시스템프로그래밍 코드 정리 및 깃허브 정리

https://github.com/sungwo0/SystemProgramming

소프트웨어학과 2020875029 신성우

코드 정리

```
stud@DESKTOP-7DQM460:~/ppt$ date
Thu Jun 12 09:48:23 KST 2025
stud@DESKTOP-7DQM460:~/ppt$ hostname
DESKTOP-7DQM460
stud@DESKTOP-7DQM460:~/ppt$ uname
Linux
stud@DESKTOP-7DQM460:~/ppt$ uname -a
Linux DESKTOP-7DQM460 5.15.167.4-microsoft-standard-WSL2 #1 SMP Tue
Nov 5 00:21:55 UTC 2024 x86_64 x86_64 x86_64 GNU/Linux
stud@DESKTOP-7DQM460:~/ppt$ whoami
stud
stud@DESKTOP-7DQM460:~/ppt$ who
stud
         pts/1
                     2025-06-12 09:35
stud@DESKTOP-7DQM460:~/ppt$ ls
stud@DESKTOP-7DQM460:~/ppt$ which ls
/usr/bin/ls
```

```
stud@DESKTOP-7DQM460:~/ppt$ pwd
/home/stud/ppt
stud@DESKTOP-7DQM460:~/ppt$ mkdir test
stud@DESKTOP-7DQM460:~/ppt$ ls
1.c test
stud@DESKTOP-7DQM460:~/ppt$ rmdir test
stud@DESKTOP-7DQM460:~/ppt$ ls
1.c
stud@DESKTOP-7DQM460:~/ppt$ ls /
bin
                  etc lib.usr-is-merged mnt run
                                                                   srv var
bin.usr-is-merged home lib64
                                          opt sbin
                                                                   sys
                  init lost+found
boot
                                          proc sbin.usr-is-merged tmp
dev
                  lib media
                                          root snap
                                                                   usr
stud@DESKTOP-7DQM460:~/ppt$ ls ~
0321 ppt snap software
stud@DESKTOP-7DQM460:~/ppt$ ls -a
  .. 1.c
stud@DESKTOP-7DQM460:~/ppt$ ls -s
total 0
0 1.c
stud@DESKTOP-7DQM460:~/ppt$ ls -l
total 0
-rw-r--r-- 1 stud stud 0 Jun 12 09:36 1.c
```

```
stud@DESKTOP-7DOM460:~/ppt$ touch test.txt
stud@DESKTOP-7DQM460:~/ppt$ ls
1.c test.txt
stud@DESKTOP-7DQM460:~/ppt$ cat > test1.txt
Hello World!
stud@DESKTOP-7DQM460:~/ppt$ ls
1.c test.txt test1.txt
stud@DESKTOP-7DQM460:~/ppt$ cat test1.txt
Hello World!
stud@DESKTOP-7DQM460:~/ppt$ wc test1.txt
1 2 13 test1.txt
stud@DESKTOP-7DQM460:~/ppt$ cp test1.txt test2.txt
stud@DESKTOP-7DQM460:~/ppt$ ls -l
total 8
-rw-r--r-- 1 stud stud 0 Jun 12 09:36 1.c
-rw-r--r-- 1 stud stud 0 Jun 12 09:56 test.txt
-rw-r--r-- 1 stud stud 13 Jun 12 09:57 test1.txt
-rw-r--r-- 1 stud stud 13 Jun 12 10:04 test2.txt
stud@DESKTOP-7DQM460:~/ppt$ mv test2.txt test3.txt
stud@DESKTOP-7DQM460:~/ppt$ ls -l
total 8
-rw-r--r-- 1 stud stud 0 Jun 12 09:36 1.c
-rw-r--r-- 1 stud stud 0 Jun 12 09:56 test.txt
-rw-rw-rw- 1 stud stud 13 Jun 12 14:16 test1.txt
-rw-r--r-- 1 stud stud 13 Jun 12 14:25 test3.txt
```

```
stud@DESKTOP-7DQM460:~/ppt$ rm test3.txt
stud@DESKTOP-7DOM460:~/ppt$ ls -l
total 4
-rw-r--r-- 1 stud stud 0 Jun 12 09:36 1.c
-rw-r--r-- 1 stud stud 0 Jun 12 09:56 test.txt
-rw-r--r-- 1 stud stud 13 Jun 12 09:57 test1.txt
stud@DESKTOP-7DQM460:~/ppt$ ln test1.txt text2.txt
stud@DESKTOP-7DQM460:~/ppt$ ls -l
total 8
-rw-r--r-- 1 stud stud 0 Jun 12 09:36 1.c
-rw-r--r-- 1 stud stud 0 Jun 12 09:56 test.txt
-rw-r--r-- 2 stud stud 13 Jun 12 09:57 test1.txt
-rw-r--r-- 2 stud stud 13 Jun 12 09:57 text2.txt
stud@DESKTOP-7DQM460:~/ppt$ ln -s test1.txt test2.txt
stud@DESKTOP-7DQM460:~/ppt$ ls -l
total 8
-rw-r--r-- 1 stud stud 0 Jun 12 09:36 1.c
-rw-r--r-- 1 stud stud 6 Jun 12 15:03 test.txt
-rw-r--r-- 1 stud stud 14 Jun 12 15:03 test1.txt
lrwxrwxrwx 1 stud stud 9 Jun 12 15:04 test2.txt -> test1.txt
stud@DESKTOP-7DQM460:~/ppt$ file test.txt
test.txt: empty
stud@DESKTOP-7DQM460:~/ppt$ file test1.txt
test1.txt: ASCII text
```

```
stud@DESKTOP-7DQM460:~/ppt$ chmod g+w,o+rw test1.txt
stud@DESKTOP-7DQM460:~/ppt$ ls -l
total 8
-rw-r--r-- 1 stud stud 0 Jun 12 09:36 1.c
-rw-r--r-- 1 stud stud 0 Jun 12 09:56 test.txt
-rw-rw-rw- 2 stud stud 13 Jun 12 09:57 test1.txt
lrwxrwxrwx 1 stud stud 9 Jun 12 14:12 test2.txt -> test1.txt
-rw-rw-rw- 2 stud stud 13 Jun 12 09:57 text2.txt
stud@DESKTOP-7DQM460:~/ppt$ touch test1.txt
stud@DESKTOP-7DQM460:~/ppt$ ls -l test1.txt
-rw-rw-rw- 2 stud stud 13 Jun 12 14:16 test1.txt
stud@DESKTOP-7DQM460:~/ppt$ ip addr
1: lo: <LOOPBACK, UP, LOWER_UP> mtu 65536 qdisc noqueue state UNKNOWN group default glen
 1000
    link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
    inet 127.0.0.1/8 scope host lo
```

