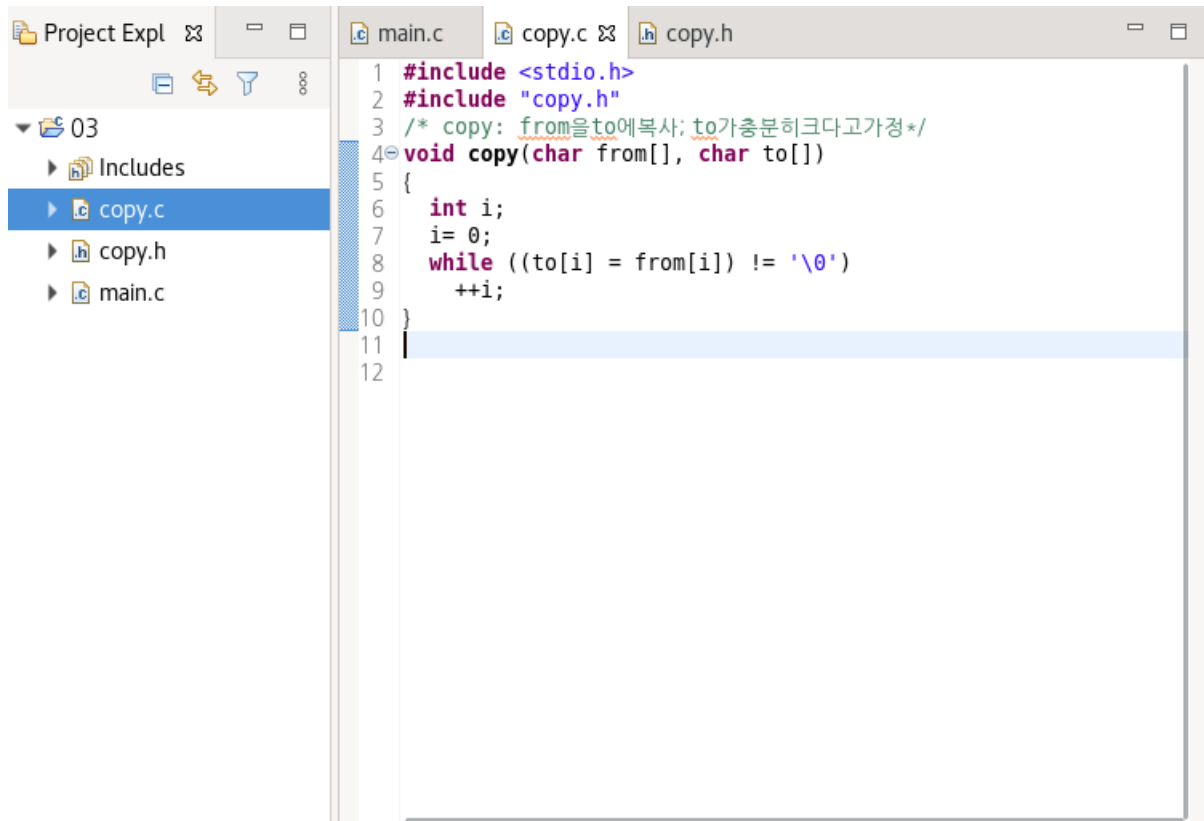


3장 과제

국어국문학과 2018312567 조명하

1. copy.c

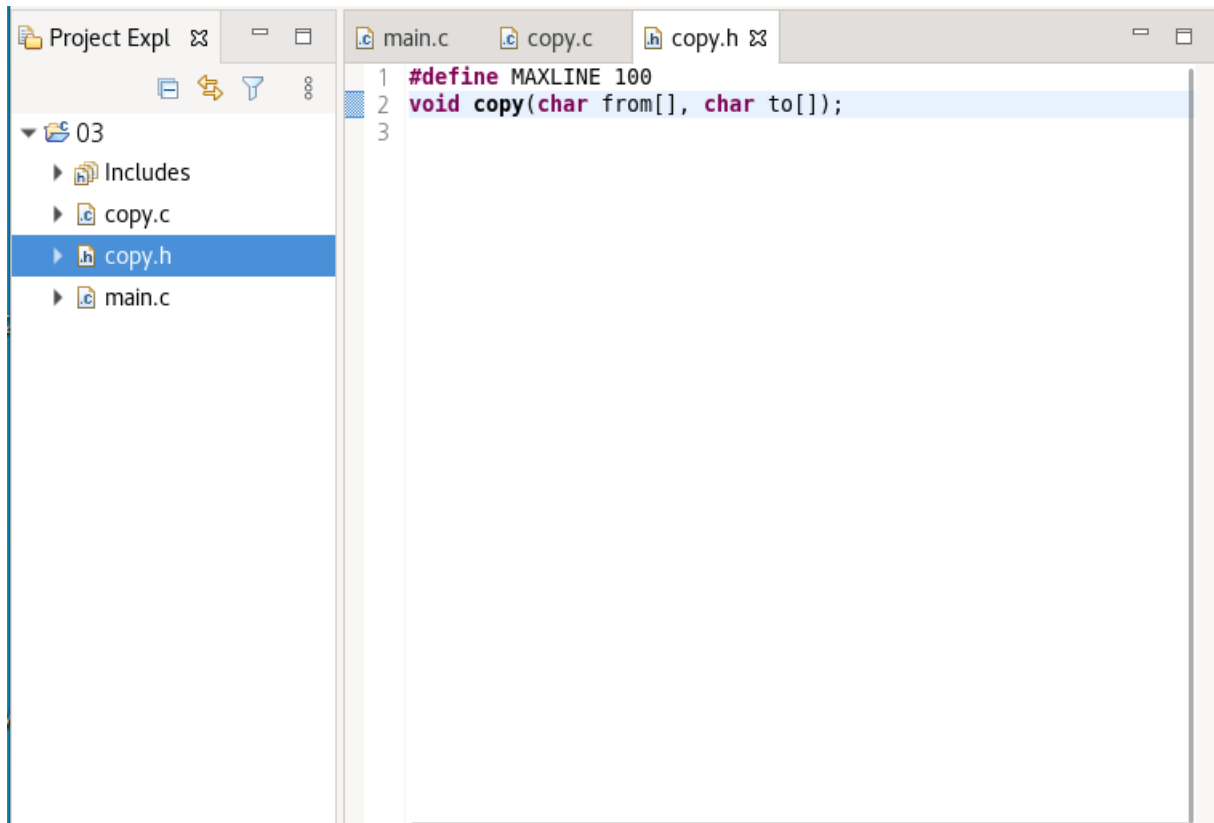


The screenshot shows a code editor with three tabs: main.c, copy.c, and copy.h. The 'copy.c' tab is active, displaying the following C code:

