、folder\_test2/test6.doc、 folder\_test2/test6.doc  
三者都是doc文档，位置与遍历文件夹小程序的位置不同，test5和test6内容相同，test7与test5和test6内容不同



# 启动程序



程序运行成功，删除folder目录下的重复文件test2.txt，此时log日志文件生成

C-Free 5.0 - [D:\folder\travesing.cpp]

[R] mingw5

travesing.cpp

文件(F) 编辑(E) 搜索(S) 查看(V) 工程(P) 构建(B) 调试(D) 工具(T) 窗口(W) 帮助(H)

#include "stdlib.h"

#include "direct.h"

1 #include "stdlib.h"

2 #include "direct.h"

Go

"D:\folder\travesing.exe"

File Owner: Xavicii  
Creation Time: 2022-10-10 10:57:19  
Last Access Time: 2022-10-10 10:57:19  
Last Modification Time: 2022-10-10 09:53:21

Found a group of redundant files:  
File Path & Name: D:\folder\folder\_test1\test3.c  
File Type: c  
File Size: 110 B  
File MD5: 3e00806b183d50c5b56429ad7ba2118c  
File Owner: Xavicii  
Creation Time: 2022-10-10 09:51:54  
Last Access Time: 2022-10-10 09:51:54  
Last Modification Time: 2022-10-09 21:48:49

File Path & Name: D:\folder\folder\_test1\test4.c  
File Type: c  
File Size: 9 B  
File MD5: 3e00806b183d50c5b56429ad7ba2118c  
File Owner: Xavicii  
Creation Time: 2022-10-10 10:57:04  
Last Access Time: 2022-10-10 10:57:04  
Last Modification Time: 2022-10-09 21:48:49

请按任意键继续. . .  
Final file number: 9  
请按任意键继续. . .  
微软拼音 半角

traverseDir  
28 //存放初始目录的绝对路径，以'\'结尾  
29 char m szInitDir[ MAX\_PATH];

构建

检查文件依赖性...

完成构建 travesing: 0 个错误, 0 个警告  
生成 D:\folder\travesing.exe

1 : 1 插入 行 UTF8 DOS 修改: 2022-10-10, 10:55:00 大小:

folder

文件 主页 共享 查看

固定到快速访问 复制 粘贴 复制路径 粘贴快捷方式 移动到 复制到 删除 重命名 新建项目 轻松访问 新建文件夹 新建 属性 编辑 历史记录 全部选择 全部取消 反向选择 打开 选择