inet 10.255.255.254/32 brd 10.255.255.254 scope global lo

```
stud@DESKTOP-7DQM460:~/ppt$ find . -user stud -print
.
./1.c
./test2.txt
./test1.txt
./test1.txt
stud@DESKTOP-7DQM460:~/ppt$ find ~ -type l -print
```

/home/stud/snap/tree/current
/home/stud/ppt/test2.txt

valid_lft forever preferred_lft forever

valid_lft forever preferred_lft forever

```
stud@DESKTOP-7DQM460:~/ppt$ grep -v "Python" test4.txt
Bob is a fan of JavaScript.
Java and C++ are also widely used.
stud@DESKTOP-7DQM460:~/ppt$ grep "Python" test4.txt
Alice loves programming in Python.
Charlie prefers Python over Java.
Python is popular among developers.
stud@DESKTOP-7DQM460:~/ppt$ grep -n "Python" test4.txt
L:Alice loves programming in Python.
3:Charlie prefers Python over Java.
Python is popular among developers.
stud@DESKTOP-7DQM460:~/ppt$ grep "[A-Z][a-z]*" test4.txt
Alice loves programming in Python.
Bob is a fan of JavaScript.
Charlie prefers Python over Java.
Python is popular among developers.
Java and C++ are also widely used.
stud@DESKTOP-7DQM460:~/ppt$ sort names.txt
Alice
```

