

## 리눅스시스템 Lab02

분반: 002

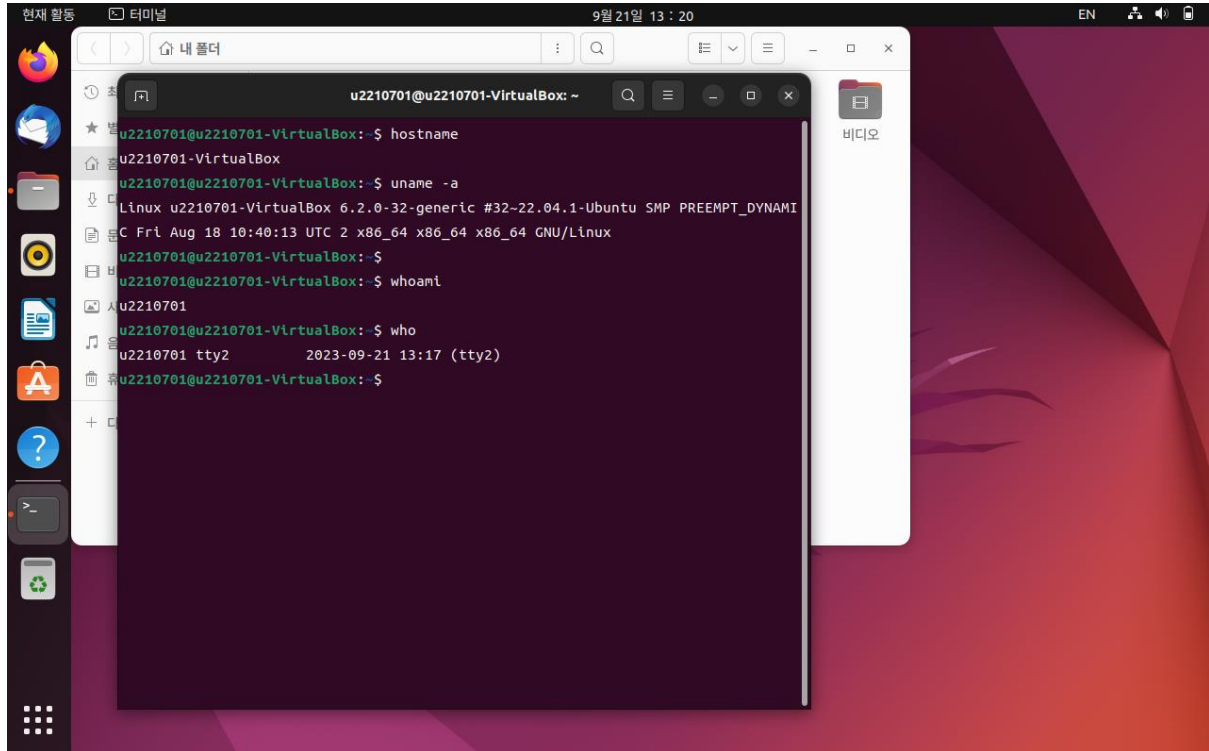
학과: 컴퓨터과학과

학번: 2210701

이름: 김주영

### 1. 시스템 및 사용자 정보 출력하기

p2 참고하여 모든 명령어 실행 후 실행 화면 캡처



The screenshot shows a terminal window titled "u2210701@u2210701-VirtualBox: ~" with the following commands and output:

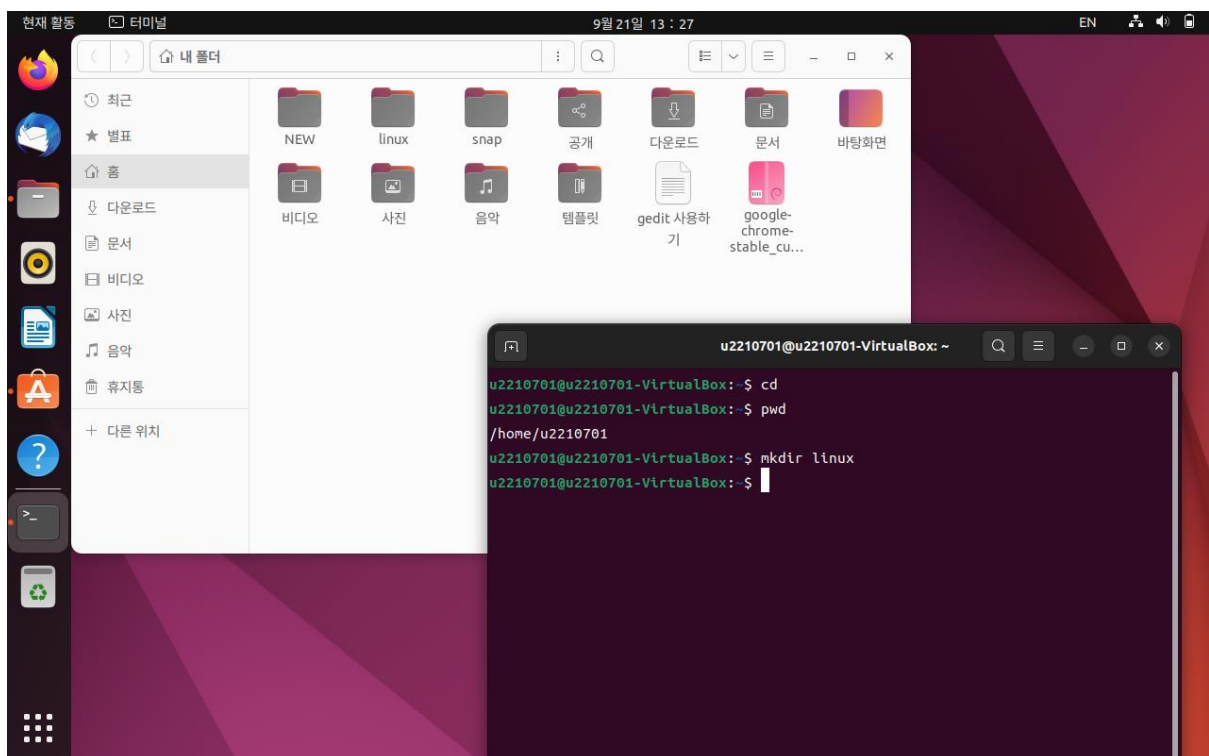
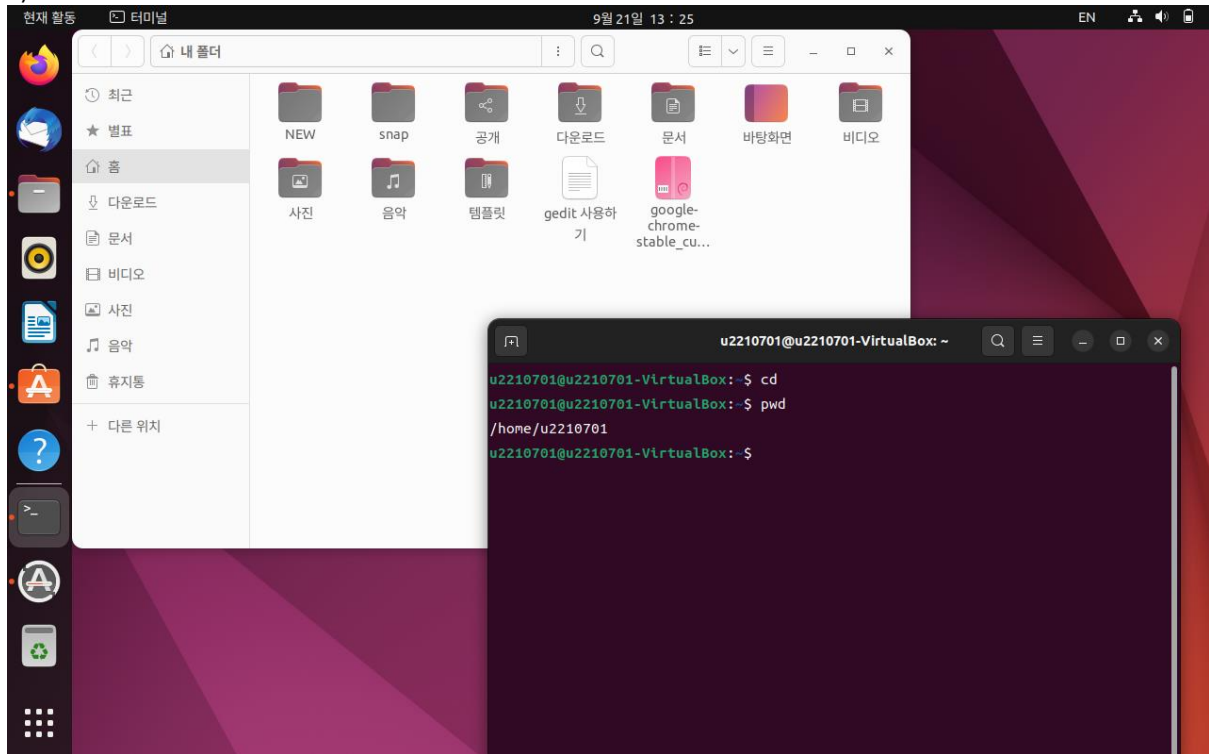
```
u2210701@u2210701-VirtualBox:~$ hostname
u2210701-VirtualBox
u2210701@u2210701-VirtualBox:~$ uname -a
Linux u2210701-VirtualBox 6.2.0-32-generic #32-22.04.1-Ubuntu SMP PREEMPT_DYNAMIC
C Fri Aug 18 10:40:13 UTC 2 x86_64 x86_64 x86_64 GNU/Linux
u2210701@u2210701-VirtualBox:~$ whoami
u2210701
u2210701@u2210701-VirtualBox:~$ who
u2210701 tty2          2023-09-21 13:17 (tty2)
u2210701@u2210701-VirtualBox:~$
```