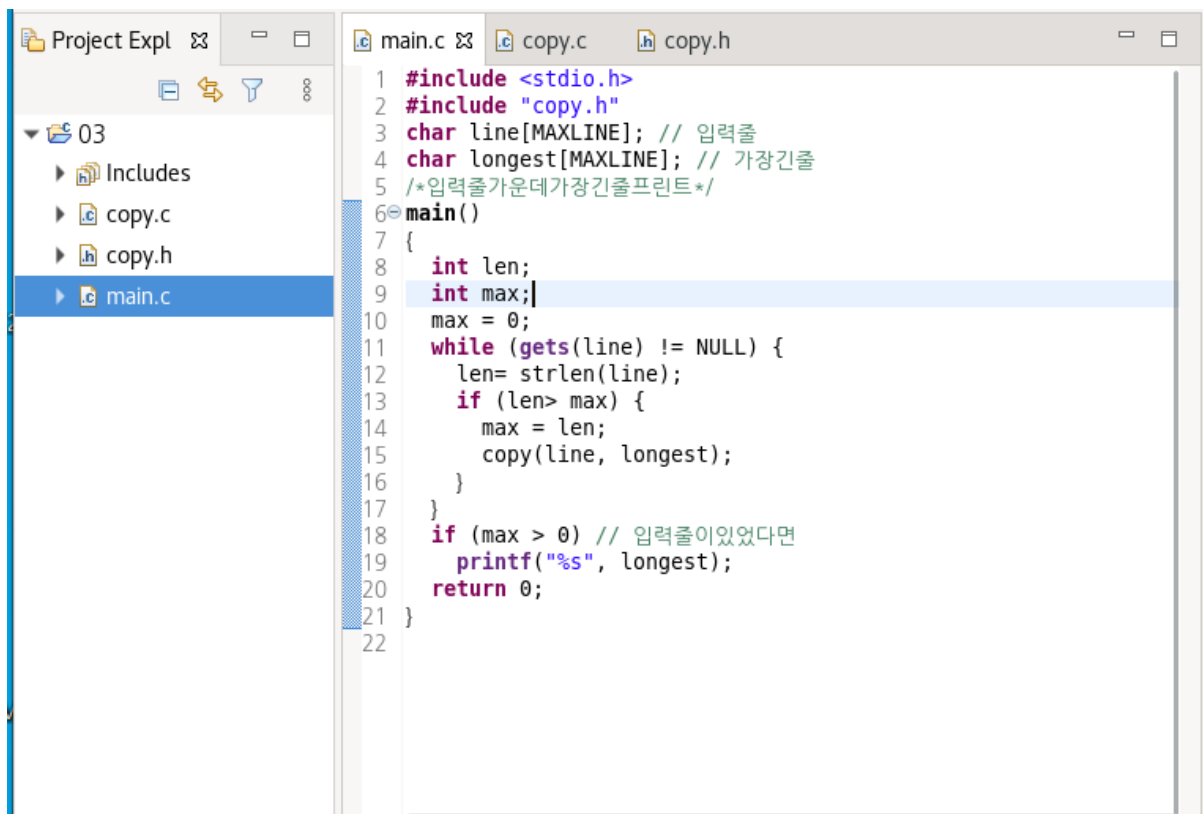
```
1 #include <stdio.h>
2 #include "copy.h"
3 /* copy: from을 to에 복사; to가 충분히 크다고 가정 */
4 void copy(char from[], char to[])
5 {
6     int i;
7     i = 0;
8     while ((to[i] = from[i]) != '\0')
9         ++i;
10 }
11
12
```