Bob Charlie David Eve

```
stud@DESKTOP-7DQM460:~/ppt$ sort -r names.txt
Eve
David
Charlie
Bob
Alice
stud@DESKTOP-7DQM460:~/ppt$ sort -n numbers.txt
5
7
13
42
99
stud@DESKTOP-7DQM460:~/ppt$ sort -nr numbers.txt
99
42
13
7
stud@DESKTOP-7DQM460:~/ppt$ cmp file1.txt file2.txt
stud@DESKTOP-7DQM460:~/ppt$ cmp file1.txt file3.txt
file1.txt file3.txt differ: byte 28, line 2
stud@DESKTOP-7DQM460:~/ppt$ cmp -l file1.txt file3.txt
28 157 164
29 156 150
30 145 162
31 56 145
32 12 145
cmp: EOF on file1.txt after byte 32
```

```
stud@DESKTOP-7DQM460:~/ppt$ diff -q old.txt new.txt
Files old.txt and new.txt differ

stud@DESKTOP-7DQM460:~/ppt$ diff old.txt new.txt
2c2
< This is the first file.
---</pre>
```

> This is the second file.

> And one more line.

3a4

```
stud@DESKTOP-7DQM460:~/ppt$ split -l 3 sample.txt part_
stud@DESKTOP-7DQM460:~/ppt$ ls -l
total 20
-rw-r--r- 1 stud stud 0 Jun 12 09:36 1.c
-rw-r--r- 1 stud stud 21 Jun 12 14:48 part_aa
-rw-r--r- 1 stud stud 21 Jun 12 14:48 part_ab
-rw-r--r- 1 stud stud 21 Jun 12 14:48 part_ac
-rw-r--r- 1 stud stud 8 Jun 12 14:48 part_ad
-rw-r--r- 1 stud stud 71 Jun 12 14:46 sample.txt
```

```
stud@DESKTOP-7DQM460:~/ppt$ cat part_aa part_ab > part_aab
stud@DESKTOP-7DQM460:~/ppt$ ls -l
total 24
-rw-r--r-- 1 stud stud 0 Jun 12 09:36 1.c
-rw-r--r-- 1 stud stud 21 Jun 12 14:48 part_aa
-rw-r--r-- 1 stud stud 42 Jun 12 14:50 part_aab
-rw-r--r-- 1 stud stud 21 Jun 12 14:48 part_ab
-rw-r--r-- 1 stud stud 21 Jun 12 14:48 part_ac
-rw-r--r-- 1 stud stud 8 Jun 12 14:48 part_ad
-rw-r--r-- 1 stud stud 71 Jun 12 14:46 sample.txt
```

```
stud@DESKTOP-7DQM460:~/ppt$ paste -s part_aa part_ab > part_aaab
stud@DESKTOP-7DQM460:~/ppt$ ls -l
total 28
-rw-r--r-- 1 stud stud 0 Jun 12 09:36 1.c
-rw-r--r-- 1 stud stud 21 Jun 12 14:48 part_aa
-rw-r--r-- 1 stud stud 42 Jun 12 14:51 part_aaab
-rw-r--r-- 1 stud stud 42 Jun 12 14:50 part_aab
-rw-r--r-- 1 stud stud 21 Jun 12 14:48 part_ab
-rw-r--r-- 1 stud stud 21 Jun 12 14:48 part_ac
-rw-r--r-- 1 stud stud 8 Jun 12 14:48 part_ad
-rw-r--r-- 1 stud stud 71 Jun 12 14:46 sample.txt
```

