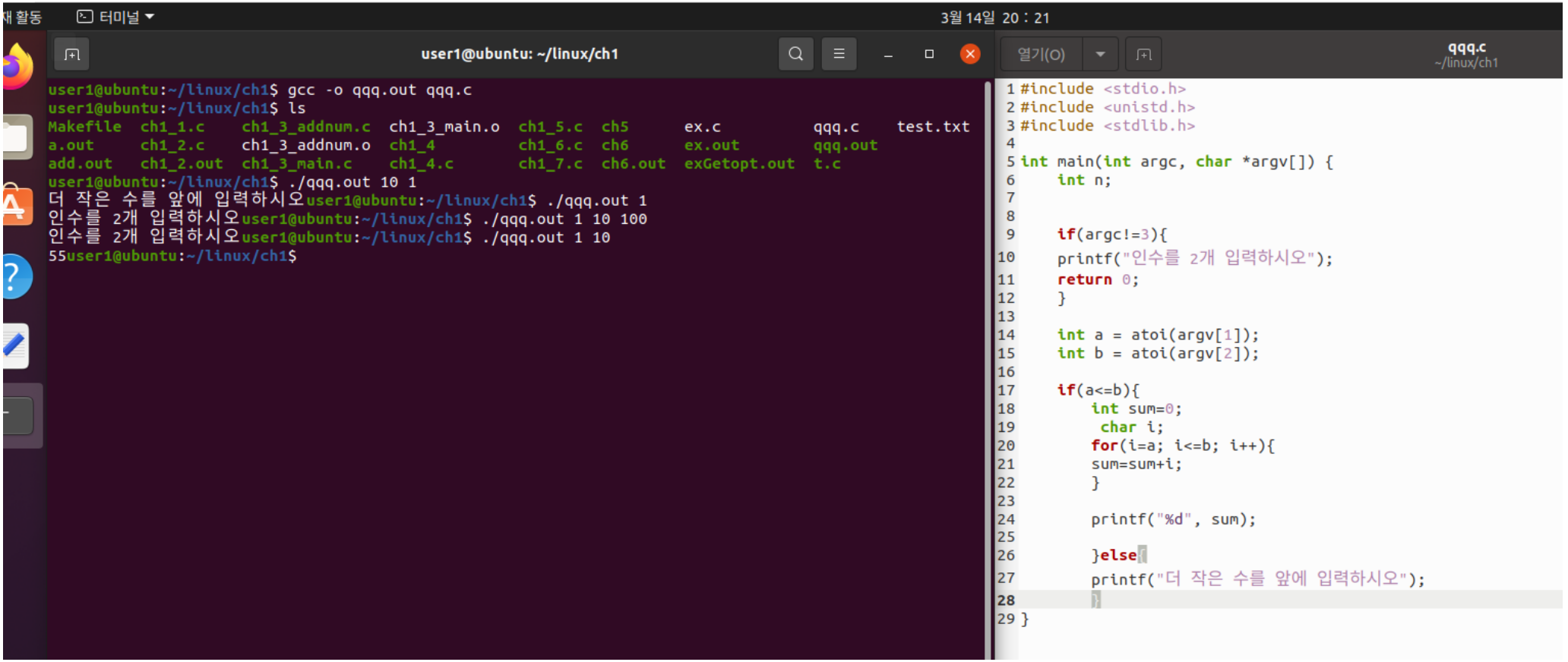
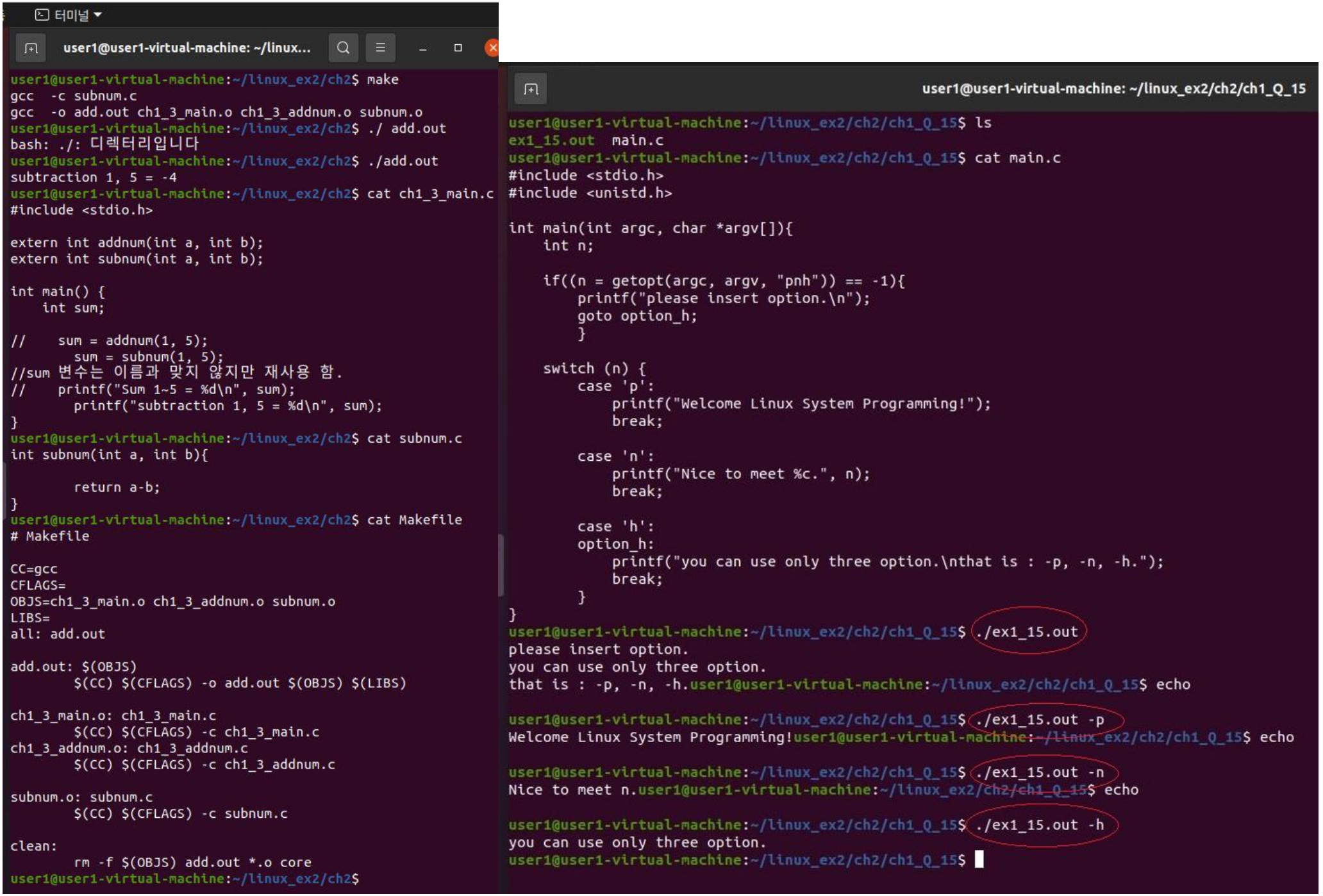
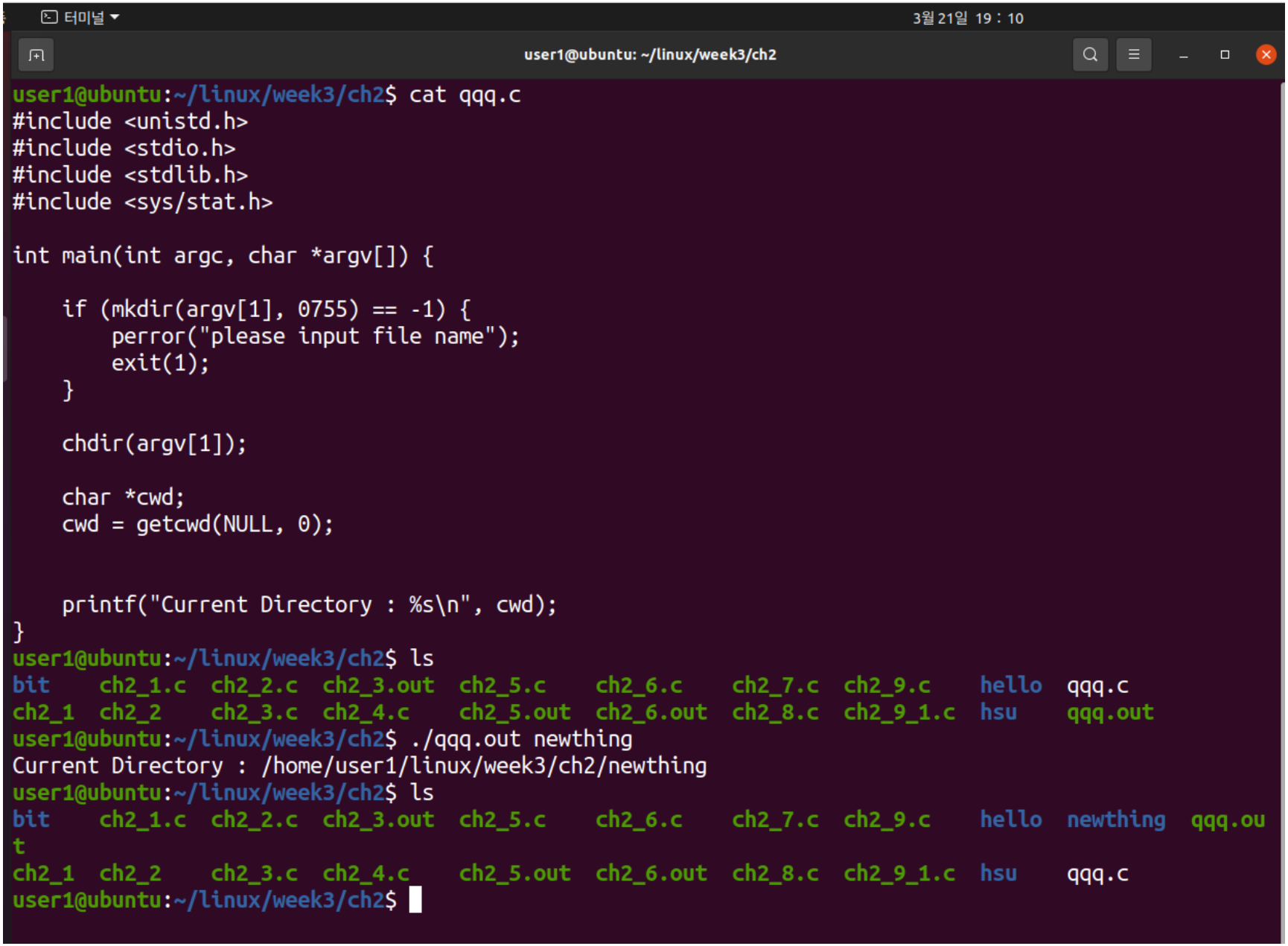


2주차 수업 중 실습.