The terminal window is open on a desktop environment with a purple and red background. The desktop has a sidebar with various application icons on the left and a top bar with system status indicators on the right.

## 2. 실습 디렉토리 만들기

- 1) p3 참고하여 사용자 계정 디렉터리에서 'linux' 디렉터리 생성 후 실행 화면 캡처
- 2) mkdir 명령어에 대한 설명 작성

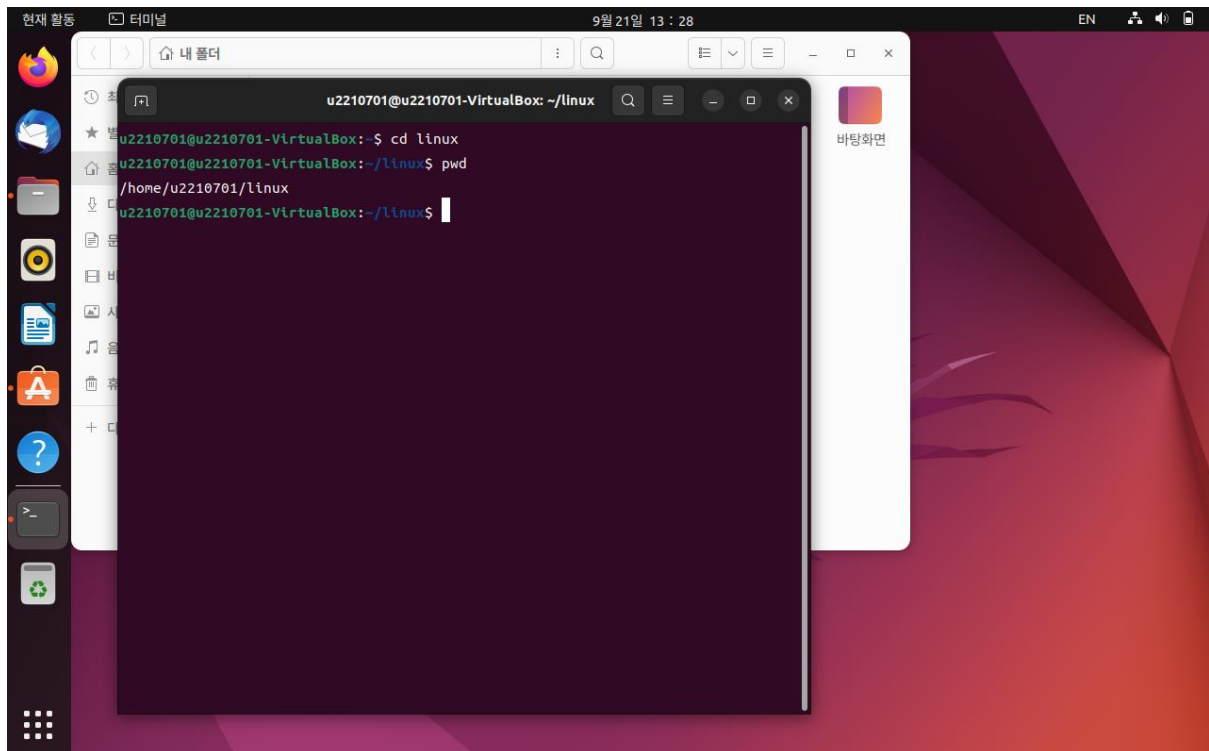
1)