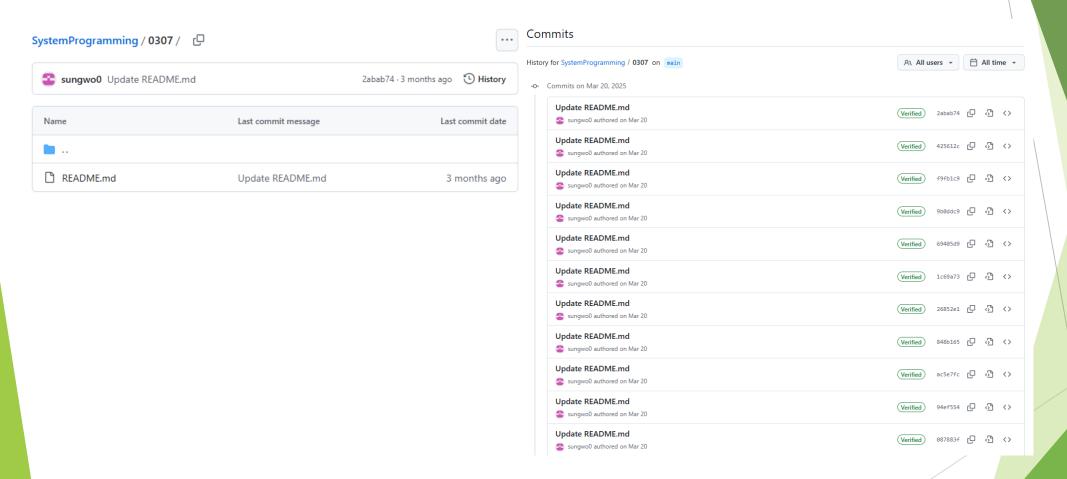
		+ 16			
stud@DESKTOP-7DQM460:~/ppt\$ df					
Filesystem	1K-blocks				Mounted on
none	4048472	Θ	4048472	0%	/usr/lib/modules/5.15.167.4-micros
oft-standard-WSL2					
none	4048472	4	4048468	1%	/mnt/wsl
drivers	487573700	446856096	40717604	92%	/usr/lib/wsl/drivers
/dev/sdc	1055762868	2126052	999933344	1%	/
none	4048472	108	4048364	1%	/mnt/wslg
none	4048472	9	4048472	0%	/usr/lib/wsl/lib
rootfs	4044980	2372	4042608	1%	/init
none	4048472	792	4047680	1%	/run
none	4048472	9	4048472	0%	/run/lock
none	4048472	9	4048472	0%	/run/shm
tmpfs	4096	9	4096	0%	/sys/fs/cgroup
none	4048472	76	4048396	1%	/mnt/wslg/versions.txt
none	4048472	76	4048396	1%	/mnt/wslg/doc
C:\	487573700	446856096	40717604	92%	/mnt/c
D:\	1953497084	1681557632	271939452	87%	/mnt/d
snapfuse	75776	75776	9	100%	/snap/core22/1963
snapfuse	4608	4608	0	100%	/snap/tree/54
snapfuse	45568	45568	9	100%	/snap/snapd/23771
snapfuse	52224	52224	0	100%	/snap/snapd/24505
tmpfs	809692	16	809676	1%	/run/user/1000
snapfuse	75776	75776	9	100%	/snap/core22/1981