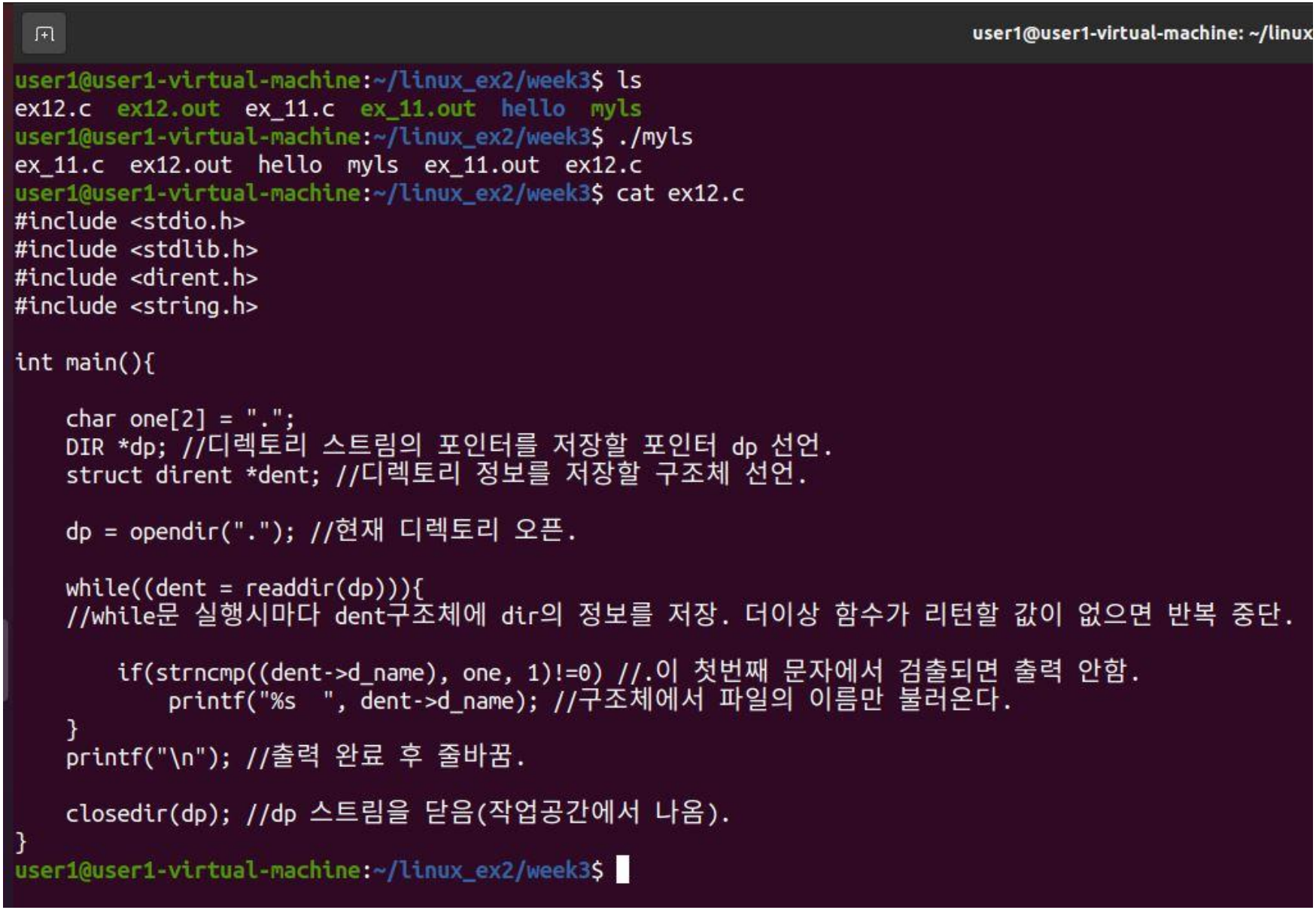
다음 페이지는 2주차 과제임. 왼쪽부터 1장 연습문제 12번, 1장 연습문제 15번.

문서 전체의 문제 번호는 연습문제를 지칭함.