2)mkdir : 현재 위치하고 있는 디렉터리에 새로운 디렉터리를 만든다

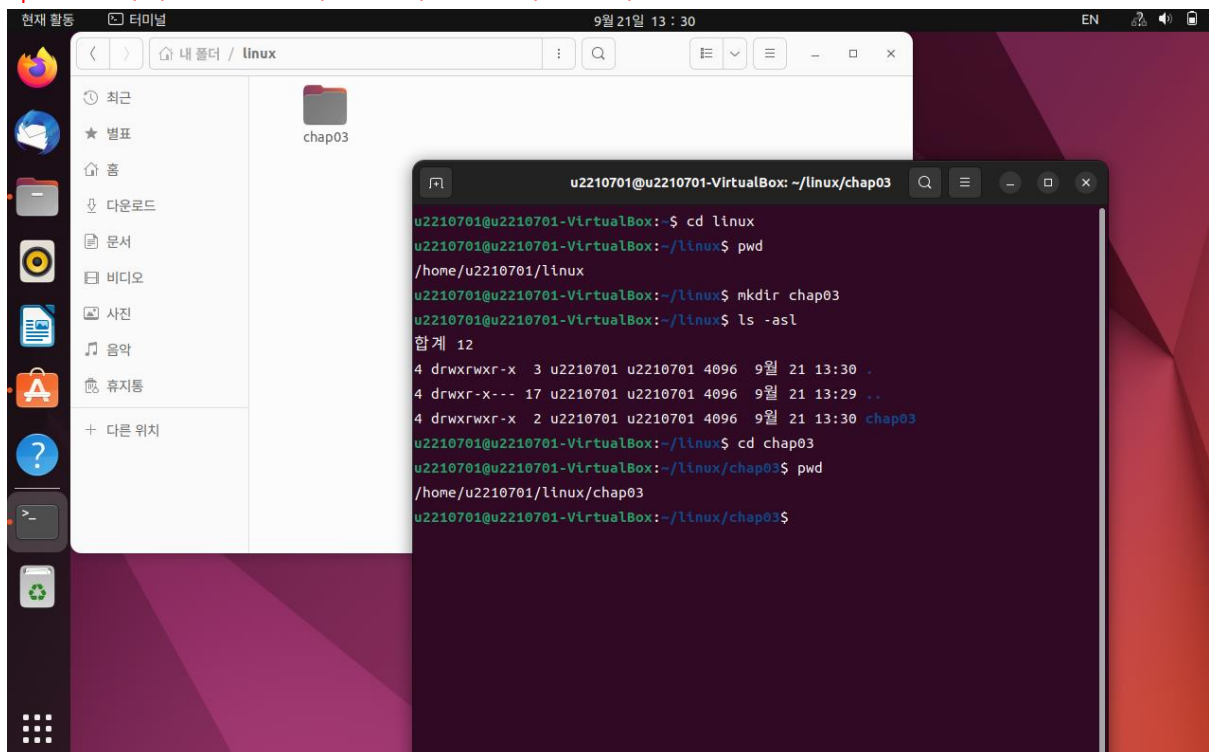
### 3. 실습 디렉터리로 이동하여 경로 확인

1) p4 참고하여 모든 명령어 실행 후 실행 화면 캡처



### 4. chap03 서브디렉터리 만들고 이동하여 경로 확인하기

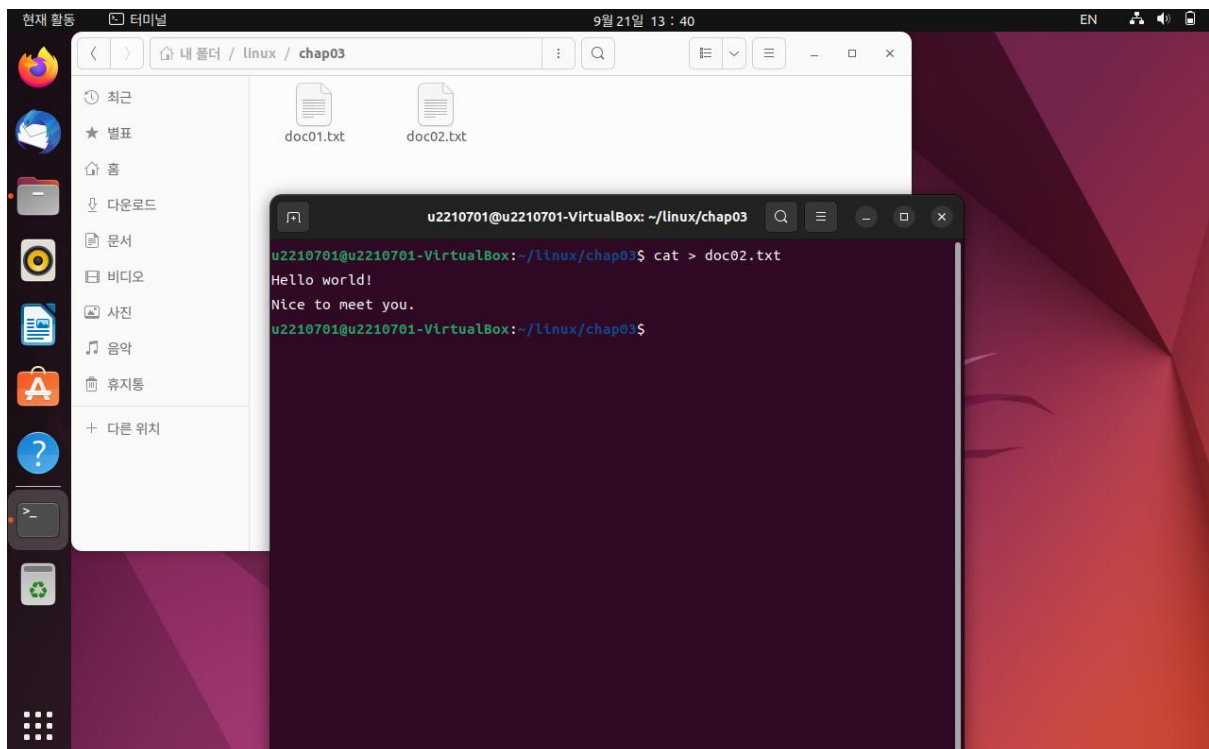
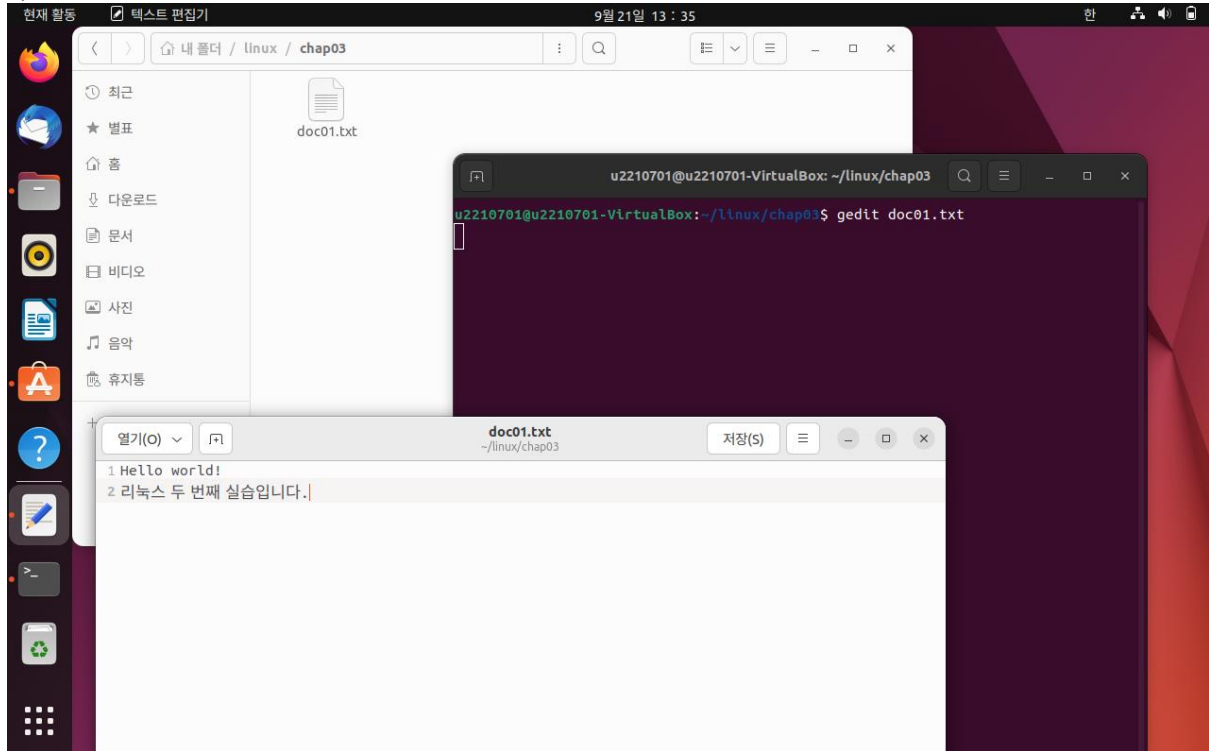
p5 참고하여 모든 명령어 실행 후 실행 화면 캡처

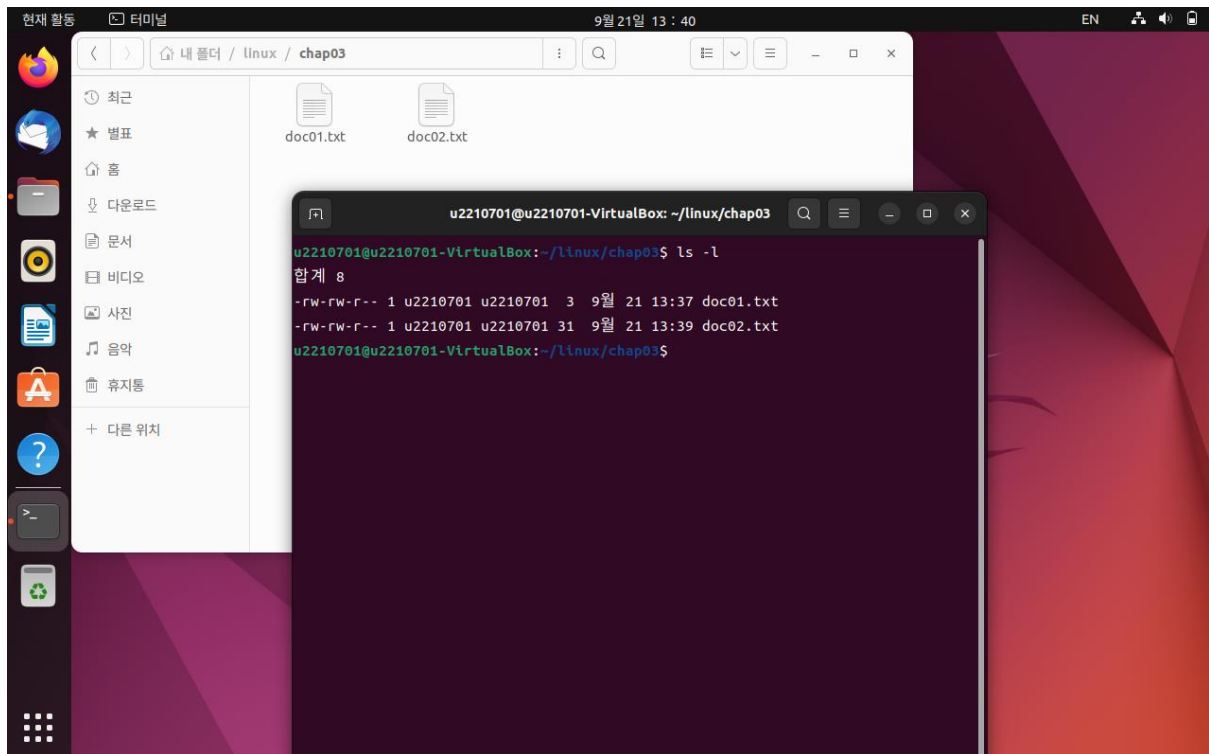


## 5. 파일을 만들고 확인하기

- 1) p6-8 참고하여 각 명령어 실행 후 모든 실행 화면 캡처
- 2) gedit 명령어에 대한 설명 작성
- 3) cat 명령어에 대한 설명 작성

