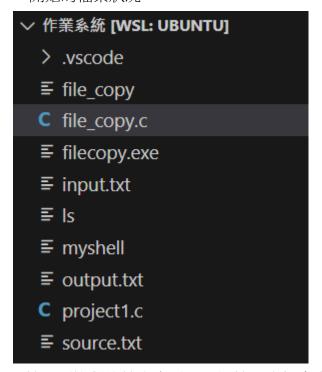
HW1

Chap. 2 2.24*:

一開始的檔案狀況



1.輸入要複製的檔案名稱 這裡輸入資料夾中的 sorce.txt

```
○ yulun@DESKTOP-1TCLE4T:/mnt/c/Users/user/Desktop/作業系統$ ./file_copy
Enter source file name: source.txt
```

2.輸入要複製到的目的地名稱,這裡 destination.txt

```
yulun@DESKTOP-1TCLE4T:/mnt/c/Users/user/Desktop/作業系統$ ./file_copy
Enter source file name: source.txt
Enter destination file name: destination.txt
```

3.完成複製

```
mmap(NULL, 12288, PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_ANONYMOUS, -1, 0) = 0x7fbf8780b000
arch_prctl(ARCH_SET_FS, 0x7fbf8780b740) = 0
                                                        = 35418
set_tid_address(0x7fbf8780ba10)
set_robust_list(0x7fbf8780ba20, 24)
                                                         = 0
rseq(0x7fbf8780c0e0, 0x20, 0, 0x53053053) = 0
mprotect(0x7fbf87a24000, 16384, PROT_READ) = 0
mprotect(0x56340c48d000, 4096, PROT_READ) = 0
mprotect(0x7fbf87a76000, 8192, PROT_READ) = 0
prlimit64(0, RLIMIT_STACK, NULL, {rlim_cur=8192*1024, rlim_max=RLIM64_INFINITY}) = 0
newfstatat(0, "", {st_mode=S_IFCHR|0620, st_rdev=makedev(0x88, 0x6), ...}, AT_EMPTY_PATH) = 0
write(1, "Enter source file name: ", 24Enter source file name: ) = 24
read(0, source.txt
"source.txt\n", 1024) = 11

openat(AT_FDCWD, "source.txt", 0_RDONLY) = 3

write(1, "Enter destination file name: ", 29Enter destination file name: ) = 29
 read(0, destination.txt
 "destination.txt\n", 1024)
                                             = 16
openat(AT_FDCWD, "destination.txt", O_WRONLY|O_CREAT|O_TRUNC, 0666) = 4
newfstatat(3, "", {st_mode=S_IFREG|0777, st_size=91, ...}, AT_EMPTY_PATH) = 0
read(3, "This is the source file.\nFeel fr"..., 4096) = 91
read(3, "", 4096) = 0
newfstatat(4, "", {st_mode=S_IFREG|0777, st_size=0, ...}, AT_EMPTY_PATH) = 0
 close(3)
 write(4, "This is the source file.\nFeel fr"..., 91) = 91
```

Chap. 3 3.19*:

執行後可以看到 cmd 指令的時間

1. 第一個版本的時間

```
● yulun@DESKTOP-1TCLE4T:/mnt/c/Users/user/Desktop/作業系統$ gcc time_v1.c -o time_v1 -lrt
● yulun@DESKTOP-1TCLE4T:/mnt/c/Users/user/Desktop/作業系統$ ./time_v1 ls
destination.txt file_copy.c input.txt myshell pipe_copy project1.c time time_v1.c
file_copy filecopy.exe ls output.txt pipe_copy.c source.txt time_v1
Elapsed time: 0.001692 seconds
```

2. 第二個版本的時間

```
● yulun@DESKTOP-1TCLE4T:/mnt/c/Users/user/Desktop/作業系統$ gcc time_v2.c -o time_v2 -lrt
● yulun@DESKTOP-1TCLE4T:/mnt/c/Users/user/Desktop/作業系統$ ./time_v2 ls
Elapsed time: 0.002363 seconds
```

可以看到第二個版本的速度較快

Chap. 3 3.27*:

執行後可以透過管道方式複製檔案

```
yulun@DESKTOP-1TCLE4T:/mnt/c/Users/user/Desktop/作業系統$ ./pipe_copy
Usage: ./pipe_copy <source_file> <destination_file>
yulun@DESKTOP-1TCLE4T:/mnt/c/Users/user/Desktop/作業系統$ ./pipe_copy source.txt output.txt
yulun@DESKTOP-1TCLE4T:/mnt/c/Users/user/Desktop/作業系統$ |
```

∨ 作業系統 [WSL: UBUNTU] > .vscode destination.txt file copy C file copy.c ≡ filecopy.exe ≡ input.txt ≣ Is **≡** myshell **≡** output.txt ■ pipe_copy pipe_copy.c C project1.c ≡ source.txt **≡** time C time.c