剪贴板 组织 新建

打开 在 folder 中搜索

名称 修改日期 类型 大小

folder\_test1 2022-10-10 11:07 文件夹

log 2022-10-10 11:07 文本文档 2 KB

md5 2022-10-10 0:01 C++ Source File 10 KB

md5 2022-10-10 0:04 C Header File 2 KB

test1 2022-10-10 9:53 文本文档 1 KB

travesing 2022-10-10 10:54 C++ Source File 20 KB

travesing.cpp~ 2022-10-10 10:54 CPP~ 文件 19 KB

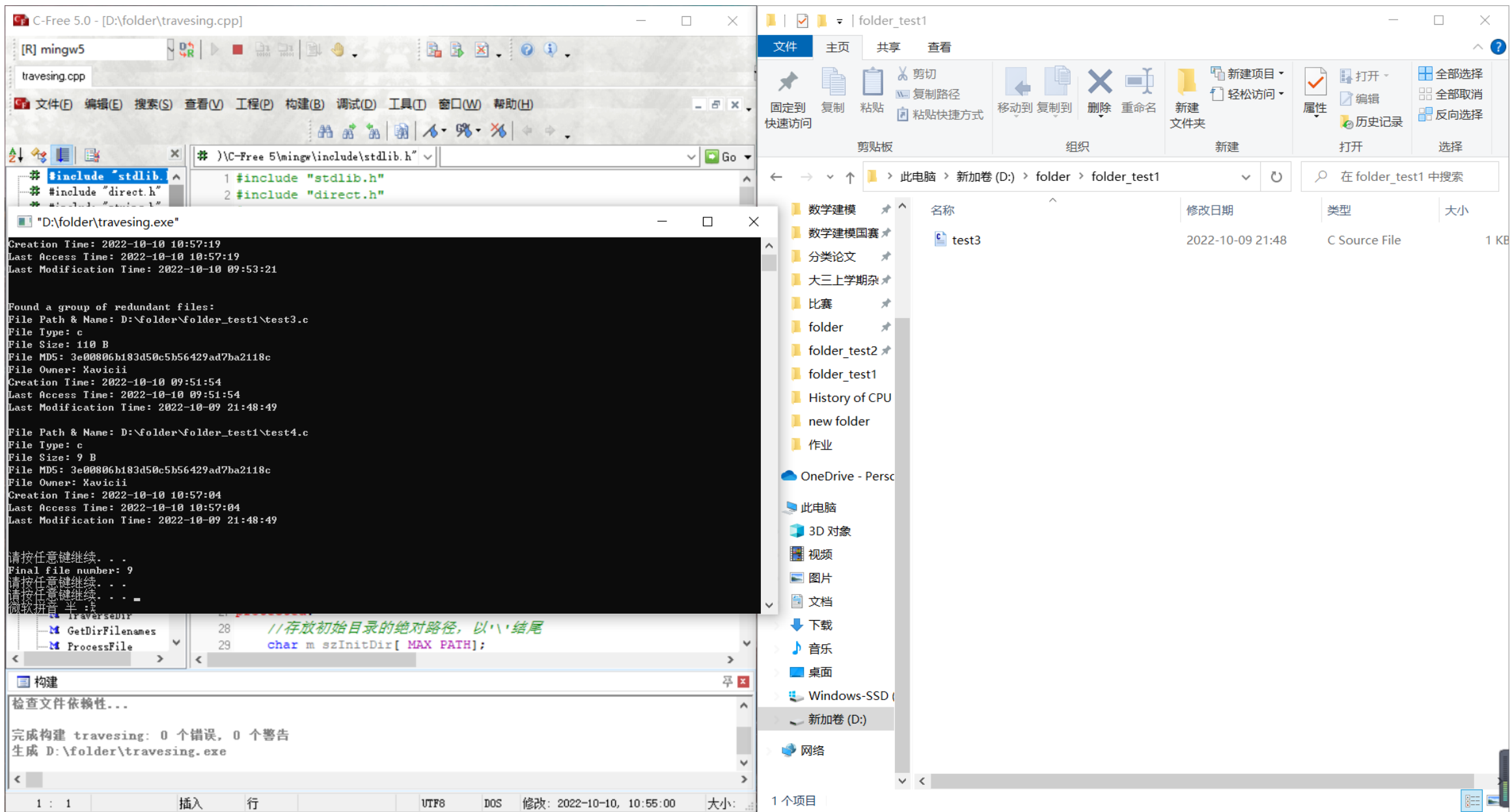
travesing 2022-10-10 10:54 应用程序 320 KB

travesing.o 2022-10-10 10:54 O 文件 58 KB

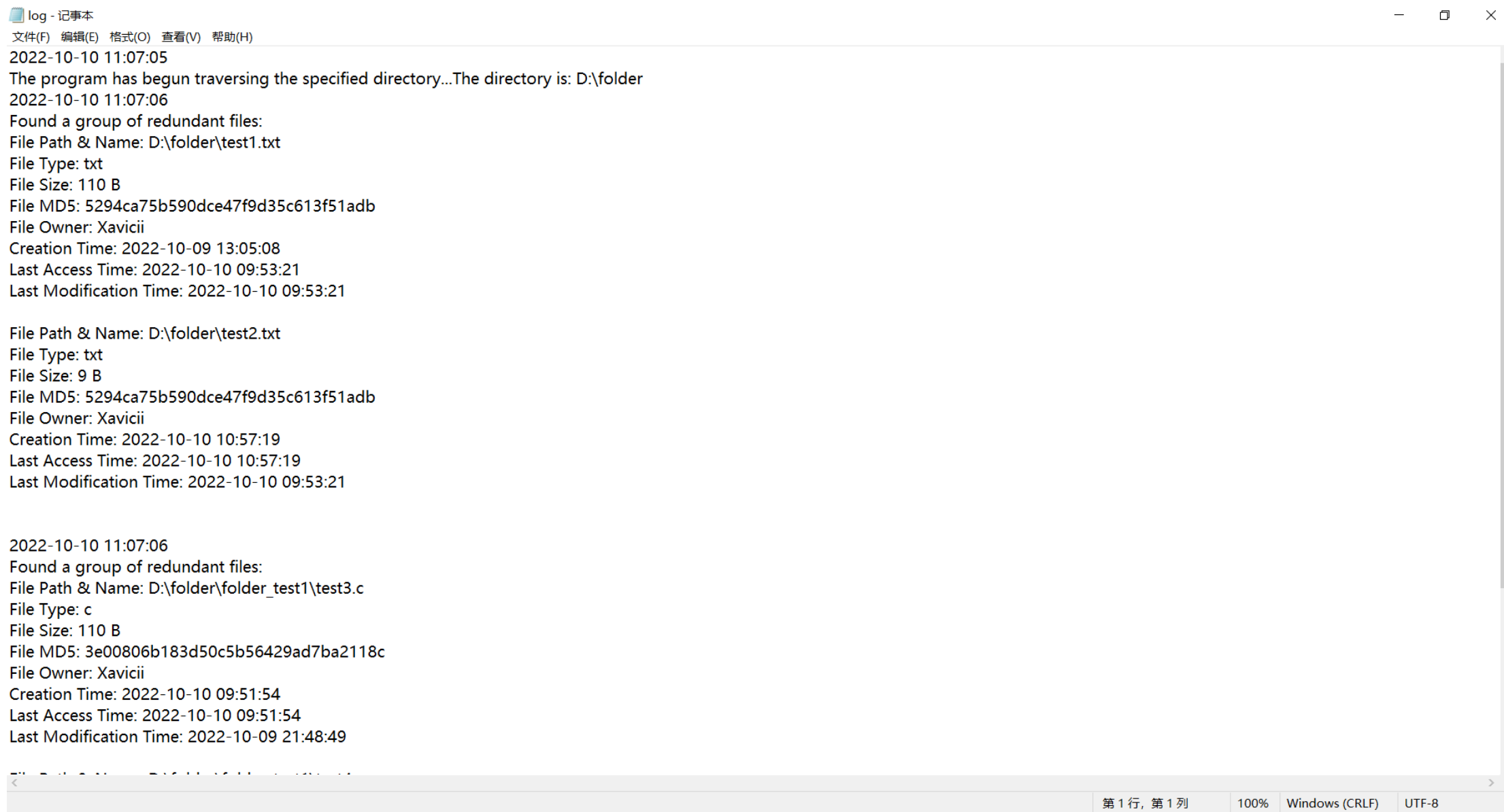
数学建模 数学建模国赛 分类论文 大三上学期杂 比赛 folder folder\_test2 folder\_test1 History of CPU new folder 作业 OneDrive - Persc 此电脑 3D 对象 视频 图片 文档 下载 音乐 桌面 Windows-SSD 新加卷 (D:) 网络