1)



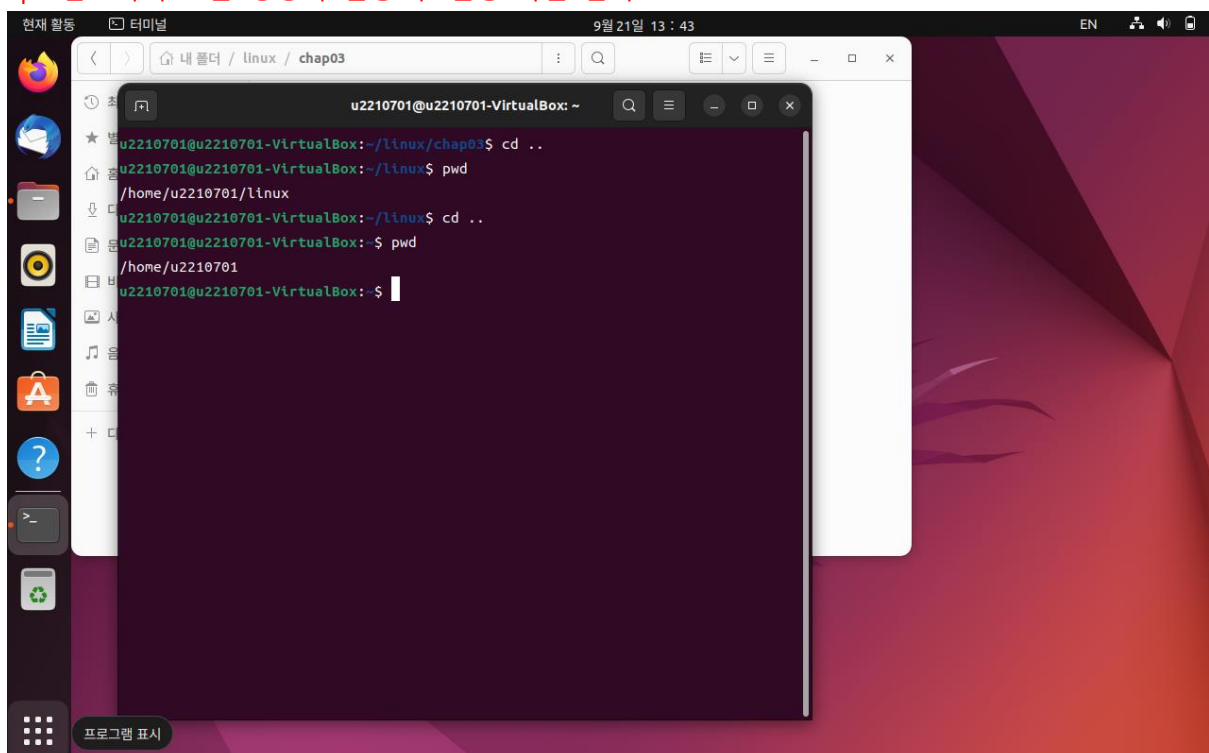


2) gedit : 현재 위치한 디렉터리에 새로운 텍스트파일을 생성하고 텍스트편집기 프로그램에서 편집을 시작한다.

3) cat : 현재 위치한 디렉터리에 새로운 텍스트파일을 생성하고 터미널에서 편집을 시작한다. (ctrl + d로 입력을 종료한다.)