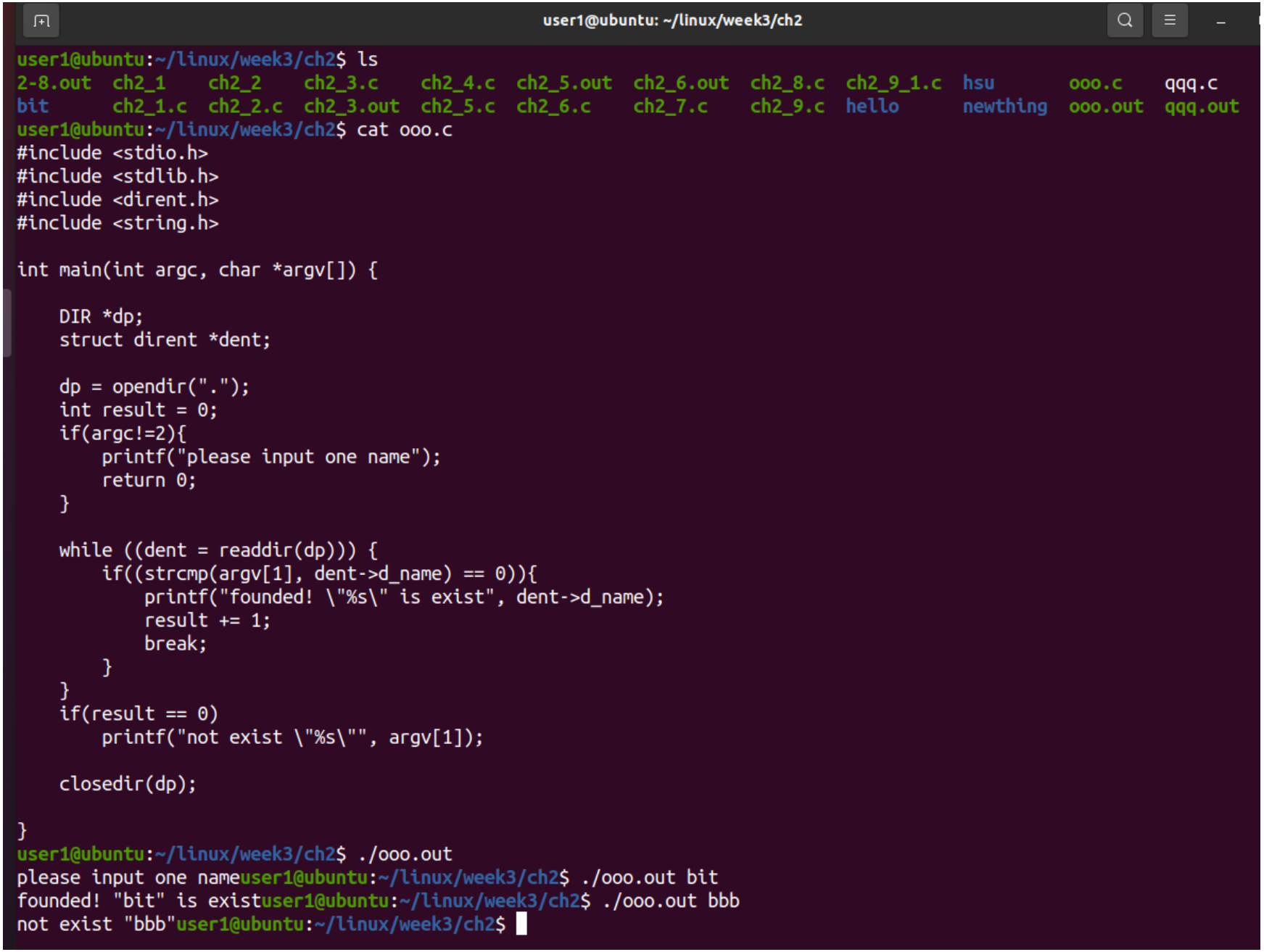

터미널
user1@user1-virtual-machine: ~/linux...
user1@user1-virtual-machine:~/linux_ex2/ch2$ make
gcc -c subnum.c
gcc -o add.out ch1_3_main.o ch1_3_addnum.o subnum.o
user1@user1-virtual-machine:~/linux_ex2/ch2$ ./ add.out
bash: ./: 디렉터리입니다
user1@user1-virtual-machine:~/linux_ex2/ch2$ ./add.out
subtraction 1, 5 = -4
user1@user1-virtual-machine:~/linux_ex2/ch2$ cat ch1_3_main.c
#include <stdio.h>
extern int addnum(int a, int b);
extern int subnum(int a, int b);
int main() {
int sum;
// sum = addnum(1, 5);
sum = subnum(1, 5);
//sum 변수는 이름과 맞지 않지만 재사용 함.
// printf("Sum 1~5 = %d\n", sum);
printf("subtraction 1, 5 = %d\n", sum);
}
user1@user1-virtual-machine:~/linux_ex2/ch2$ cat subnum.c
int subnum(int a, int b){
return a-b;
}
user1@user1-virtual-machine:~/linux_ex2/ch2$ cat Makefile
# Makefile
CC=gcc
CFLAGS=
OBJS=ch1_3_main.o ch1_3_addnum.o subnum.o
LIBS=
all: add.out
add.out: $(OBJS)
$(CC) $(CFLAGS) -o add.out $(OBJS) $(LIBS)
ch1_3_main.o: ch1_3_main.c
$(CC) $(CFLAGS) -c ch1_3_main.c
ch1_3_addnum.o: ch1_3_addnum.c
$(CC) $(CFLAGS) -c ch1_3_addnum.c
subnum.o: subnum.c
$(CC) $(CFLAGS) -c subnum.c
clean:
rm -f $(OBJS) add.out *.o core
user1@user1-virtual-machine:~/linux_ex2/ch2$
user1@user1-virtual-machine: ~/linux_ex2/ch2/ch1_Q_15
user1@user1-virtual-machine:~/linux_ex2/ch2/ch1_Q_15$ ls
ex1_15.out main.c
user1@user1-virtual-machine:~/linux_ex2/ch2/ch1_Q_15$ cat main.c
#include <stdio.h>
#include <unistd.h>
int main(int argc, char *argv[]){
int n;
if((n = getopt(argc, argv, "pnh")) == -1){
printf("please insert option.\n");
goto option_h;
}
switch (n) {
case 'p':
printf("Welcome Linux System Programming!");
break;
case 'n':
printf("Nice to meet %c.", n);
break;
case 'h':
option_h:
printf("you can use only three option.\nthat is : -p, -n, -h.");
break;
}
}
user1@user1-virtual-machine:~/linux_ex2/ch2/ch1_Q_15$ ./ex1_15.out
please insert option.
you can use only three option.
that is : -p, -n, -h.user1@user1-virtual-machine:~/linux_ex2/ch2/ch1_Q_15$ echo
user1@user1-virtual-machine:~/linux_ex2/ch2/ch1_Q_15$ ./ex1_15.out -p
Welcome Linux System Programming!user1@user1-virtual-machine:~/linux_ex2/ch2/ch1_Q_15$ echo
user1@user1-virtual-machine:~/linux_ex2/ch2/ch1_Q_15$ ./ex1_15.out -n
Nice to meet n.user1@user1-virtual-machine:~/linux_ex2/ch2/ch1_Q_15$ echo
user1@user1-virtual-machine:~/linux_ex2/ch2/ch1_Q_15$ ./ex1_15.out -h
you can use only three option.
user1@user1-virtual-machine:~/linux_ex2/ch2/ch1_Q_15$


터미널
3월 21일 19 : 10
user1@ubuntu: ~/linux/week3/ch2
user1@ubuntu:~/linux/week3/ch2$ cat qqq.c
#include <unistd.h>
#include <stdio.h>
#include <stdlib.h>
#include <sys/stat.h>
int main(int argc, char *argv[]) {
if (mkdir(argv[1], 0755) == -1) {
perror("please input file name");
exit(1);
}
chdir(argv[1]);
char *cwd;
cwd = getcwd(NULL, 0);
printf("Current Directory : %s\n", cwd);
}
user1@ubuntu:~/linux/week3/ch2$ ls
bit ch2_1.c ch2_2.c ch2_3.out ch2_5.c ch2_6.c ch2_7.c ch2_9.c hello qqq.c
ch2_1 ch2_2 ch2_3.c ch2_4.c ch2_5.out ch2_6.out ch2_8.c ch2_9_1.c hsu qqq.out
user1@ubuntu:~/linux/week3/ch2$ ./qqq.out newthing
Current Directory : /home/user1/linux/week3/ch2/newthing
user1@ubuntu:~/linux/week3/ch2$ ls
bit ch2_1.c ch2_2.c ch2_3.out ch2_5.c ch2_6.c ch2_7.c ch2_9.c hello newthing qqq.ou
t
ch2_1 ch2_2 ch2_3.c ch2_4.c ch2_5.out ch2_6.out ch2_8.c ch2_9_1.c hsu qqq.c
user1@ubuntu:~/linux/week3/ch2$

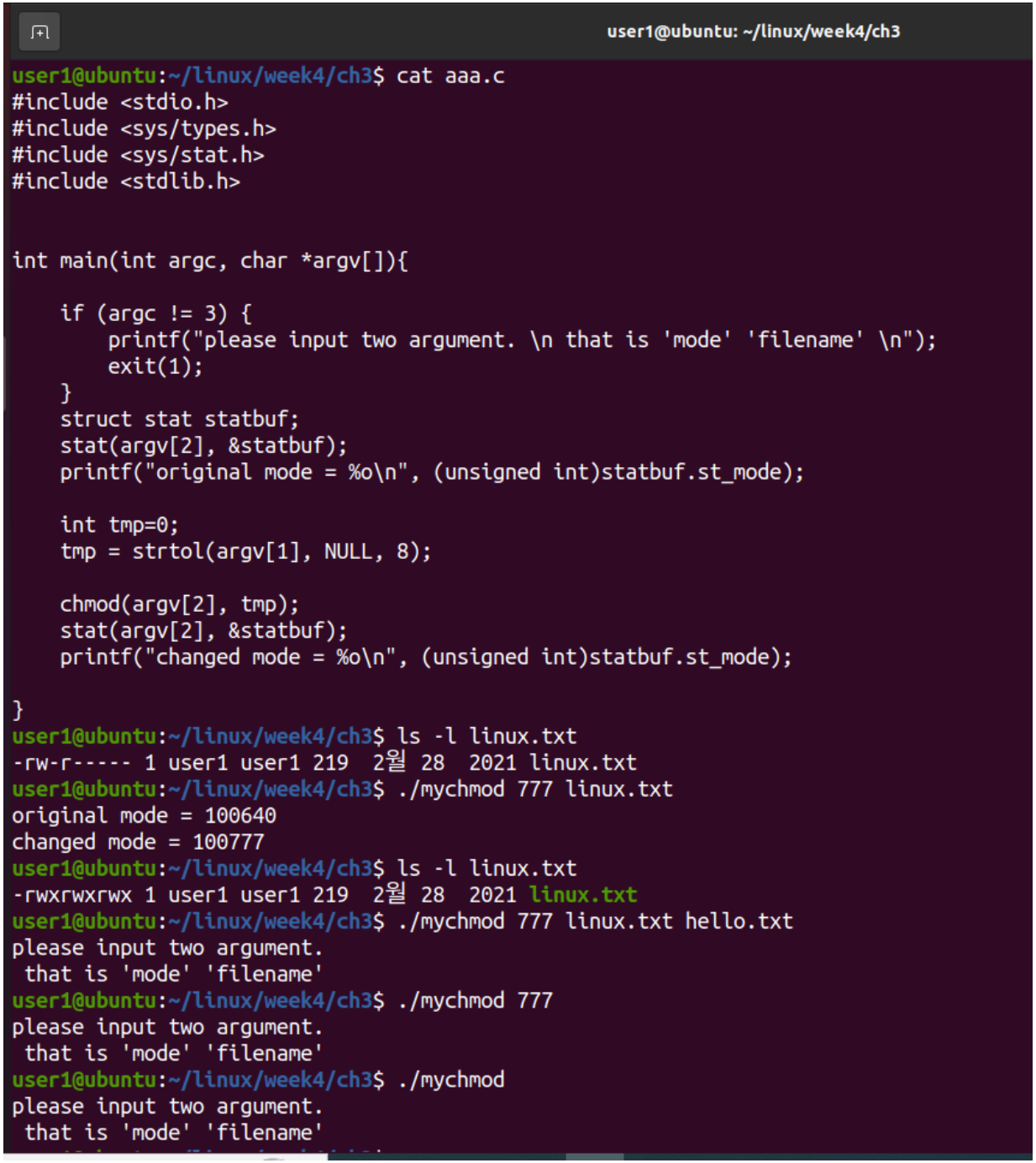
3주차 수업 중 실습


user1@user1-virtual-machine: ~/linux
user1@user1-virtual-machine:~/linux_ex2/week3$ ls
ex12.c ex12.out ex_11.c ex_11.out hello myls
user1@user1-virtual-machine:~/linux_ex2/week3$ ./myls
ex_11.c ex12.out hello myls ex_11.out ex12.c
user1@user1-virtual-machine:~/linux_ex2/week3$ cat ex12.c
#include <stdio.h>
#include <stdlib.h>
#include <dirent.h>
#include <string.h>
int main(){
char one[2] = ".";
DIR *dp; //디렉토리 스트림의 포인터를 저장할 포인터 dp 선언.
struct dirent *dent; //디렉토리 정보를 저장할 구조체 선언.
dp = opendir("."); //현재 디렉토리 오픈.
while((dent = readdir(dp))){
//while문 실행시마다 dent구조체에 dir의 정보를 저장. 더이상 함수가 리턴할 값이 없으면 반복 중단.
if(strncmp((dent->d_name), one, 1)!=0) //.이 첫번째 문자에서 검출되면 출력 안함.
printf("%s ", dent->d_name); //구조체에서 파일의 이름만 불러온다.
}
printf("\n"); //출력 완료 후 줄바꿈.
closedir(dp); //dp 스트림을 닫음(작업공간에서 나옴).
}
user1@user1-virtual-machine:~/linux_ex2/week3$