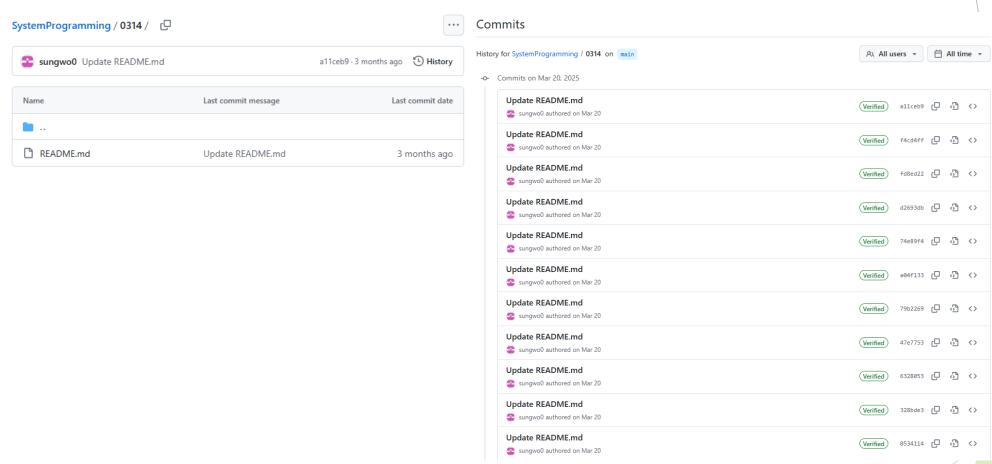
```
stud@DESKTOP-7DQM460:~/ppt$ ps
PID TTY TIME CMD
388 pts/0 00:00:00 bash
915 pts/0 00:00:00 man
923 pts/0 00:00:00 pager
1680 pts/0 00:00:00 ps
```