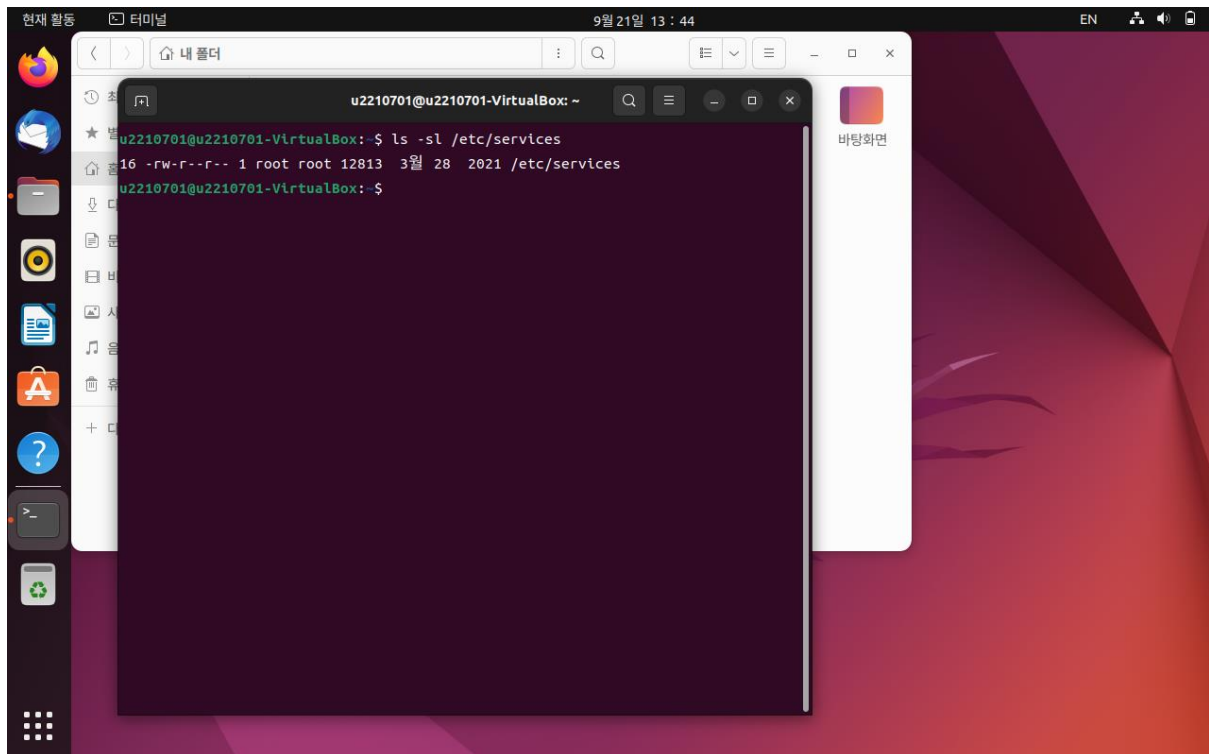
6. 부모 디렉터리로 이동하면서 경로 확인하기

p9 참고하여 모든 명령어 실행 후 실행 화면 캡처



## 7. /etc/services 파일을 살펴보자

p10 참고하여 명령어 실행 후 실행 화면 캡처

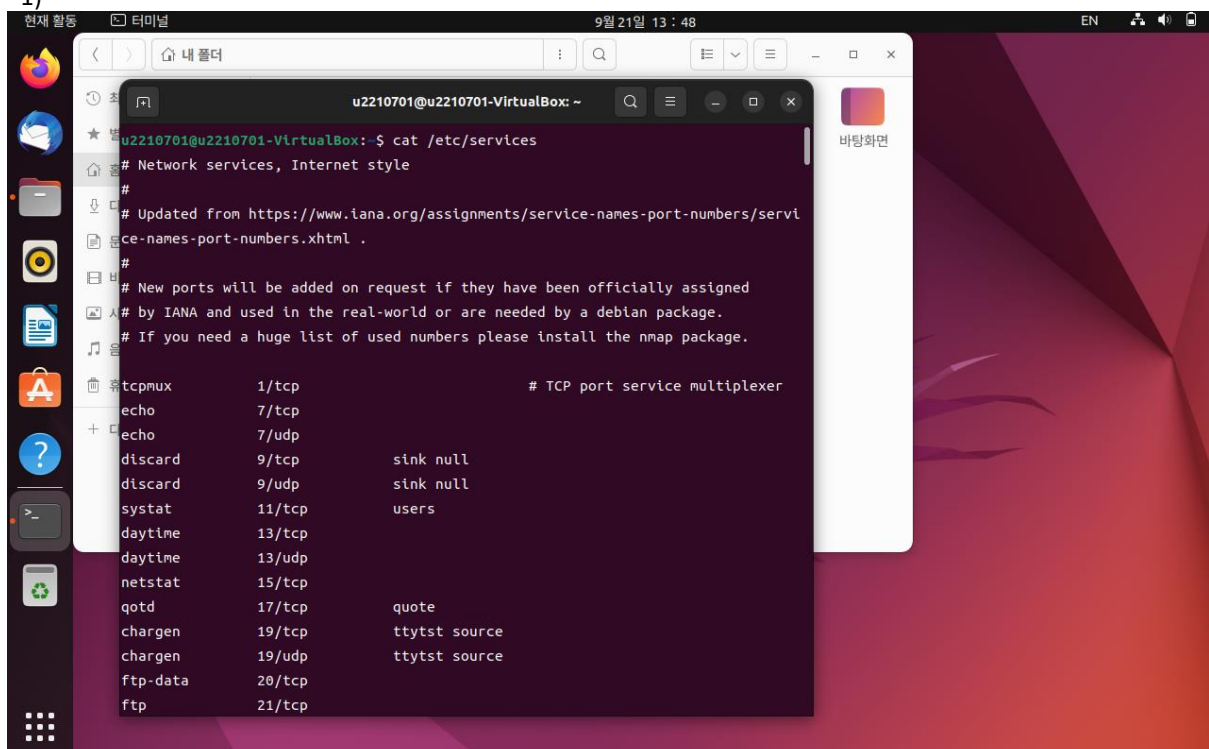


## 8. 이 파일의 내용을 출력한다.

1) p11-13 참고하여 각 명령어 실행 후 모든 실행 화면 캡처

2) cat 명령어의 -n 옵션과 -b 옵션에 대한 설명 작성

1)

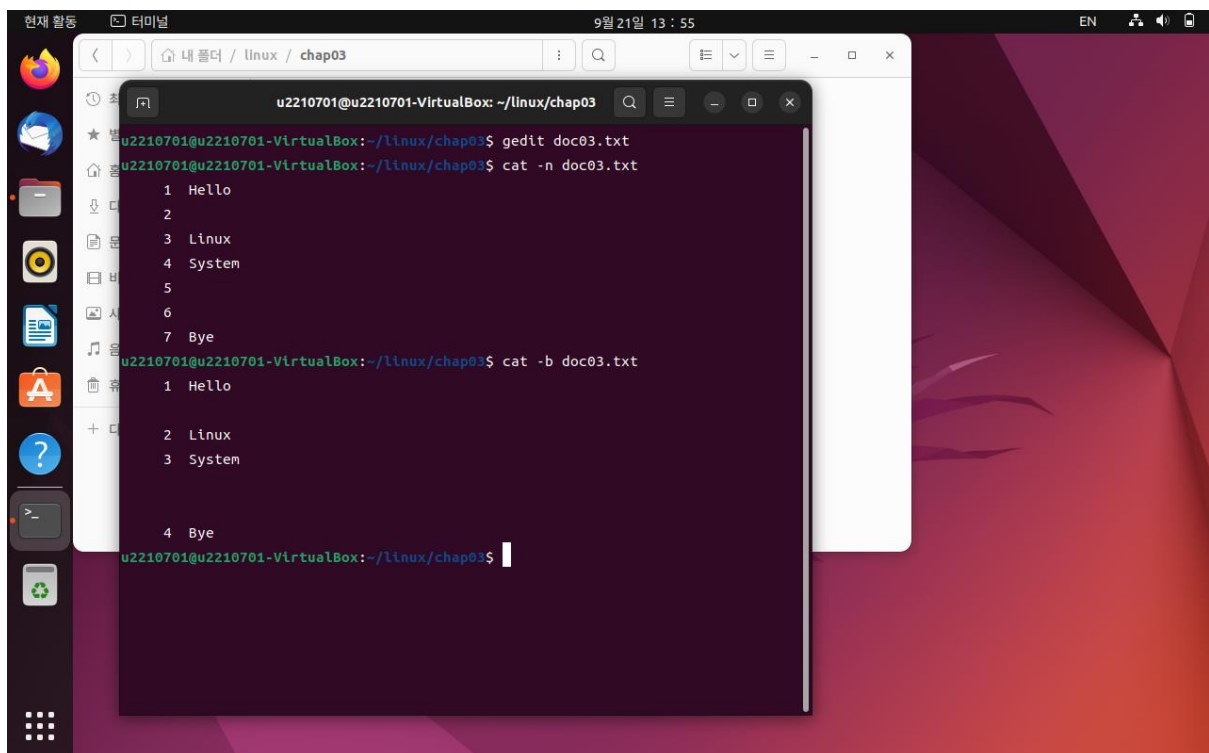
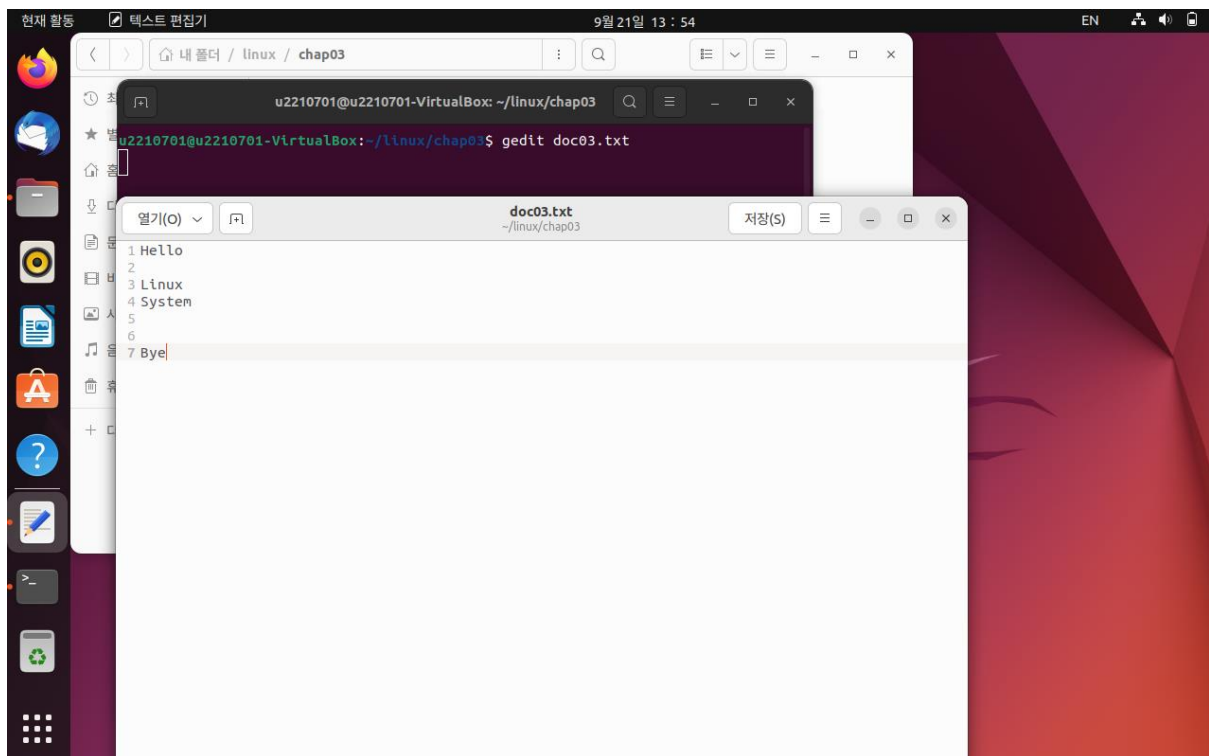




```
현재 활동 9월 21일 13:51 EN
u2210701@u2210701-VirtualBox: ~/linux/chap03
# Local services
amandaidx 10082/tcp # amanda backup services
amidxtape 10083/tcp # amanda backup services
sgl-cmsd 17001/udp # Cluster membership services daemon
sgl-crsd 17002/udp
sgl-gcd 17003/udp # SGI Group membership daemon
sgl-cad 17004/tcp # Cluster Admin daemon
binkp 24554/tcp # binkp fidonet protocol
asp 27374/tcp # Address Search Protocol
asp 27374/udp
csync2 30865/tcp # cluster synchronization tool
dircproxy 57000/tcp # Detachable IRC Proxy
tfido 60177/tcp # fidonet EMSI over telnet
fido 60179/tcp # fidonet EMSI over TCP

u2210701@u2210701-VirtualBox:~$ cat ~/linux/chap03/doc01.txt
Hello world!
리눅스 두 번째 실습입니다.
u2210701@u2210701-VirtualBox:~$ cd linux
u2210701@u2210701-VirtualBox:~/linux$ cd chap03
u2210701@u2210701-VirtualBox:~/linux/chap03$ cat doc01.txt
Hello world!
리눅스 두 번째 실습입니다.
u2210701@u2210701-VirtualBox:~/linux/chap03$
```

```
현재 활동 9월 21일 13:52 EN
u2210701@u2210701-VirtualBox: ~
u2210701@u2210701-VirtualBox:~$ cat -n /etc/services
1 # Network services, Internet style
2 #
3 # Updated from https://www.iana.org/assignments/service-names-port-numbers/service-names-port-numbers.xhtml .
4 #
5 # New ports will be added on request if they have been officially assigned
6 # by IANA and used in the real-world or are needed by a debian package.
7 # If you need a huge list of used numbers please install the nmap package
8
9 tcpmux 1/tcp # TCP port service multiplexer
10 echo 7/tcp
11 echo 7/udp
12 discard 9/tcp sink null
13 discard 9/udp sink null
14 systat 11/tcp users
15 daytime 13/tcp
16 daytime 13/udp
17 netstat 15/tcp
18 qotd 17/tcp quote
19 chargen 19/tcp ttytst source
```