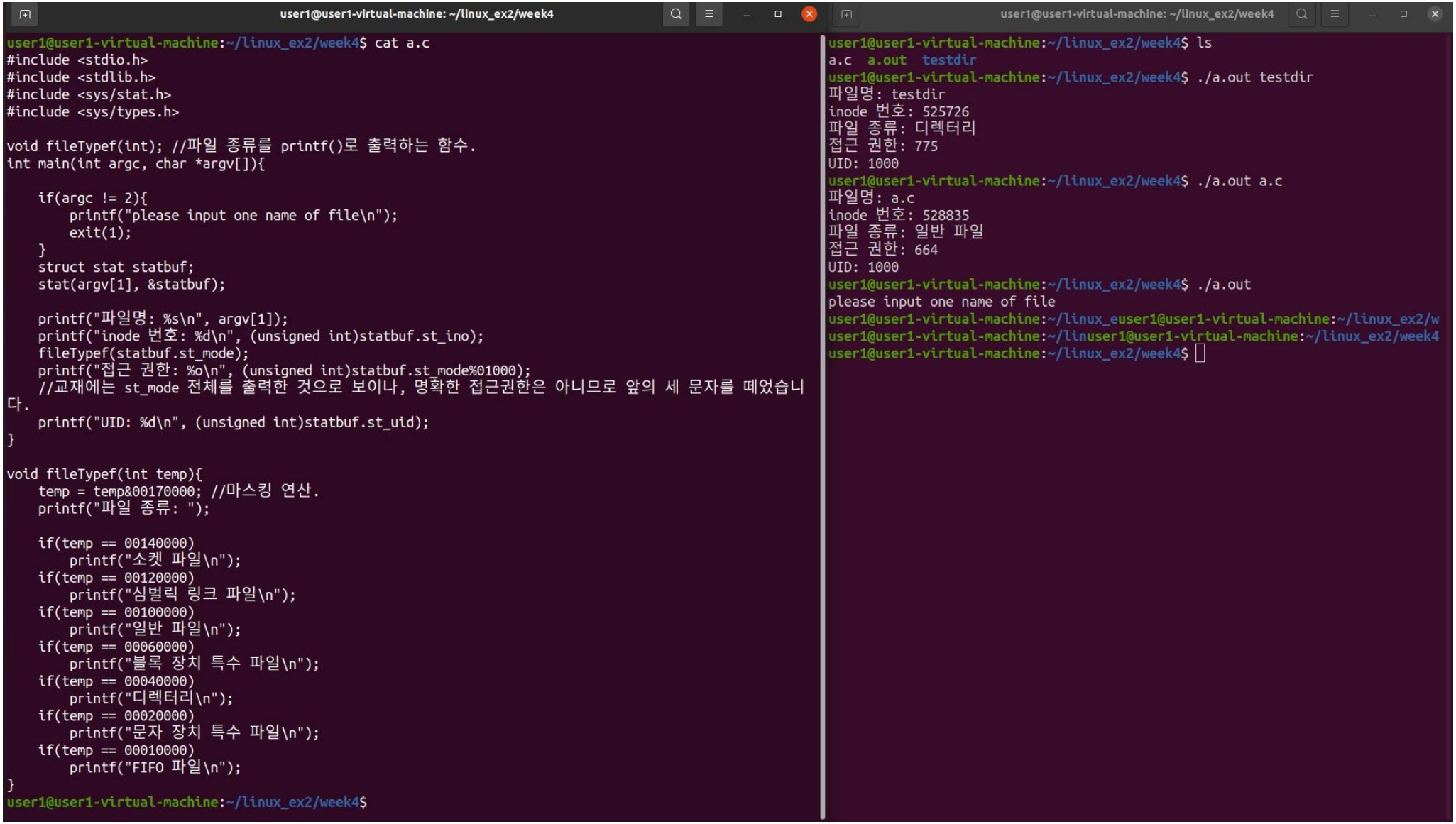
2장 12번 (3주차)


user1@ubuntu: ~/linux/week3/ch2
user1@ubuntu:~/linux/week3/ch2$ ls
2-8.out ch2_1 ch2_2 ch2_3.c ch2_4.c ch2_5.out ch2_6.out ch2_8.c ch2_9_1.c hsu ooo.c qqq.c
bit ch2_1.c ch2_2.c ch2_3.out ch2_5.c ch2_6.c ch2_7.c ch2_9.c hello newthing ooo.out qqq.out
user1@ubuntu:~/linux/week3/ch2$ cat ooo.c
#include <stdio.h>
#include <stdlib.h>
#include <dirent.h>
#include <string.h>
int main(int argc, char *argv[]) {
DIR *dp;
struct dirent *dent;
dp = opendir(".");
int result = 0;
if(argc!=2){
printf("please input one name");
return 0;
}
while ((dent = readdir(dp))) {
if((strcmp(argv[1], dent->d_name) == 0)){
printf("founded! \"%s\" is exist", dent->d_name);
result += 1;
break;
}
}
if(result == 0)
printf("not exist \"%s\"", argv[1]);
closedir(dp);
}
user1@ubuntu:~/linux/week3/ch2$ ./ooo.out
please input one nameuser1@ubuntu:~/linux/week3/ch2$ ./ooo.out bit
founded! "bit" is existuser1@ubuntu:~/linux/week3/ch2$ ./ooo.out bbb
not exist "bbb"user1@ubuntu:~/linux/week3/ch2$

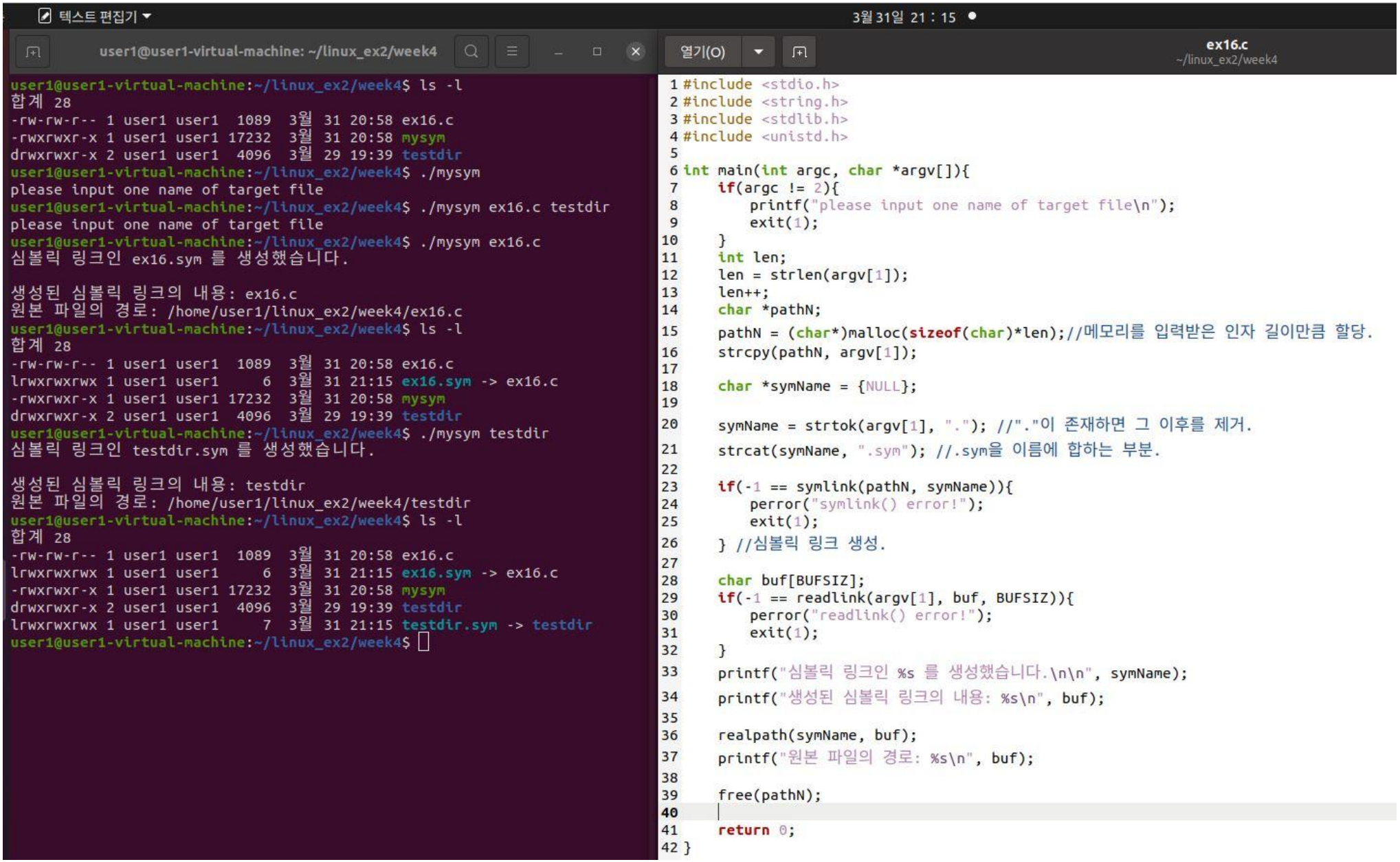
2장 14번 (3주차)


user1@ubuntu: ~/linux/week4/ch3
user1@ubuntu:~/linux/week4/ch3$ cat aaa.c
#include <stdio.h>
#include <sys/types.h>
#include <sys/stat.h>
#include <stdlib.h>
int main(int argc, char *argv[]){
if (argc != 3) {
printf("please input two argument. \n that is 'mode' 'filename' \n");
exit(1);
}
struct stat statbuf;
stat(argv[2], &statbuf);
printf("original mode = %o\n", (unsigned int)statbuf.st_mode);
int tmp=0;
tmp = strtol(argv[1], NULL, 8);
chmod(argv[2], tmp);
stat(argv[2], &statbuf);
printf("changed mode = %o\n", (unsigned int)statbuf.st_mode);
}
user1@ubuntu:~/linux/week4/ch3$ ls -l linux.txt
-rw-r----- 1 user1 user1 219 2월 28 2021 linux.txt
user1@ubuntu:~/linux/week4/ch3$ ./mychmod 777 linux.txt
original mode = 100640
changed mode = 100777
user1@ubuntu:~/linux/week4/ch3$ ls -l linux.txt
-rwxrwxrwx 1 user1 user1 219 2월 28 2021 linux.txt
user1@ubuntu:~/linux/week4/ch3$ ./mychmod 777 linux.txt hello.txt
please input two argument.
that is 'mode' 'filename'
user1@ubuntu:~/linux/week4/ch3$ ./mychmod 777
please input two argument.
that is 'mode' 'filename'
user1@ubuntu:~/linux/week4/ch3$ ./mychmod
please input two argument.
that is 'mode' 'filename'