The left sidebar shows a project explorer with a folder named '03' containing files 'Includes', 'copy.c', 'copy.h', and 'main.c'. The 'copy.c' file is selected.

2. copy.h



3. main.c



4. 터미널 로그

```
[chomyungha@localhost ~]$ ls
```

```
eclipse          test 다운로드 바탕화면 사진 음악
```

```
eclipse-workspace 공개 문서 비디오 서식
```

```
[chomyungha@localhost ~]$ cd eclipse-workspace
```

```
[chomyungha@localhost eclipse-workspace]$ ls
```

```
03
```

```
[chomyungha@localhost eclipse-workspace]$ cd 03
```

```
[chomyungha@localhost 03]$ ls
```

```
copy.c copy.h main.c
```

```
[chomyungha@localhost 03]$ gcc -g -o main main.c copy.c
```

```
main.c: In function 'main':
```

```
main.c:12:2: warning: 'gets' is deprecated (declared at /usr/include/stdio.h:638) [-Wdeprecated-declarations]
```

```
    while (gets(line) != NULL) {
```

```
    ^
```

```
main.c:13:8: warning: incompatible implicit declaration of built-in function 'strlen' [enabled by default]
```

```
        len= strlen(line);
```

```
        ^
```

```
/tmp/ccvfxBNw.o: In function `main':
```

```
/home/chomyungha/eclipse-workspace/03/main.c:12: warning: the `gets' function is dangerous and should not be used.
```

```
[chomyungha@localhost 03]$ ./main
```

```
Hey
```

```
Happy Day
```

```
Hello
```

Happy Day[chomyungha@localhost 03]\$ gdb main

GNU gdb (GDB) Red Hat Enterprise Linux 7.6.1-120.el7

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This is free software: you are free to change and redistribute it.

There is NO WARRANTY, to the extent permitted by law. Type "show copying" and "show warranty" for details.

This GDB was configured as "x86_64-redhat-linux-gnu".

For bug reporting instructions, please see:

<<http://www.gnu.org/software/gdb/bugs/>>...

Reading symbols from /home/chomyungha/eclipse-workspace/03/main...done.

(gdb) l main

```
3      char line[MAXLINE]; // 입력줄
4      char longest[MAXLINE]; // 가장긴줄
5
6      /*입력줄가운데가장긴줄프린트*/
7      main()
8      {
9          int len;
10         int max;
11         max = 0;
12         while (gets(line) != NULL) {
```

(gdb) l

```
13             len= strlen(line);
14             if (len > max) {
15                 max = len;
```

```

16             copy(line, longest);
17         }
18     }
19     if (max > 0) // 입력줄이있었다면
20         printf("%s", longest);
21     return 0;
22 }

```

(gdb) l copy

```

1     #include <stdio.h>
2     #include "copy.h"
3     /* copy: from을to에 복사; to가충분히크다고가정*/
4     void copy(char from[], char to[])
5     {
6         int i;
7         i= 0;
8         while ((to[i] = from[i]) != '\0')
9             ++i;
10    }

```

(gdb) l

11

(gdb) b main

Breakpoint 1 at 0x4005c5: file main.c, line 11.