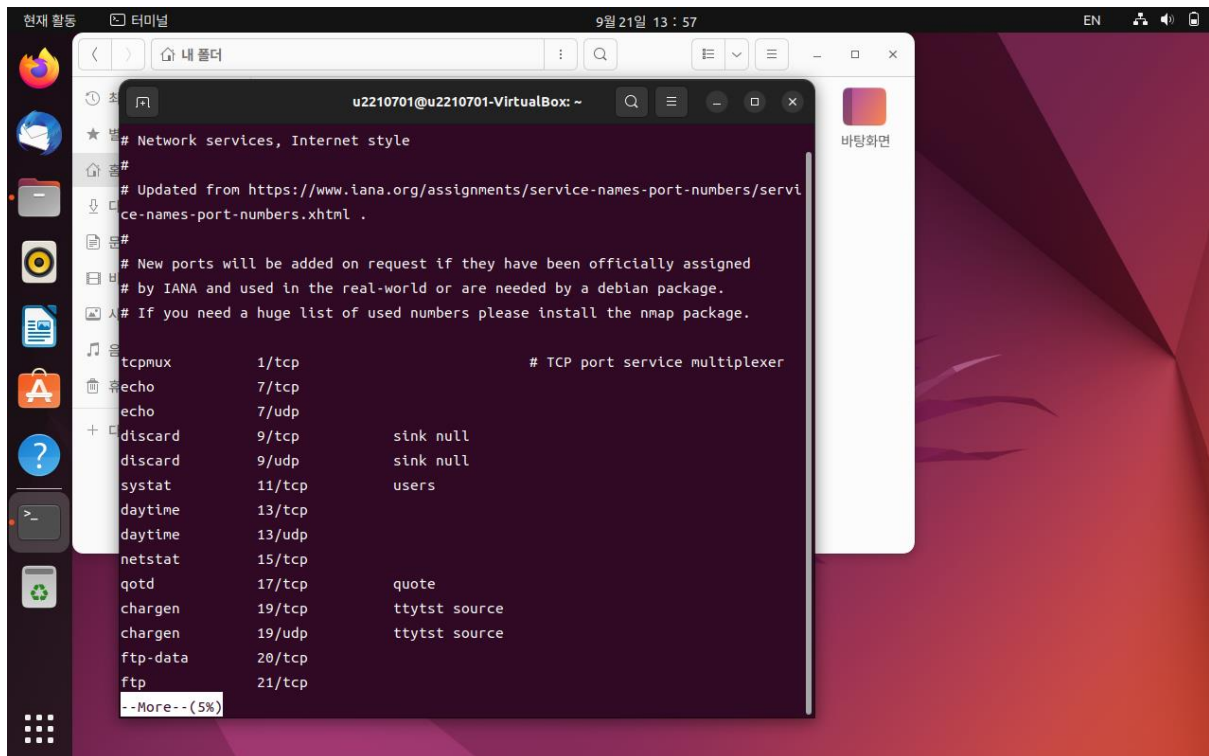
-n : line number를 포함해서 출력하고, 비어있는 행의 line number도 출력한다

-b : line number를 포함해서 출력하되, 비어있는 행의 line number는 출력하지 않는다

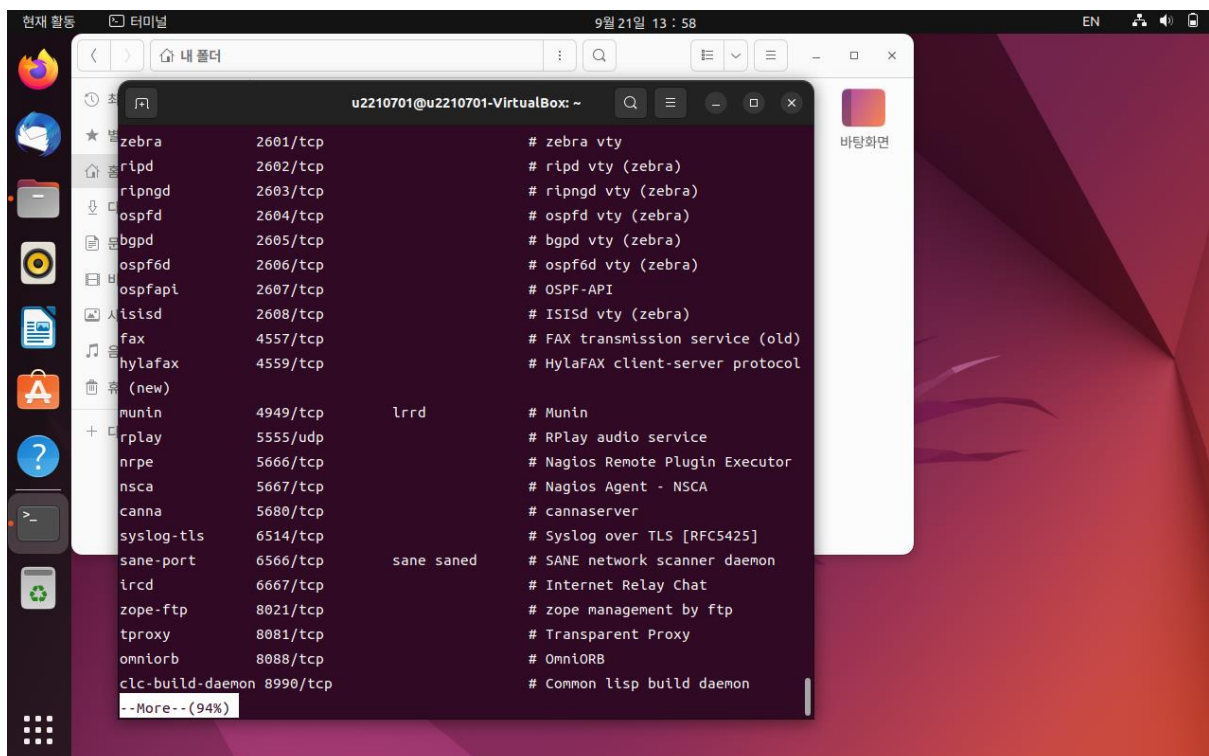


9. 이 파일의 내용을 페이지 단위로 출력한다.