9 个项目 选中 1 个项目

# folder的子目录folder\_test1中的重复文件test4.c也成功被删除



# log日志文件记录了重复文件的信息，包括文件路径、大小、类型、所有者、创建时间、最近访问时间、最近修改时间



```
log - 记事本
文件(F) 编辑(E) 格式(O) 查看(V) 帮助(H)
2022-10-10 11:07:05
The program has begun traversing the specified directory...The directory is: D:\folder
2022-10-10 11:07:06
Found a group of redundant files:
File Path & Name: D:\folder\test1.txt
File Type: txt
File Size: 110 B
File MD5: 5294ca75b590dce47f9d35c613f51adb
File Owner: Xavicii
Creation Time: 2022-10-09 13:05:08
Last Access Time: 2022-10-10 09:53:21
Last Modification Time: 2022-10-10 09:53:21

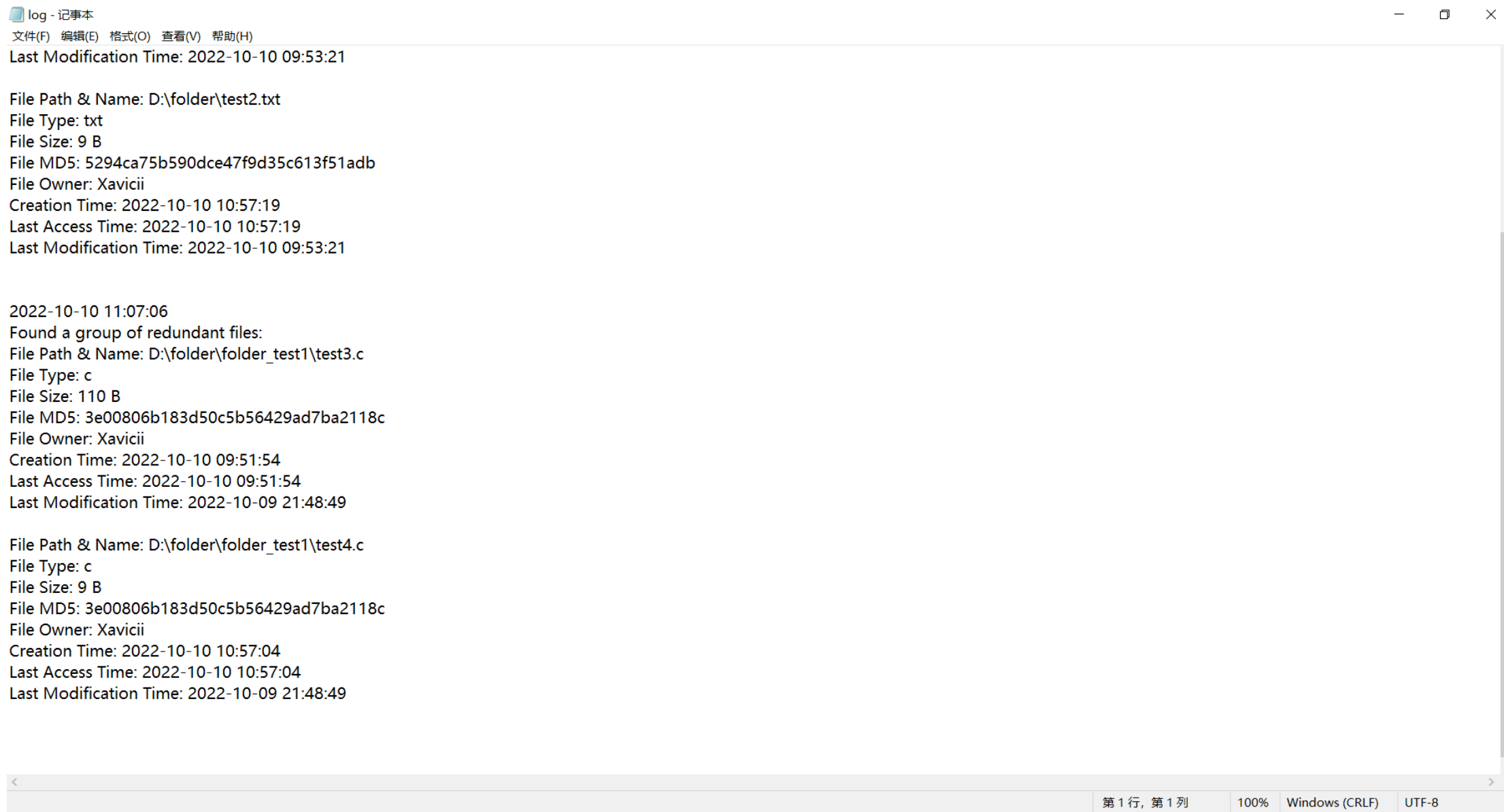
File Path & Name: D:\folder\test2.txt
File Type: txt
File Size: 9 B
File MD5: 5294ca75b590dce47f9d35c613f51adb
File Owner: Xavicii
Creation Time: 2022-10-10 10:57:19
Last Access Time: 2022-10-10 10:57:19
Last Modification Time: 2022-10-10 09:53:21

2022-10-10 11:07:06
Found a group of redundant files:
File Path & Name: D:\folder\folder_test1\test3.c
File Type: c
File Size: 110 B
File MD5: 3e00806b183d50c5b56429ad7ba2118c
File Owner: Xavicii
Creation Time: 2022-10-10 09:51:54
Last Access Time: 2022-10-10 09:51:54
Last Modification Time: 2022-10-09 21:48:49

第 1 行, 第 1 列 100% Windows (CRLF) UTF-8
```