(gdb) b copy

Breakpoint 2 at 0x400634: file copy.c, line 7.

(gdb) info b

Num	Type	Disp	Enb	Address	What
-----	------	------	-----	---------	------

1 breakpoint keep y 0x0000000004005c5 in main at main.c:11

2 breakpoint keep y 0x000000000400634 in copy at copy.c:7

(gdb) r

Starting program: /home/chomyungha/eclipse-workspace/03/main

Breakpoint 1, main () at main.c:11

11 max = 0;

Missing separate debuginfos, use: debuginfo-install glibc-2.17-317.el7.x86_64

(gdb) n

12 while (gets(line) != NULL) {

(gdb) n

Hey

13 len= strlen(line);

(gdb) n

14 if (len > max) {

(gdb) n

15 max = len;

(gdb) n

16 copy(line, longest);

(gdb) n

Breakpoint 2, copy (from=0x60104f <line> "Hey", to=0x601045 <longest> "")

at copy.c:7

7 i= 0;

(gdb) n

8 while ((to[i] = from[i]) != '\0')

(gdb) n

```
9             ++i;
```

(gdb) n

```
8             while ((to[i] = from[i]) != '\0')
```

(gdb) n

```
9             ++i;
```

(gdb) n

```
8             while ((to[i] = from[i]) != '\0')
```

(gdb) n

```
9             ++i;
```

(gdb) n

```
8             while ((to[i] = from[i]) != '\0')
```

(gdb) n

```
10         }
```

(gdb) n

main () at main.c:12

```
12         while (gets(line) != NULL) {
```

(gdb) n

Happy Day

```
13             len= strlen(line);
```

(gdb) n

```
14             if (len > max) {
```

(gdb) n

```
15                 max = len;
```

(gdb) n

```
16                 copy(line, longest);
```

(gdb) n

Breakpoint 2, copy (from=0x60104f <line> "Happy Day",

to=0x601045 <longest> "Hey") at copy.c:7

7 i = 0;

(gdb) n

8 while ((to[i] = from[i]) != '\0')

(gdb) n

9 ++i;

(gdb) n

8 while ((to[i] = from[i]) != '\0')

(gdb) n

9 ++i;

(gdb) n

8 while ((to[i] = from[i]) != '\0')

(gdb) n

9 ++i;

(gdb) n

8 while ((to[i] = from[i]) != '\0')

(gdb) n

9 ++i;

(gdb) n

8 while ((to[i] = from[i]) != '\0')

(gdb) n

9 ++i;

(gdb) p to


```
$1 = 0x601045 <longest> "Happy"
```

```
(gdb) p from
```

```
$2 = 0x60104f <line> "Happy Day"
```

```
(gdb) n
```

```
8         while ((to[i] = from[i]) != '\0')
```

```
(gdb) n
```

```
9             ++i;
```

```
(gdb) n
```

```
8         while ((to[i] = from[i]) != '\0')
```

```
(gdb) n
```

```
9             ++i;
```

```
(gdb) n
```

```
8         while ((to[i] = from[i]) != '\0')
```

```
(gdb) n
```

```
9             ++i;
```

```
(gdb) n
```

```
8         while ((to[i] = from[i]) != '\0')
```

```
(gdb) n
```

```
9             ++i;
```

```
(gdb) p to
```

```
$3 = 0x601045 <longest> "Happy Day"
```

```
(gdb) n
```

```
8         while ((to[i] = from[i]) != '\0')
```

```
(gdb) n
```

```
10     }
```

```
(gdb) n
```

main () at main.c:12

```
12          while (gets(line) != NULL) {
```

(gdb) n

Hello

```
13          len= strlen(line);
```

(gdb) n

```
14          if (len > max) {
```

(gdb) n

```
12          while (gets(line) != NULL) {
```

(gdb) n

```
19          if (max > 0) // 입력줄이있었다면
```

(gdb) n

```
20          printf("%s", longest);
```

(gdb) n

```
21          return 0;
```

(gdb) n

```
22      }
```

(gdb) n

0x00007ffff7a2f555 in __libc_start_main () from /lib64/libc.so.6

(gdb) n

Single stepping until exit from function __libc_start_main,

which has no line number information.

Happy Day[Inferior 1 (process 3526) exited normally]

(gdb) quit

[chomyungha@localhost 03]\$