p14 참고하여 모든 명령어 실행 후 실행 화면 캡처



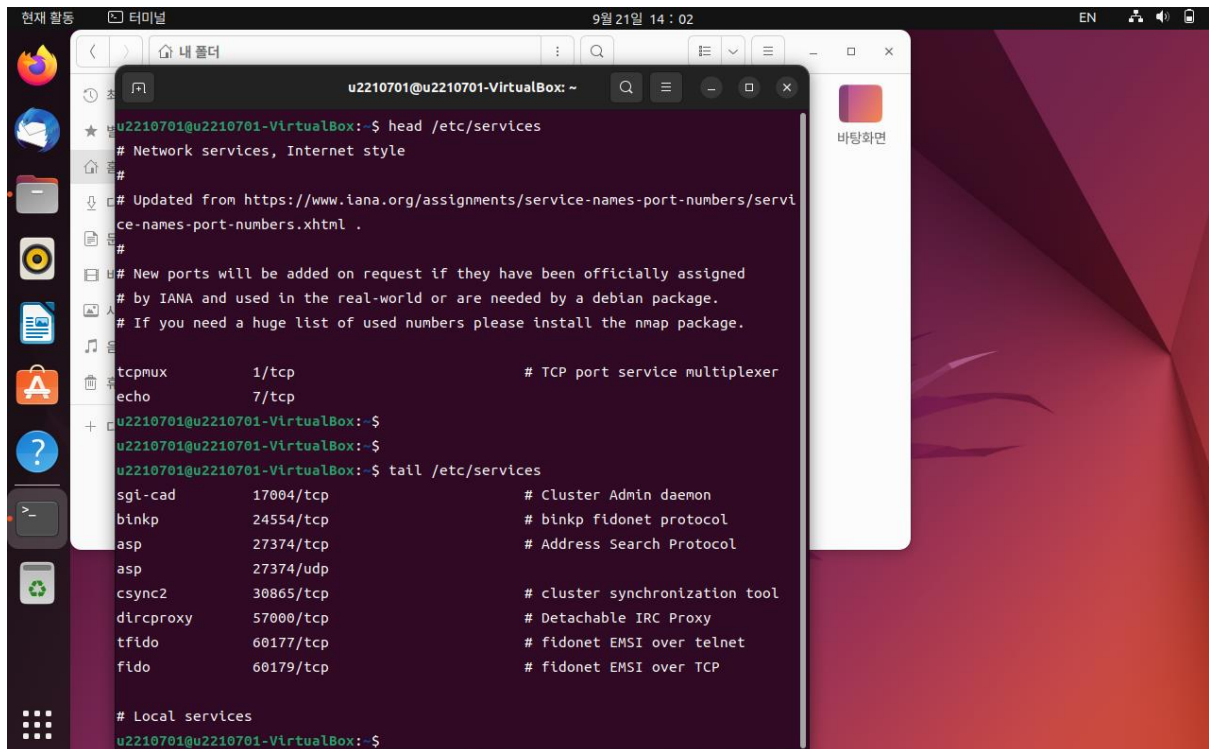
```
u2210701@u2210701-VirtualBox: ~  
# Network services, Internet style  
#  
# Updated from https://www.iana.org/assignments/service-names-port-numbers/service-names-port-numbers.xhtml .  
#  
# New ports will be added on request if they have been officially assigned  
# by IANA and used in the real-world or are needed by a debian package.  
# If you need a huge list of used numbers please install the nmap package.  
  
tcpmux      1/tcp          # TCP port service multiplexer  
echo        7/tcp  
echo        7/udp  
discard     9/tcp          sink null  
discard     9/udp          sink null  
sysstat     11/tcp         users  
daytime     13/tcp  
daytime     13/udp  
netstat     15/tcp  
qotd        17/tcp         quote  
chargen     19/tcp         ttytst source  
chargen     19/udp         ttytst source  
ftp-data    20/tcp  
ftp         21/tcp  
--More-- (5%)
```



```
u2210701@u2210701-VirtualBox: ~  
zebra       2601/tcp       # zebra vty  
ripd        2602/tcp       # ripd vty (zebra)  
ripngd      2603/tcp       # ripngd vty (zebra)  
ospfd       2604/tcp       # ospfd vty (zebra)  
bgpd        2605/tcp       # bgpd vty (zebra)  
ospf6d      2606/tcp       # ospf6d vty (zebra)  
ospfapi     2607/tcp       # OSPF-API  
isisd       2608/tcp       # ISISd vty (zebra)  
fax         4557/tcp       # FAX transmission service (old)  
hylafax     4559/tcp       # HylaFAX client-server protocol  
(new)  
munin       4949/tcp       lrdd          # Munin  
rplay       5555/udp       # RPlay audio service  
nrpe        5666/tcp       # Nagios Remote Plugin Executor  
nscd        5667/tcp       # Nagios Agent - NSCA  
canna       5680/tcp       # cannaserver  
syslog-tls  6514/tcp       # Syslog over TLS [RFC5425]  
sane-port   6566/tcp       sane saned    # SANE network scanner daemon  
ircd        6667/tcp       # Internet Relay Chat  
zope-ftp    8021/tcp       # zope management by ftp  
tproxy      8081/tcp       # Transparent Proxy  
omniorb     8088/tcp       # Omniorb  
clc-build-daemon 8990/tcp      # Common lisp build daemon  
--More-- (94%)
```

10. 이 파일의 앞부분과 뒷부분을 출력한다.