# log日志文件记录了重复文件的信息，包括文件路径、大小、类型、所有者、创建时间、最近访问时间、最近修改时间



```
log - 记事本
文件(F) 编辑(E) 格式(O) 查看(V) 帮助(H)
Last Modification Time: 2022-10-10 09:53:21

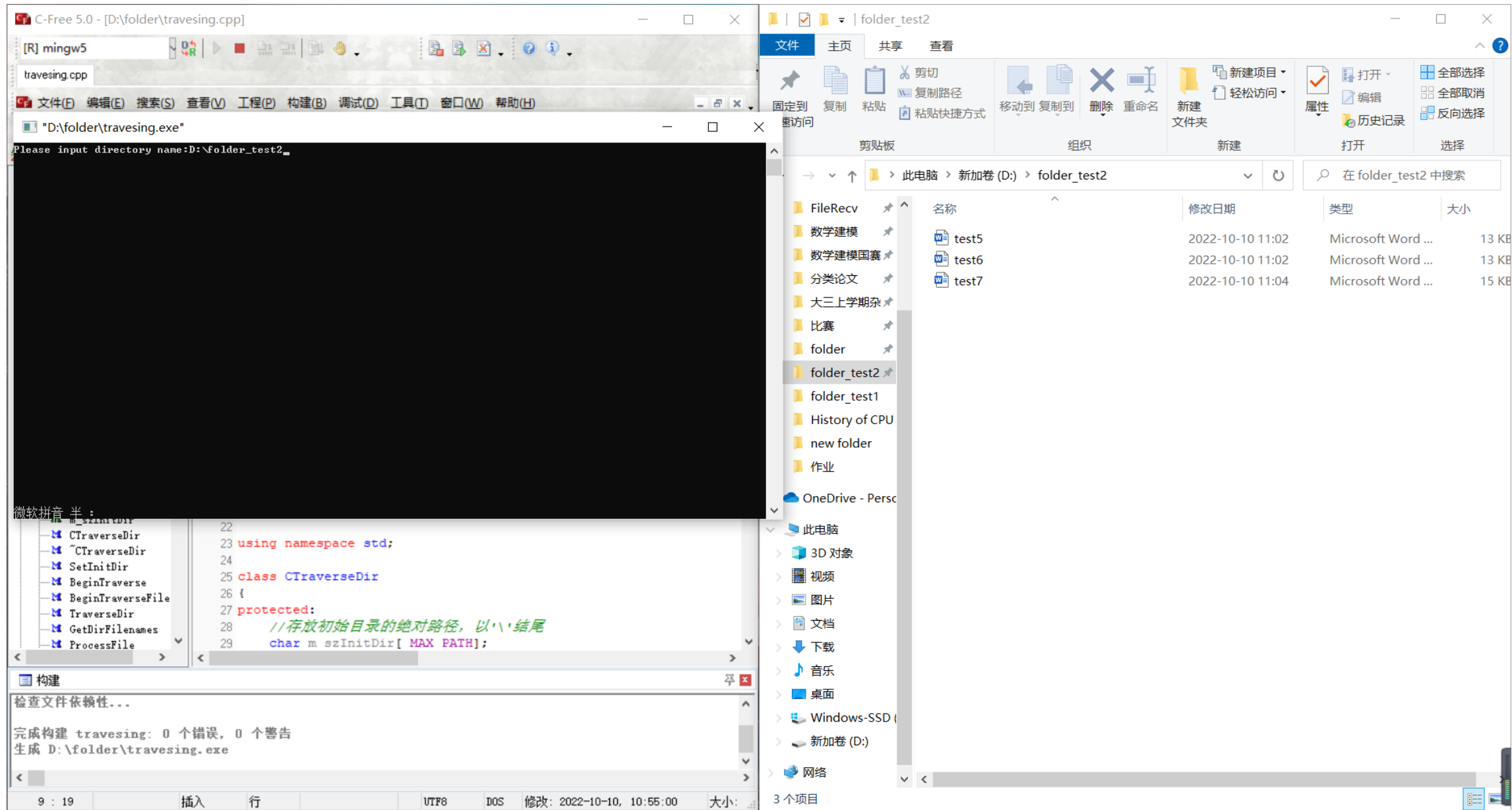
File Path & Name: D:\folder\test2.txt
File Type: txt
File Size: 9 B
File MD5: 5294ca75b590dce47f9d35c613f51adb
File Owner: Xavicii
Creation Time: 2022-10-10 10:57:19
Last Access Time: 2022-10-10 10:57:19
Last Modification Time: 2022-10-10 09:53:21

2022-10-10 11:07:06
Found a group of redundant files:
File Path & Name: D:\folder\folder_test1\test3.c
File Type: c
File Size: 110 B
File MD5: 3e00806b183d50c5b56429ad7ba2118c
File Owner: Xavicii
Creation Time: 2022-10-10 09:51:54
Last Access Time: 2022-10-10 09:51:54
Last Modification Time: 2022-10-09 21:48:49

File Path & Name: D:\folder\folder_test1\test4.c
File Type: c
File Size: 9 B
File MD5: 3e00806b183d50c5b56429ad7ba2118c
File Owner: Xavicii
Creation Time: 2022-10-10 10:57:04
Last Access Time: 2022-10-10 10:57:04
Last Modification Time: 2022-10-09 21:48:49

第 1 行, 第 1 列 100% Windows (CRLF) UTF-8
```