4주차 수업 중 실습


user1@user1-virtual-machine: ~/linux_ex2/week4
user1@user1-virtual-machine:~/linux_ex2/week4$ cat a.c
#include <stdio.h>
#include <stdlib.h>
#include <sys/stat.h>
#include <sys/types.h>
void fileTypef(int); //파일 종류를 printf()로 출력하는 함수.
int main(int argc, char *argv[]){
if(argc != 2){
printf("please input one name of file\n");
exit(1);
}
struct stat statbuf;
stat(argv[1], &statbuf);
printf("파일명: %s\n", argv[1]);
printf("inode 번호: %d\n", (unsigned int)statbuf.st_ino);
fileTypef(statbuf.st_mode);
printf("접근 권한: %o\n", (unsigned int)statbuf.st_mode%01000);
//교재에는 st_mode 전체를 출력한 것으로 보이나, 명확한 접근권한은 아니므로 앞의 세 문자를 떼었습니다.
printf("UID: %d\n", (unsigned int)statbuf.st_uid);
}
void fileTypef(int temp){
temp = temp&00170000; //마스킹 연산.
printf("파일 종류: ");
if(temp == 00140000)
printf("소켓 파일\n");
if(temp == 00120000)
printf("심벌릭 링크 파일\n");
if(temp == 00100000)
printf("일반 파일\n");
if(temp == 00060000)
printf("블록 장치 특수 파일\n");
if(temp == 00040000)
printf("디렉터리\n");
if(temp == 00020000)
printf("문자 장치 특수 파일\n");
if(temp == 00010000)
printf("FIFO 파일\n");
}
user1@user1-virtual-machine:~/linux_ex2/week4$
user1@user1-virtual-machine: ~/linux_ex2/week4
user1@user1-virtual-machine:~/linux_ex2/week4$ ls
a.c a.out testdir
user1@user1-virtual-machine:~/linux_ex2/week4$ ./a.out testdir
파일명: testdir
inode 번호: 525726
파일 종류: 디렉터리
접근 권한: 775
UID: 1000
user1@user1-virtual-machine:~/linux_ex2/week4$ ./a.out a.c
파일명: a.c
inode 번호: 528835
파일 종류: 일반 파일
접근 권한: 664
UID: 1000
user1@user1-virtual-machine:~/linux_ex2/week4$ ./a.out
please input one name of file
user1@user1-virtual-machine:~/linux_euser1@user1-virtual-machine:~/linux_ex2/w
user1@user1-virtual-machine:~/linuser1@user1-virtual-machine:~/linux_ex2/week4
user1@user1-virtual-machine:~/linux_ex2/week4$

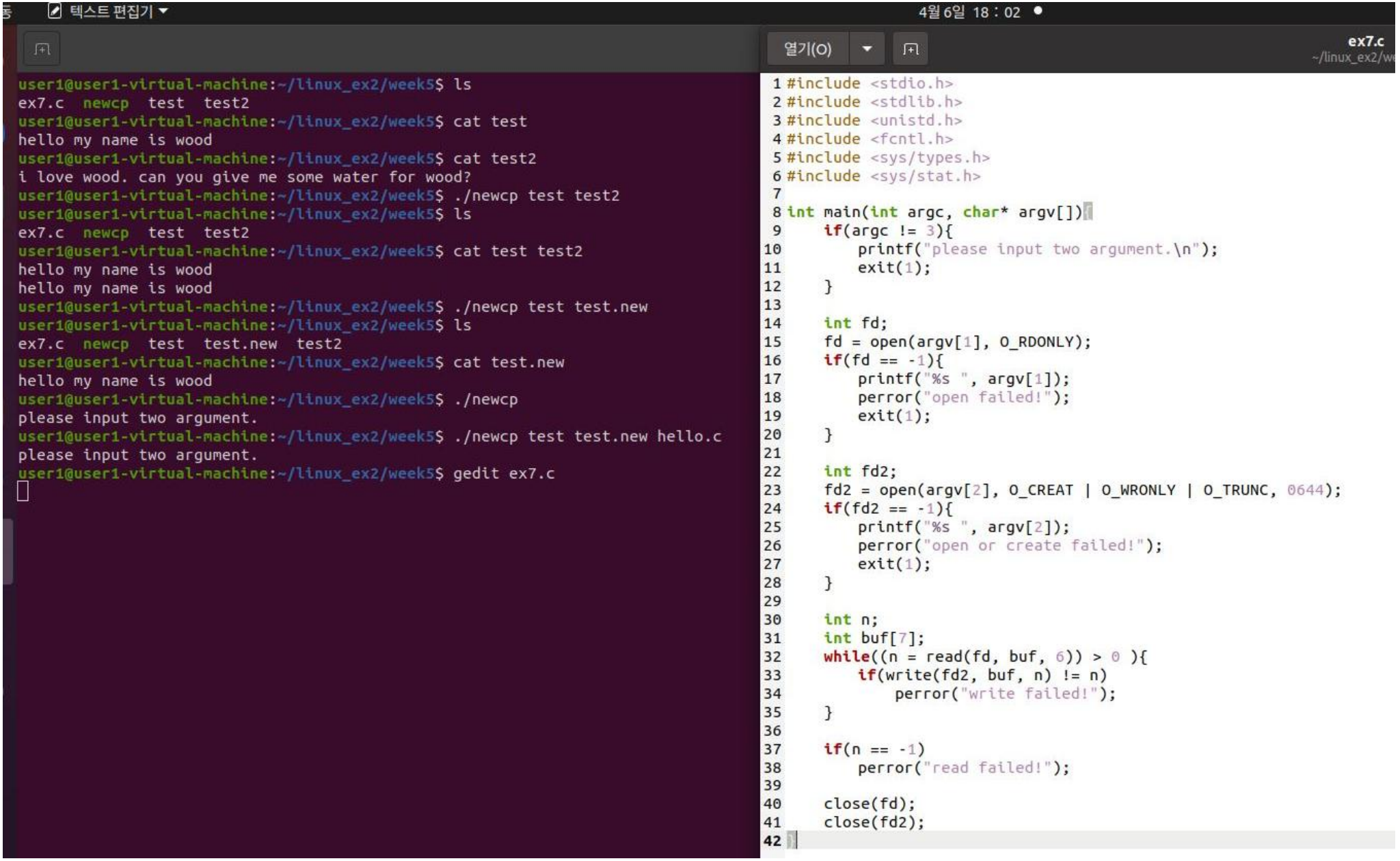
3장 8번 (4주차)


텍스트 편집기
3월 31일 21 : 15
user1@user1-virtual-machine: ~/linux_ex2/week4
user1@user1-virtual-machine:~/linux_ex2/week4$ ls -l
합계 28
-rw-rw-r-- 1 user1 user1 1089 3월 31 20:58 ex16.c
-rwxrwxr-x 1 user1 user1 17232 3월 31 20:58 mysym
drwxrwxr-x 2 user1 user1 4096 3월 29 19:39 testdir
user1@user1-virtual-machine:~/linux_ex2/week4$ ./mysym
please input one name of target file
user1@user1-virtual-machine:~/linux_ex2/week4$ ./mysym ex16.c testdir
please input one name of target file
user1@user1-virtual-machine:~/linux_ex2/week4$ ./mysym ex16.c
심볼릭 링크인 ex16.sym 를 생성했습니다.
생성된 심볼릭 링크의 내용: ex16.c
원본 파일의 경로: /home/user1/linux_ex2/week4/ex16.c
user1@user1-virtual-machine:~/linux_ex2/week4$ ls -l
합계 28
-rw-rw-r-- 1 user1 user1 1089 3월 31 20:58 ex16.c
lrwxrwxrwx 1 user1 user1 6 3월 31 21:15 ex16.sym -> ex16.c
-rwxrwxr-x 1 user1 user1 17232 3월 31 20:58 mysym
drwxrwxr-x 2 user1 user1 4096 3월 29 19:39 testdir
user1@user1-virtual-machine:~/linux_ex2/week4$ ./mysym testdir
심볼릭 링크인 testdir.sym 를 생성했습니다.
생성된 심볼릭 링크의 내용: testdir
원본 파일의 경로: /home/user1/linux_ex2/week4/testdir
user1@user1-virtual-machine:~/linux_ex2/week4$ ls -l
합계 28
-rw-rw-r-- 1 user1 user1 1089 3월 31 20:58 ex16.c
lrwxrwxrwx 1 user1 user1 6 3월 31 21:15 ex16.sym -> ex16.c
-rwxrwxr-x 1 user1 user1 17232 3월 31 20:58 mysym
drwxrwxr-x 2 user1 user1 4096 3월 29 19:39 testdir
lrwxrwxrwx 1 user1 user1 7 3월 31 21:15 testdir.sym -> testdir
user1@user1-virtual-machine:~/linux_ex2/week4$
열기(O)
ex16.c
~/linux_ex2/week4
1 #include <stdio.h>
2 #include <string.h>
3 #include <stdlib.h>
4 #include <unistd.h>
5
6 int main(int argc, char *argv[]){
7 if(argc != 2){
8 printf("please input one name of target file\n");
9 exit(1);
10 }
11 int len;
12 len = strlen(argv[1]);
13 len++;
14 char *pathN;
15 pathN = (char*)malloc(sizeof(char)*len);//메모리를 입력받은 인자 길이만큼 할당.
16 strcpy(pathN, argv[1]);
17
18 char *symName = {NULL};
19
20 symName = strtok(argv[1], "."); //"."이 존재하면 그 이후를 제거.
21 strcat(symName, ".sym"); //.sym을 이름에 합하는 부분.
22
23 if(-1 == symlink(pathN, symName)){
24 perror("symlink() error!");
25 exit(1);
26 } //심볼릭 링크 생성.
27
28 char buf[BUFSIZ];
29 if(-1 == readlink(argv[1], buf, BUFSIZ)){
30 perror("readlink() error!");
31 exit(1);
32 }
33 printf("심볼릭 링크인 %s 를 생성했습니다.\n\n", symName);
34 printf("생성된 심볼릭 링크의 내용: %s\n", buf);
35
36 realpath(symName, buf);
37 printf("원본 파일의 경로: %s\n", buf);
38
39 free(pathN);
40
41 return 0;
42 }