p15-16 참고하여 모든 명령어 실행 후 실행 화면 캡처

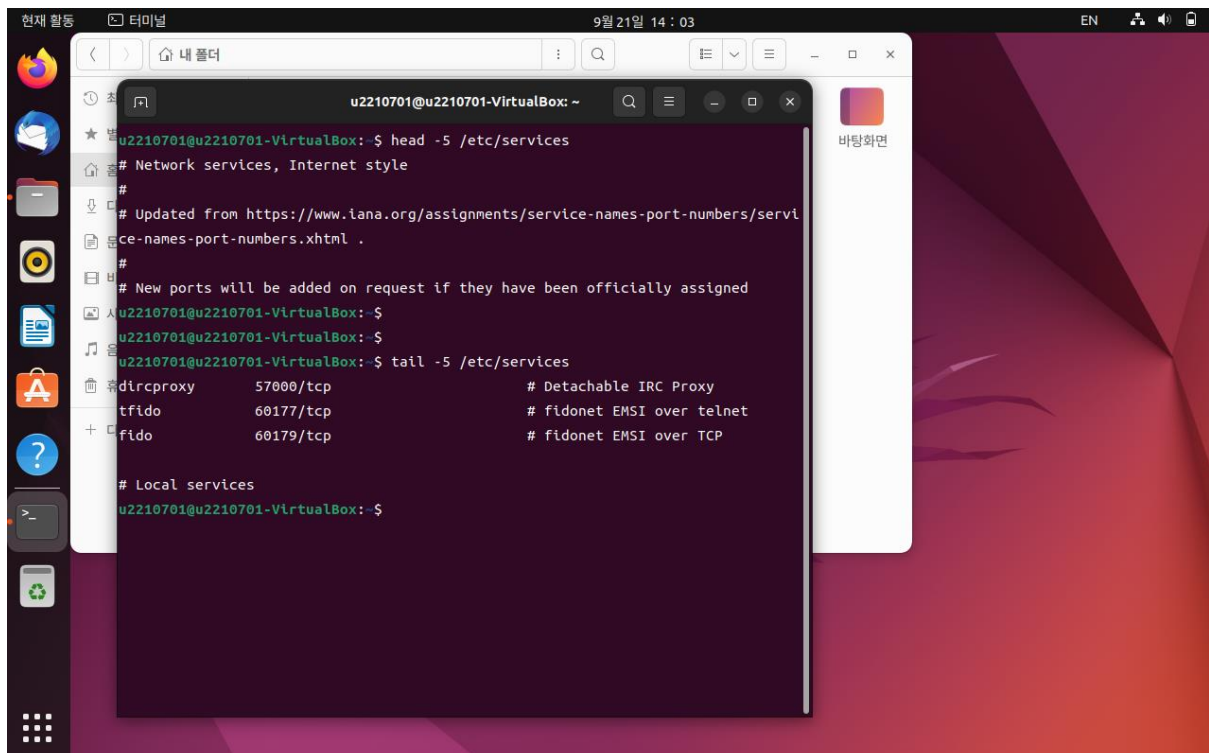


A terminal window titled 'u2210701@u2210701-VirtualBox: ~' showing the execution of 'head /etc/services' and 'tail /etc/services' commands. The 'head' command displays the first few lines of the file, including comments about network services and IANA assignments. The 'tail' command displays the last few lines, listing various services like 'sgl-cad', 'binkp', 'asp', 'csync2', 'dircproxy', 'tfido', and 'fido' with their respective port numbers and protocols.

```
u2210701@u2210701-VirtualBox:~$ head /etc/services
# Network services, Internet style
#
# Updated from https://www.iana.org/assignments/service-names-port-numbers/service-names-port-numbers.xhtml .
#
# New ports will be added on request if they have been officially assigned
# by IANA and used in the real-world or are needed by a debian package.
# If you need a huge list of used numbers please install the nmap package.

tcpmux      1/tcp                # TCP port service multiplexer
echo        7/tcp
u2210701@u2210701-VirtualBox:~$
u2210701@u2210701-VirtualBox:~$ tail /etc/services
sgl-cad      17004/tcp                # Cluster Admin daemon
binkp       24554/tcp                # binkp fidonet protocol
asp         27374/tcp                # Address Search Protocol
asp         27374/udp
csync2      30865/tcp                # cluster synchronization tool
dircproxy   57000/tcp                # Detachable IRC Proxy
tfido       60177/tcp                # fidonet EMSI over telnet
fido        60179/tcp                # fidonet EMSI over TCP

# Local services
u2210701@u2210701-VirtualBox:~$
```



A terminal window titled 'u2210701@u2210701-VirtualBox: ~' showing the execution of 'head -5 /etc/services' and 'tail -5 /etc/services' commands. The 'head -5' command displays the first five lines of the file, and the 'tail -5' command displays the last five lines, showing services like 'dircproxy', 'tfido', and 'fido'.

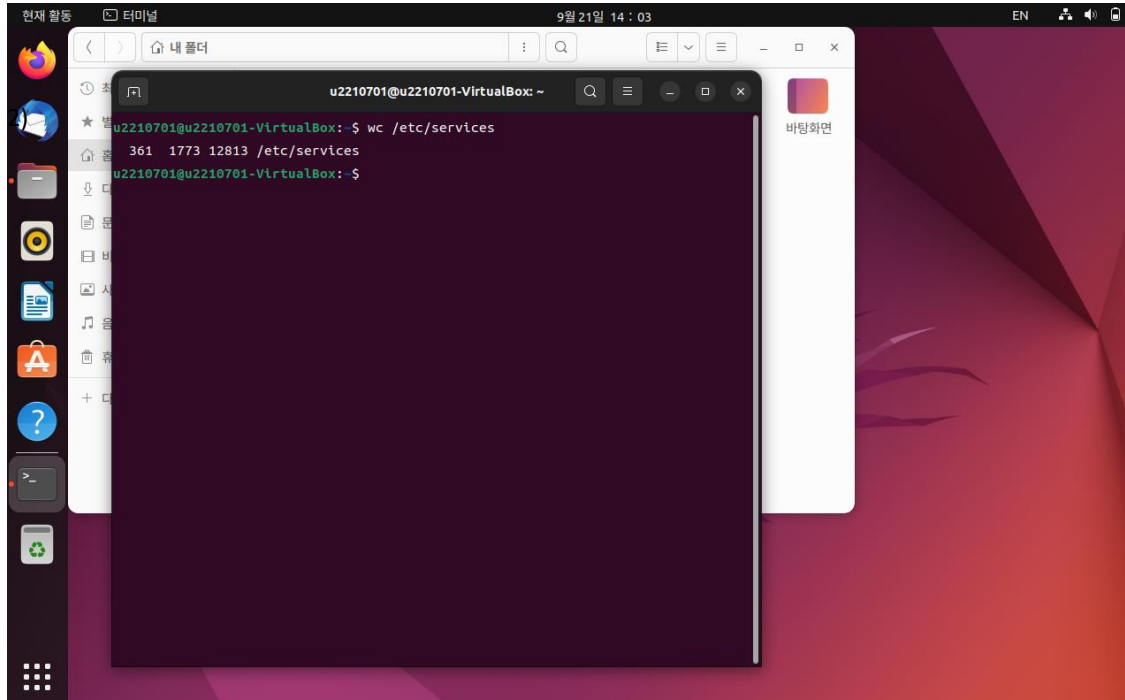
```
u2210701@u2210701-VirtualBox:~$ head -5 /etc/services
# Network services, Internet style
#
# Updated from https://www.iana.org/assignments/service-names-port-numbers/service-names-port-numbers.xhtml .
#
# New ports will be added on request if they have been officially assigned
u2210701@u2210701-VirtualBox:~$
u2210701@u2210701-VirtualBox:~$ tail -5 /etc/services
dircproxy   57000/tcp                # Detachable IRC Proxy
tfido       60177/tcp                # fidonet EMSI over telnet
fido        60179/tcp                # fidonet EMSI over TCP

# Local services
u2210701@u2210701-VirtualBox:~$
```

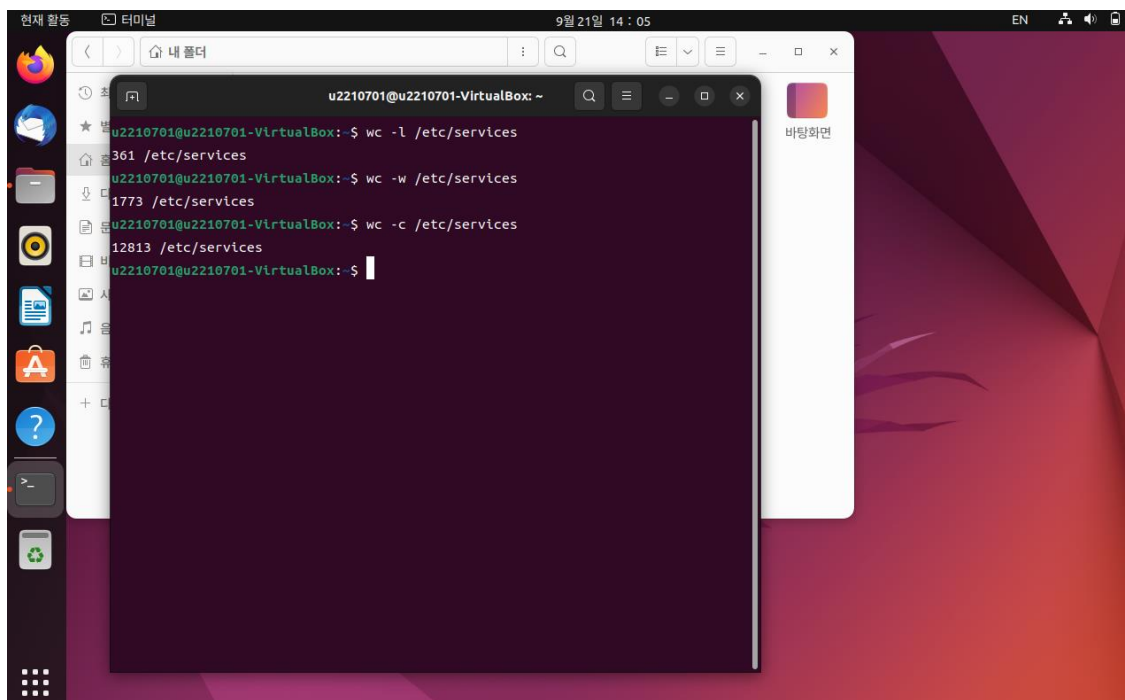
11. 이 파일의 단어를 세서 출력한다.

- 1) p17-18 참고하여 모든 명령어 실행 후 실행 화면 캡처
- 2) wc 명령어의 -l 옵션, -w 옵션과 -c 옵션에 대한 설명 작성

1)



```
u2210701@u2210701-VirtualBox: ~  
$ wc /etc/services  
361 1773 12813 /etc/services  
u2210701@u2210701-VirtualBox: $
```



```
u2210701@u2210701-VirtualBox: ~  
$ wc -l /etc/services  
361 /etc/services  
u2210701@u2210701-VirtualBox: ~  
$ wc -w /etc/services  
1773 /etc/services  
u2210701@u2210701-VirtualBox: ~  
$ wc -c /etc/services  
12813 /etc/services  
u2210701@u2210701-VirtualBox: ~  
$
```

2)

- l: 파일의 줄 수를 출력한다(line)
- w: 파일의 단어 수를 출력한다(word)
- c: 파일의 문자 수를 출력한다(char)