# 程序再次启动，尝试删除folder\_test2目录下的重复文件



# 程序运行成功，folder\_test2目录下的重复文件test6.doc被删除

The image shows a screenshot of a Windows desktop with two windows open. The left window is the C-Free 5.0 IDE, and the right window is the Windows File Explorer.

**C-Free 5.0 IDE:**

- File:** D:\folder\travesing.cpp
- Compiler:** mingw5
- Execution Command:** "D:\folder\travesing.exe"
- Output Console:**

```
Please input directory name:D:\folder_test2
File number: 3
请按任意键继续. . .
Found a group of redundant files:
File Path & Name: D:\folder_test2\test5.docx
File Type: docx
File Size: 12673 B
File MD5: 7eac423ffe8b9326218b0792f3b5cfd8
File Owner: Mavicii
Creation Time: 2022-10-10 11:03:01
Last Access Time: 2022-10-10 11:03:01
Last Modification Time: 2022-10-10 11:02:52

File Path & Name: D:\folder_test2\test6.docx
File Type: docx
File Size: 12673 B
File MD5: 7eac423ffe8b9326218b0792f3b5cfd8
File Owner: Mavicii
Creation Time: 2022-10-10 11:05:58
Last Access Time: 2022-10-10 11:05:58
Last Modification Time: 2022-10-10 11:02:52

请按任意键继续. . .
Final file number: 2
请按任意键继续. . .
```
- Source Code:**

```
22
23 using namespace std;
24
25 class CTraverseDir
26 {
27 protected:
28     //存放初始目录的绝对路径, 以'\'结尾
29     char m_szInitDir[ MAX_PATH];
```
- Build Console:**