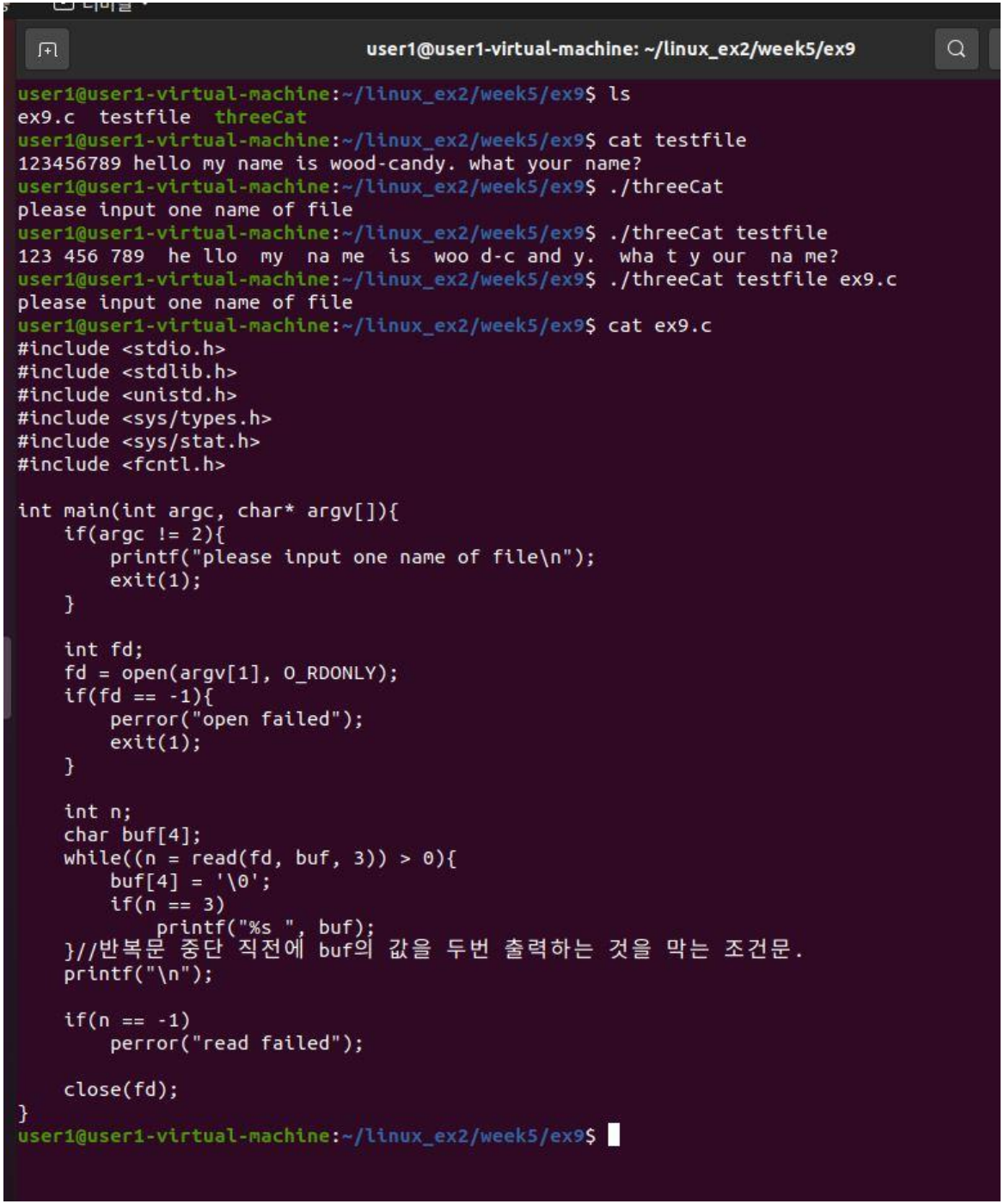
3장 16번 (4주차)

```
user1@ubuntu:~/linux/week5$ cat newcat.c
#include <fcntl.h>
#include <unistd.h>
#include <stdlib.h>
#include <stdio.h>

int main(int argc, char* argv[]){

    if(argc != 2){
        printf("input one name");
        exit(1);
    }

    int fd, n;
    char buf[10];

    fd = open(argv[1], O_RDONLY);
    if(fd == -1){
        perror("open failed: ");
        exit(1);
    }

    while ((n = read(fd, buf, 6)) > 0) {
        if (write(1, buf, n) != n) perror("Write");
    }

    if (n == -1) perror("Read");

    close(fd);

    return 0;
}
user1@ubuntu:~/linux/week5$ cat test.txt
hello hello e is he is h
user1@ubuntu:~/linux/week5$ ./cat.out test.txt
hello hello e is he is h
user1@ubuntu:~/linux/week5$
```