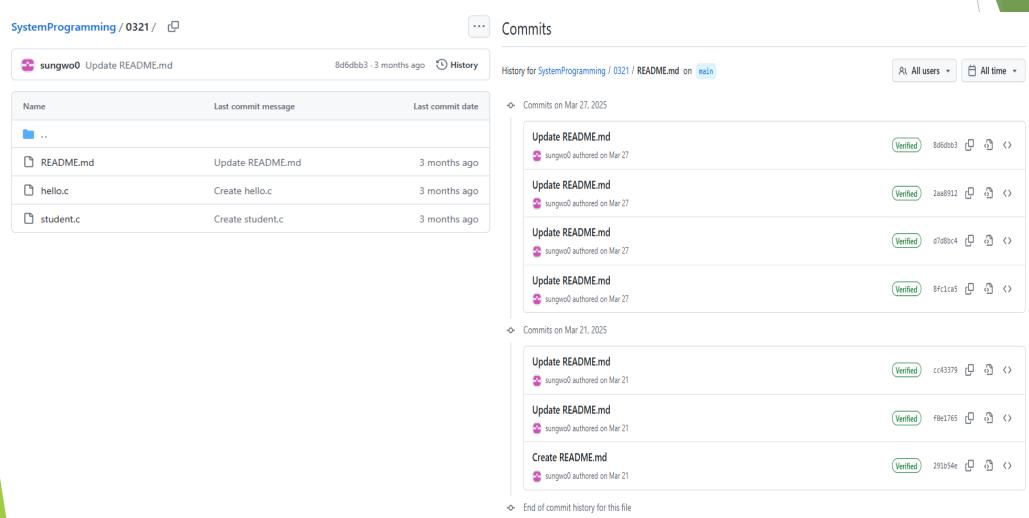
stud@DESKTOP-7DQM460:~/ppt\$ du
12

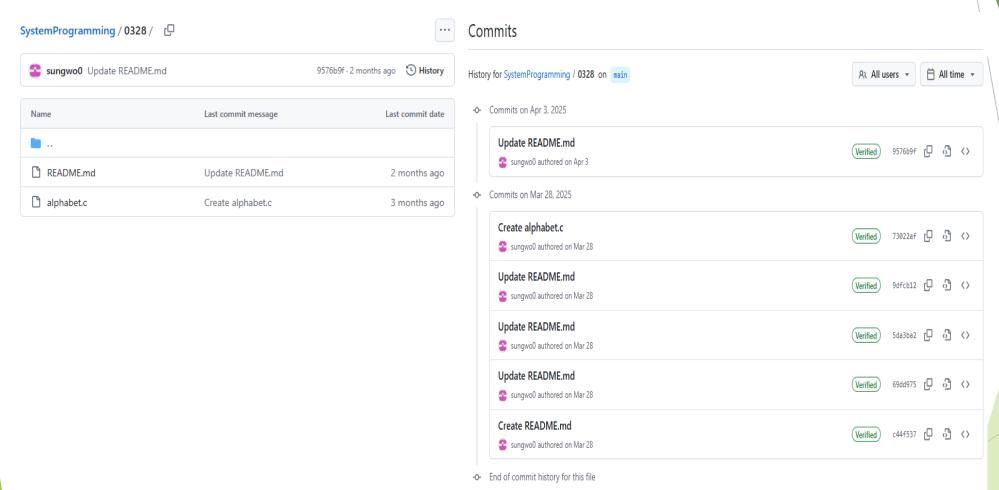
점수: 15

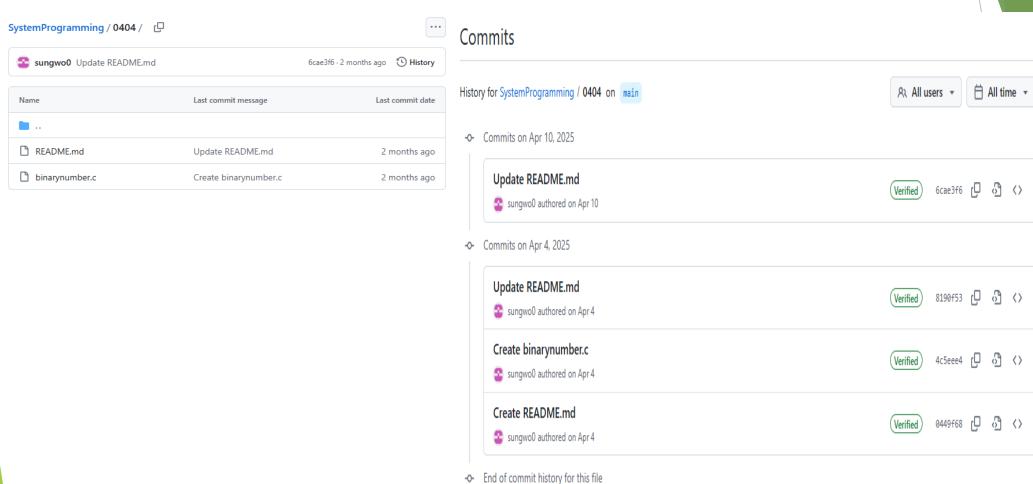
▶ 우분트 내에서 다양한 코드들을 활용해서 정리를 하였기때문에 이 점수를 생각 하였습니다.