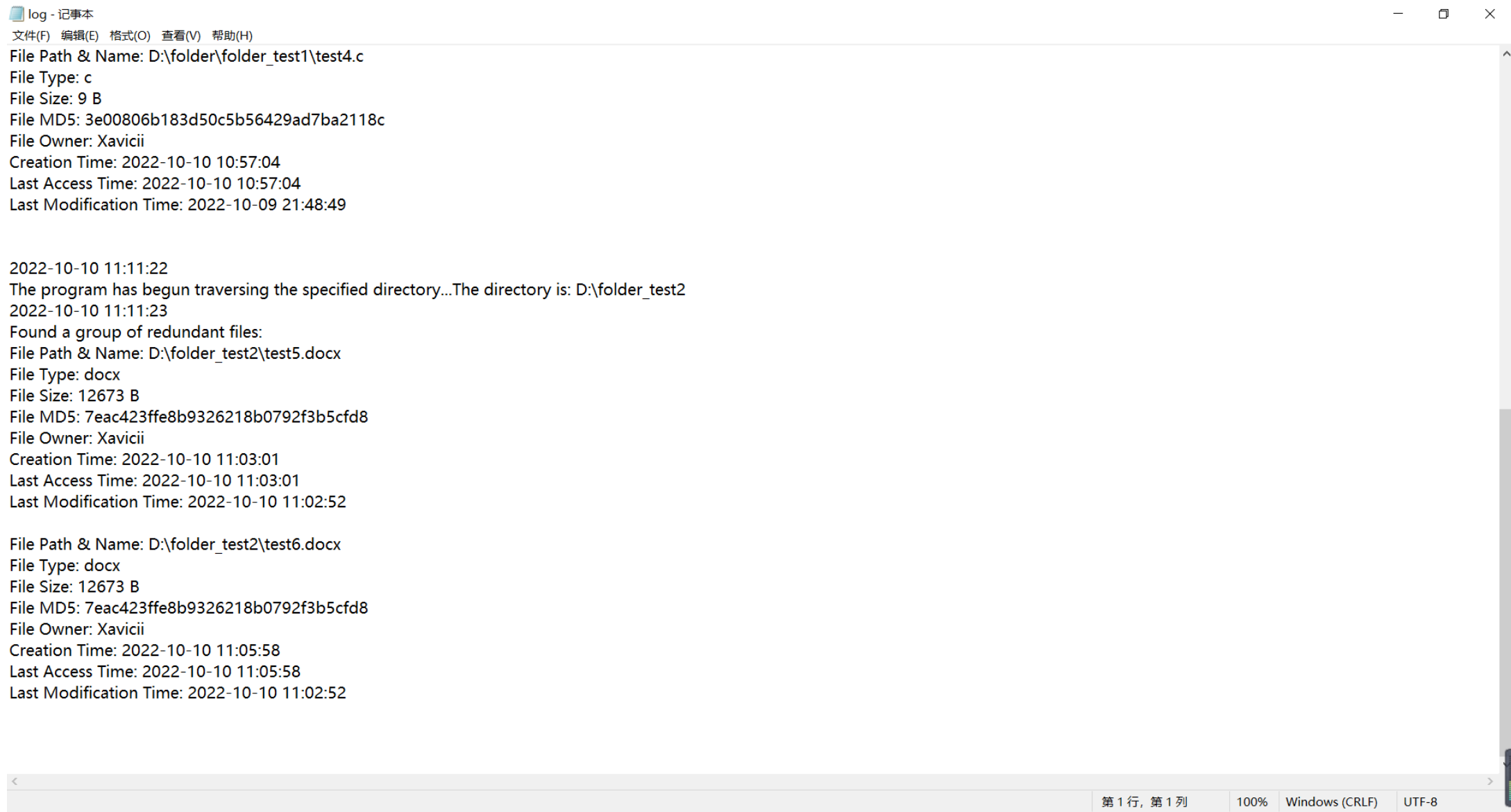
```
检查文件依赖性...
完成构建 travesing: 0 个错误, 0 个警告
生成 D:\folder\travesing.exe
```

**Windows File Explorer:**

- Path:** 此电脑 > 新加卷 (D:) > folder\_test2
- Files:**

| 名称    | 修改日期             | 类型                 | 大小    |
|-------|------------------|--------------------|-------|
| test5 | 2022-10-10 11:02 | Microsoft Word ... | 13 KB |
| test7 | 2022-10-10 11:04 | Microsoft Word ... | 15 KB |

# 此时folder目录下log日志文件内容更新



The image shows a Windows Notepad window titled "log - 记事本". The window contains the following text:

```
文件(F) 编辑(E) 格式(O) 查看(V) 帮助(H)
File Path & Name: D:\folder\folder_test1\test4.c
File Type: c
File Size: 9 B
File MD5: 3e00806b183d50c5b56429ad7ba2118c
File Owner: Xavicii
Creation Time: 2022-10-10 10:57:04
Last Access Time: 2022-10-10 10:57:04
Last Modification Time: 2022-10-09 21:48:49

2022-10-10 11:11:22
The program has begun traversing the specified directory...The directory is: D:\folder_test2
2022-10-10 11:11:23
Found a group of redundant files:
File Path & Name: D:\folder_test2\test5.docx
File Type: docx
File Size: 12673 B
File MD5: 7eac423ffe8b9326218b0792f3b5cfd8
File Owner: Xavicii
Creation Time: 2022-10-10 11:03:01
Last Access Time: 2022-10-10 11:03:01
Last Modification Time: 2022-10-10 11:02:52

File Path & Name: D:\folder_test2\test6.docx
File Type: docx
File Size: 12673 B
File MD5: 7eac423ffe8b9326218b0792f3b5cfd8
File Owner: Xavicii
Creation Time: 2022-10-10 11:05:58
Last Access Time: 2022-10-10 11:05:58
Last Modification Time: 2022-10-10 11:02:52
```

The status bar at the bottom indicates the current position is "第 1 行, 第 1 列" (Line 1, Column 1), the zoom is "100%", the encoding is "Windows (CRLF)", and the language is "UTF-8".