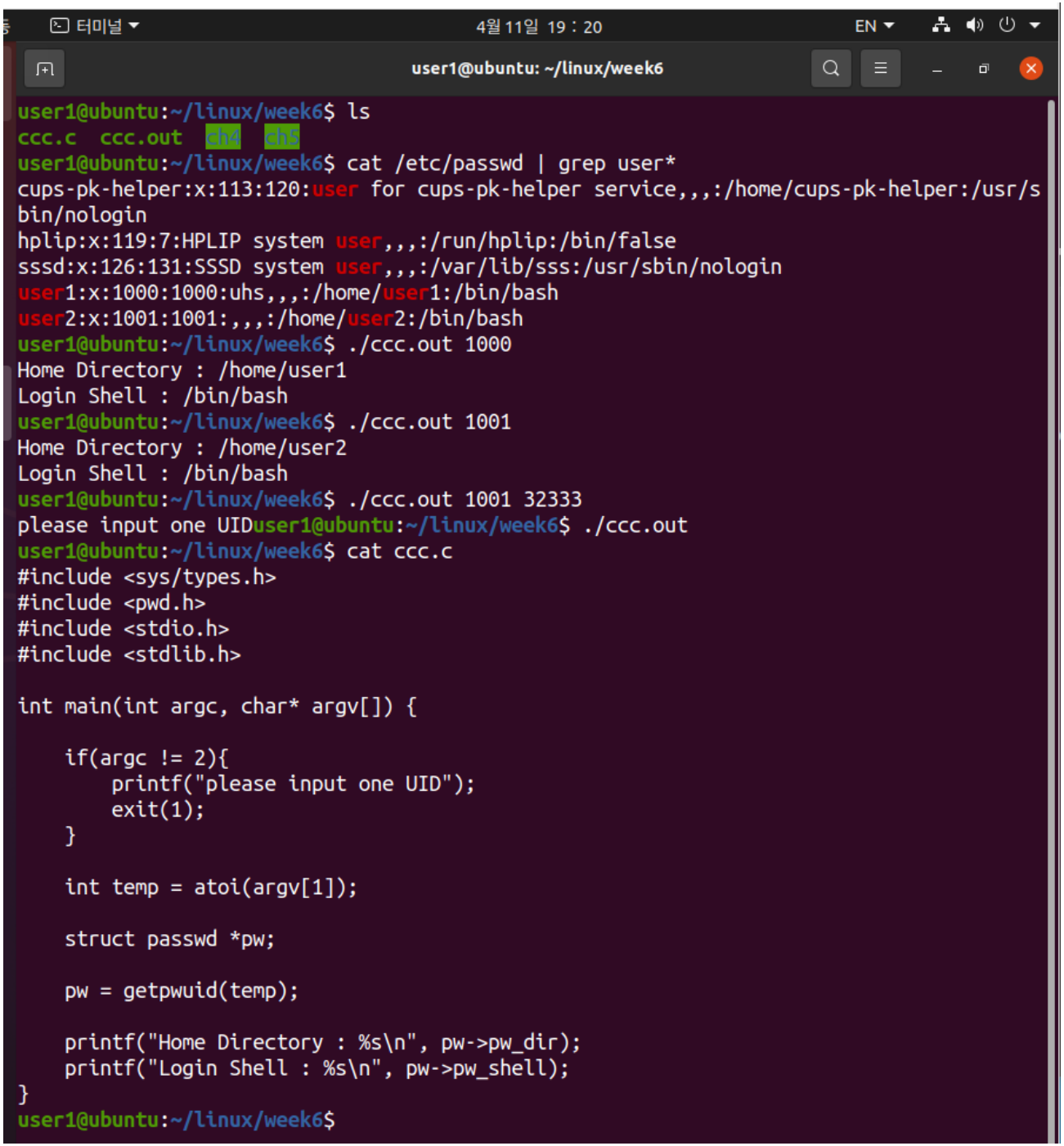
5주차 수업 중 실습


텍스트 편집기
4월 6일 18 : 02
열기(O)
ex7.c
~/linux_ex2/w
user1@user1-virtual-machine:~/linux_ex2/week5$ ls
ex7.c newcp test test2
user1@user1-virtual-machine:~/linux_ex2/week5$ cat test
hello my name is wood
user1@user1-virtual-machine:~/linux_ex2/week5$ cat test2
i love wood. can you give me some water for wood?
user1@user1-virtual-machine:~/linux_ex2/week5$ ./newcp test test2
user1@user1-virtual-machine:~/linux_ex2/week5$ ls
ex7.c newcp test test2
user1@user1-virtual-machine:~/linux_ex2/week5$ cat test test2
hello my name is wood
hello my name is wood
user1@user1-virtual-machine:~/linux_ex2/week5$ ./newcp test test.new
user1@user1-virtual-machine:~/linux_ex2/week5$ ls
ex7.c newcp test test.new test2
user1@user1-virtual-machine:~/linux_ex2/week5$ cat test.new
hello my name is wood
user1@user1-virtual-machine:~/linux_ex2/week5$ ./newcp
please input two argument.
user1@user1-virtual-machine:~/linux_ex2/week5$ ./newcp test test.new hello.c
please input two argument.
user1@user1-virtual-machine:~/linux_ex2/week5$ gedit ex7.c
1 #include <stdio.h>
2 #include <stdlib.h>
3 #include <unistd.h>
4 #include <fcntl.h>
5 #include <sys/types.h>
6 #include <sys/stat.h>
7
8 int main(int argc, char* argv[]){
9 if(argc != 3){
10 printf("please input two argument.\n");
11 exit(1);
12 }
13
14 int fd;
15 fd = open(argv[1], O_RDONLY);
16 if(fd == -1){
17 printf("%s ", argv[1]);
18 perror("open failed!");
19 exit(1);
20 }
21
22 int fd2;
23 fd2 = open(argv[2], O_CREAT | O_WRONLY | O_TRUNC, 0644);
24 if(fd2 == -1){
25 printf("%s ", argv[2]);
26 perror("open or create failed!");
27 exit(1);
28 }
29
30 int n;
31 int buf[7];
32 while((n = read(fd, buf, 6)) > 0){
33 if(write(fd2, buf, n) != n)
34 perror("write failed!");
35 }
36
37 if(n == -1)
38 perror("read failed!");
39
40 close(fd);
41 close(fd2);
42 }

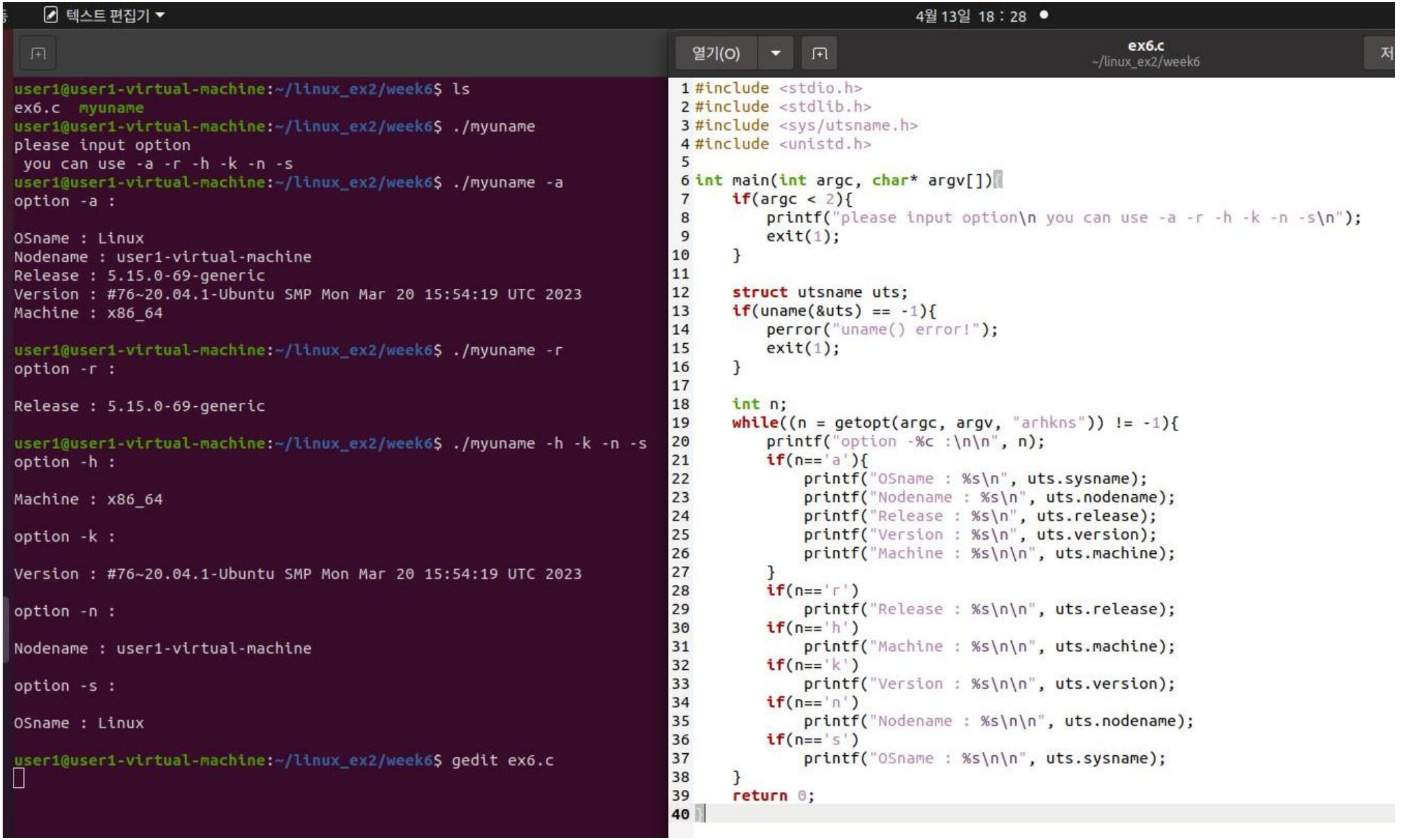
4장 7번 (5주차)


user1@user1-virtual-machine: ~/linux_ex2/week5/ex9
user1@user1-virtual-machine:~/linux_ex2/week5/ex9$ ls
ex9.c testfile threeCat
user1@user1-virtual-machine:~/linux_ex2/week5/ex9$ cat testfile
123456789 hello my name is wood-candy. what your name?
user1@user1-virtual-machine:~/linux_ex2/week5/ex9$ ./threeCat
please input one name of file
user1@user1-virtual-machine:~/linux_ex2/week5/ex9$ ./threeCat testfile
123 456 789 he llo my na me is woo d-c and y. wha t y our na me?
user1@user1-virtual-machine:~/linux_ex2/week5/ex9$ ./threeCat testfile ex9.c
please input one name of file
user1@user1-virtual-machine:~/linux_ex2/week5/ex9$ cat ex9.c
#include <stdio.h>
#include <stdlib.h>
#include <unistd.h>
#include <sys/types.h>
#include <sys/stat.h>
#include <fcntl.h>
int main(int argc, char* argv[]){
if(argc != 2){
printf("please input one name of file\n");
exit(1);
}
int fd;
fd = open(argv[1], O_RDONLY);
if(fd == -1){
perror("open failed");
exit(1);
}
int n;
char buf[4];
while((n = read(fd, buf, 3)) > 0){
buf[4] = '\0';
if(n == 3)
printf("%s ", buf);
}//반복문 중단 직전에 buf의 값을 두번 출력하는 것을 막는 조건문.
printf("\n");
if(n == -1)
perror("read failed");
close(fd);
}
user1@user1-virtual-machine:~/linux_ex2/week5/ex9$

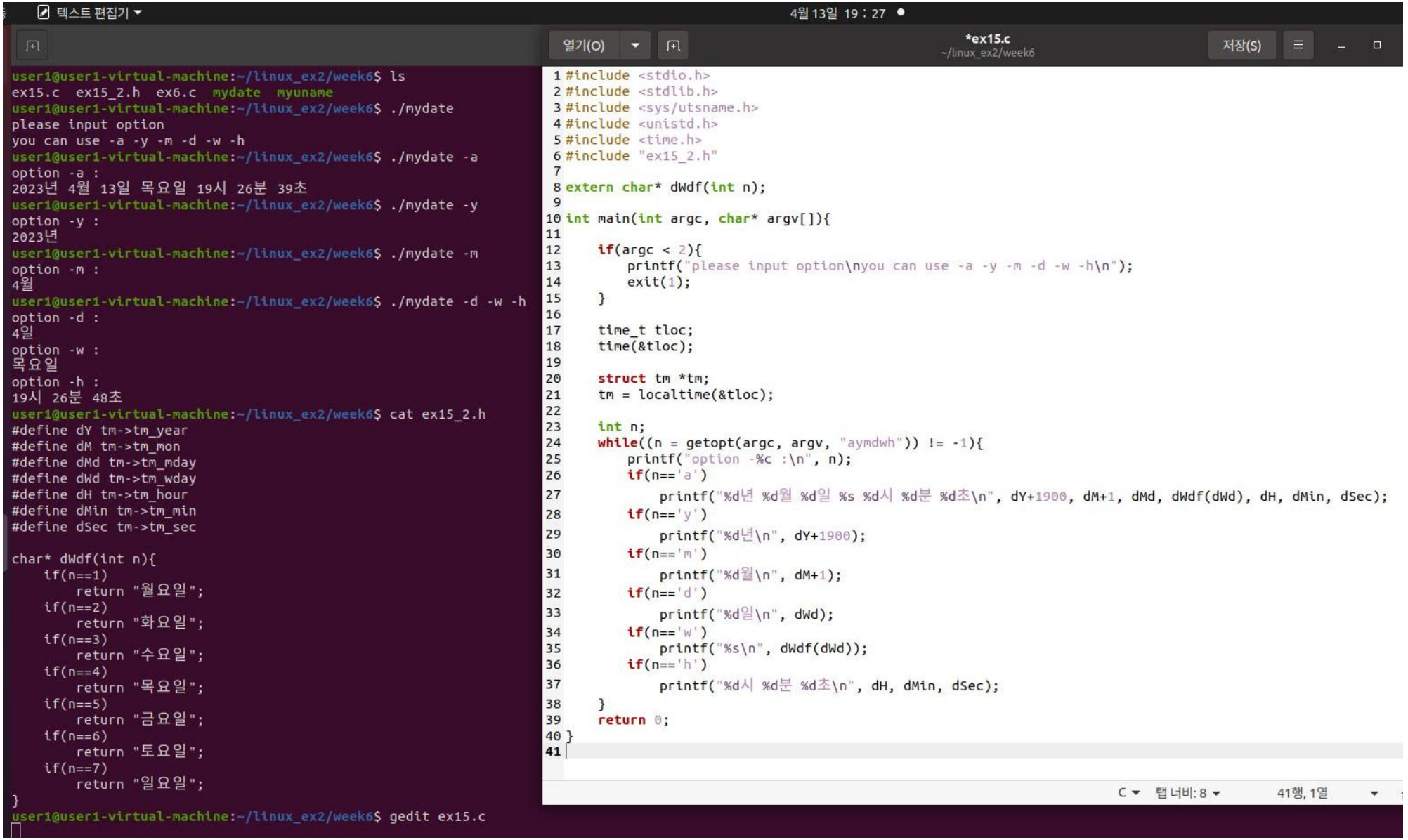
4장 9번 (5주차)


터미널
4월 11일 19 : 20
EN
user1@ubuntu: ~/linux/week6
user1@ubuntu:~/linux/week6$ ls
ccc.c ccc.out ch4 ch5
user1@ubuntu:~/linux/week6$ cat /etc/passwd | grep user*
cups-pk-helper:x:113:120:user for cups-pk-helper service,,,:/home/cups-pk-helper:/usr/sbin/nologin
hplip:x:119:7:HPLIP system user,,,:/run/hplip:/bin/false
sssd:x:126:131:SSSD system user,,,:/var/lib/sss:/usr/sbin/nologin
user1:x:1000:1000:uhs,,,:/home/user1:/bin/bash
user2:x:1001:1001:,,,:/home/user2:/bin/bash
user1@ubuntu:~/linux/week6$ ./ccc.out 1000
Home Directory : /home/user1
Login Shell : /bin/bash
user1@ubuntu:~/linux/week6$ ./ccc.out 1001
Home Directory : /home/user2
Login Shell : /bin/bash
user1@ubuntu:~/linux/week6$ ./ccc.out 1001 32333
please input one UIDuser1@ubuntu:~/linux/week6$ ./ccc.out
user1@ubuntu:~/linux/week6$ cat ccc.c
#include <sys/types.h>
#include <pwd.h>
#include <stdio.h>
#include <stdlib.h>
int main(int argc, char* argv[]) {
if(argc != 2){
printf("please input one UID");
exit(1);
}
int temp = atoi(argv[1]);
struct passwd *pw;
pw = getpwuid(temp);
printf("Home Directory : %s\n", pw->pw_dir);
printf("Login Shell : %s\n", pw->pw_shell);
}
user1@ubuntu:~/linux/week6$

6주차 수업 중 실습


텍스트 편집기
4월 13일 18 : 28
user1@user1-virtual-machine:~/linux_ex2/week6$ ls
ex6.c myuname
user1@user1-virtual-machine:~/linux_ex2/week6$ ./myuname
please input option
 you can use -a -r -h -k -n -s
user1@user1-virtual-machine:~/linux_ex2/week6$ ./myuname -a
option -a :
OSname : Linux
Nodename : user1-virtual-machine
Release : 5.15.0-69-generic
Version : #76~20.04.1-Ubuntu SMP Mon Mar 20 15:54:19 UTC 2023
Machine : x86_64
user1@user1-virtual-machine:~/linux_ex2/week6$ ./myuname -r
option -r :
Release : 5.15.0-69-generic
user1@user1-virtual-machine:~/linux_ex2/week6$ ./myuname -h -k -n -s
option -h :
Machine : x86_64
option -k :
Version : #76~20.04.1-Ubuntu SMP Mon Mar 20 15:54:19 UTC 2023
option -n :
Nodename : user1-virtual-machine
option -s :
OSname : Linux
user1@user1-virtual-machine:~/linux_ex2/week6$ gedit ex6.c
열기(O)
ex6.c
~/linux_ex2/week6
1 #include <stdio.h>
2 #include <stdlib.h>
3 #include <sys/utsname.h>
4 #include <unistd.h>
5
6 int main(int argc, char* argv[]){
7   if(argc < 2){
8   printf("please input option\n you can use -a -r -h -k -n -s\n");
9   exit(1);
10   }
11
12   struct utsname uts;
13   if(uname(&uts) == -1){
14   perror("uname() error!");
15   exit(1);
16   }
17
18   int n;
19   while((n = getopt(argc, argv, "arhkns")) != -1){
20   printf("option -%c :\n\n", n);
21   if(n=='a'){
22   printf("OSname : %s\n", uts.sysname);
23   printf("Nodename : %s\n", uts.nodename);
24   printf("Release : %s\n", uts.release);
25   printf("Version : %s\n", uts.version);
26   printf("Machine : %s\n\n", uts.machine);
27   }
28   if(n=='r')
29   printf("Release : %s\n\n", uts.release);
30   if(n=='h')
31   printf("Machine : %s\n\n", uts.machine);
32   if(n=='k')
33   printf("Version : %s\n\n", uts.version);
34   if(n=='n')
35   printf("Nodename : %s\n\n", uts.nodename);
36   if(n=='s')
37   printf("OSname : %s\n\n", uts.sysname);
38   }
39   return 0;
40 }

5장 6번 (6주차)


텍스트 편집기
4월 13일 19 : 27
열기(O)
*ex15.c
~/linux_ex2/week6
저장(S)
user1@user1-virtual-machine:~/linux_ex2/week6$ ls
ex15.c ex15_2.h ex6.c mydate myuname
user1@user1-virtual-machine:~/linux_ex2/week6$ ./mydate
please input option
you can use -a -y -m -d -w -h
user1@user1-virtual-machine:~/linux_ex2/week6$ ./mydate -a
option -a :
2023년 4월 13일 목요일 19시 26분 39초
user1@user1-virtual-machine:~/linux_ex2/week6$ ./mydate -y
option -y :
2023년
user1@user1-virtual-machine:~/linux_ex2/week6$ ./mydate -m
option -m :
4월
user1@user1-virtual-machine:~/linux_ex2/week6$ ./mydate -d -w -h
option -d :
4일
option -w :
목요일
option -h :
19시 26분 48초
user1@user1-virtual-machine:~/linux_ex2/week6$ cat ex15_2.h
#define dY tm->tm_year
#define dM tm->tm_mon
#define dMd tm->tm_mday
#define dWd tm->tm_wday
#define dH tm->tm_hour
#define dMin tm->tm_min
#define dSec tm->tm_sec
char* dWdf(int n){
if(n==1)
return "월요일";
if(n==2)
return "화요일";
if(n==3)
return "수요일";
if(n==4)
return "목요일";
if(n==5)
return "금요일";
if(n==6)
return "토요일";
if(n==7)
return "일요일";
}
user1@user1-virtual-machine:~/linux_ex2/week6$ gedit ex15.c
1 #include <stdio.h>
2 #include <stdlib.h>
3 #include <sys/utsname.h>
4 #include <unistd.h>
5 #include <time.h>
6 #include "ex15_2.h"
7
8 extern char* dWdf(int n);
9
10 int main(int argc, char* argv[]){
11
12 if(argc < 2){
13 printf("please input option\nyou can use -a -y -m -d -w -h\n");
14 exit(1);
15 }
16
17 time_t tloc;
18 time(&tloc);
19
20 struct tm *tm;
21 tm = localtime(&tloc);
22
23 int n;
24 while((n = getopt(argc, argv, "aymdwh")) != -1){
25 printf("option -%c :\n", n);
26 if(n=='a')
27 printf("%d년 %d월 %d일 %s %d시 %d분 %d초\n", dY+1900, dM+1, dMd, dWdf(dWd), dH, dMin, dSec);
28 if(n=='y')
29 printf("%d년\n", dY+1900);
30 if(n=='m')
31 printf("%d월\n", dM+1);
32 if(n=='d')
33 printf("%d일\n", dWd);
34 if(n=='w')
35 printf("%s\n", dWdf(dWd));
36 if(n=='h')
37 printf("%d시 %d분 %d초\n", dH, dMin, dSec);
38 }
39 return 0;
40 }
41
C
탭 너비: 8
41행, 1열

5장 15번 (6주차)

```
user1@ubuntu:~/linux/week7$ ls
ch6  ex8.c  ex8.out
user1@ubuntu:~/linux/week7$ ./ex8.out
please input one argument, PID
user1@ubuntu:~/linux/week7$ ./ex8.out 0
PPID : 2891
PGID : 2986
SID  : 2891
user1@ubuntu:~/linux/week7$ ./ex8.out 2429
PGID : 2429
SID  : 2429
user1@ubuntu:~/linux/week7$ ps
    PID TTY          TIME CMD
   2891 pts/1    00:00:00 bash
   2988 pts/1    00:00:00 ps
user1@ubuntu:~/linux/week7$ ./ex8.out 2891
PGID : 2891
SID  : 2891
user1@ubuntu:~/linux/week7$ cat ex8.c
#include <stdio.h>
#include <stdlib.h>
#include <sys/types.h>
#include <unistd.h>

int main(int argc, char* argv[]){
    if(argc != 2){
        printf("please input one argument, PID\n");
        exit(1);
    }

    int inputPid;
    inputPid = atoi(argv[1]);

    if(inputPid == 0){
        printf("PPID : %d\n", (int)getppid());
        printf("PGID : %d\n", (int)getpgid(0));
        printf("SID  : %d\n", (int)getsid(0));
    }else{
        printf("PGID : %d\n", (int)getpgid(inputPid));
        printf("SID  : %d\n", (int)getsid(inputPid));
    }

    return 0;
}
user1@ubuntu:~/linux/week7$
```

8주차 수업 중 실습. 8주차 과제는 연습문제 전체(제출 없음).