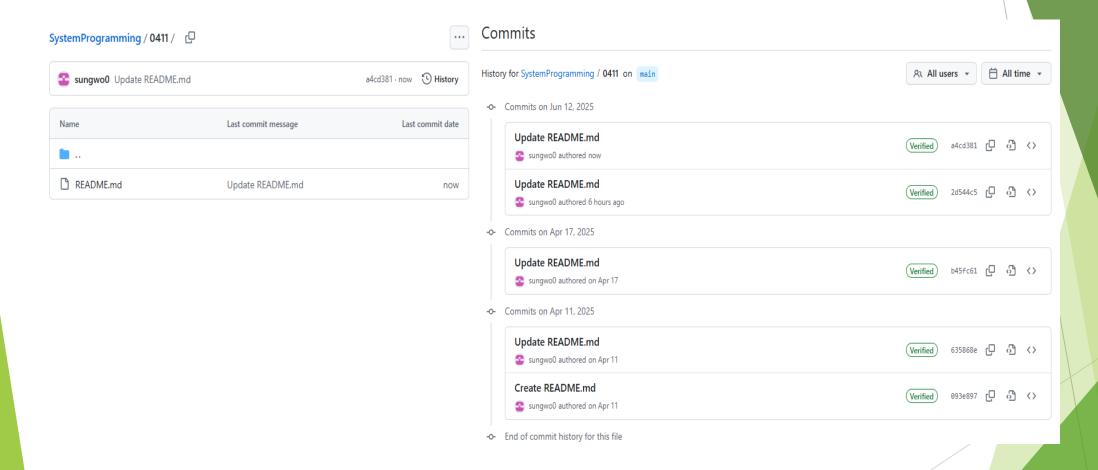


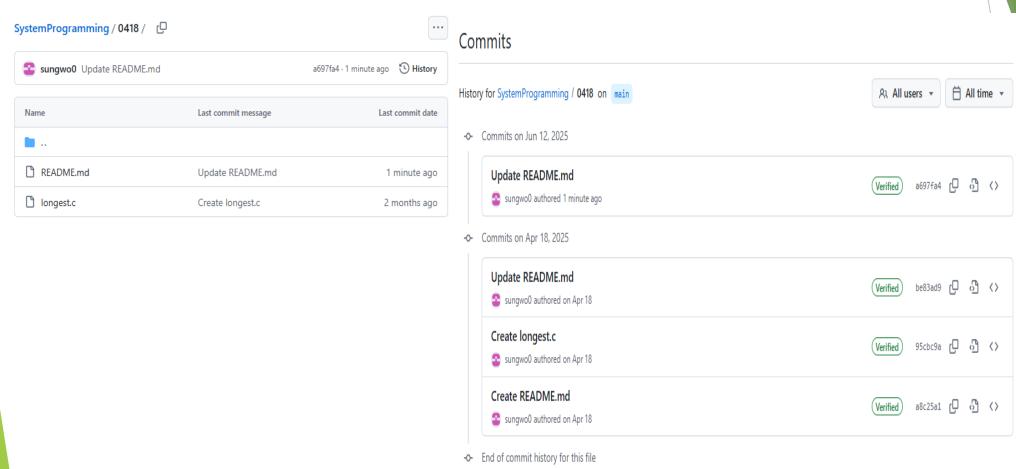


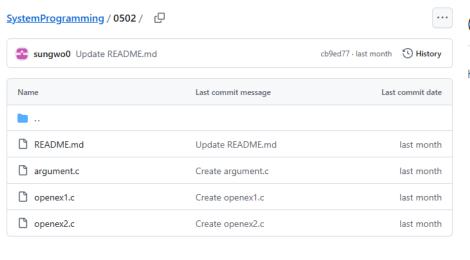


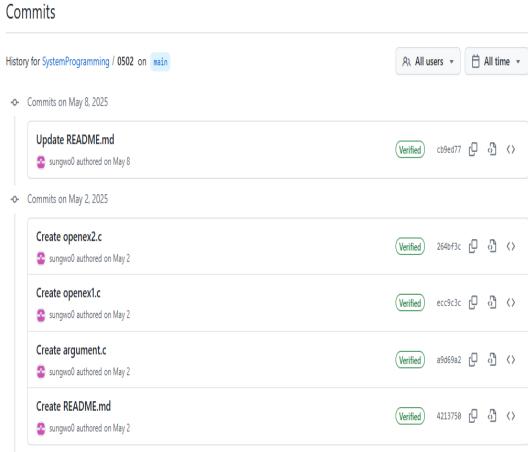




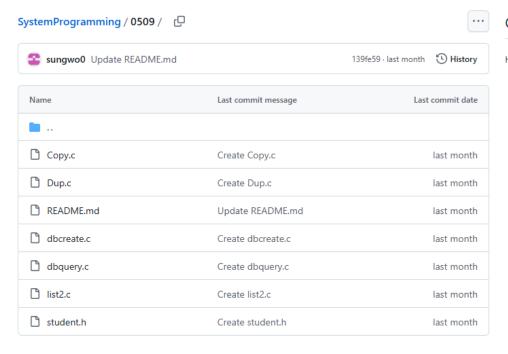


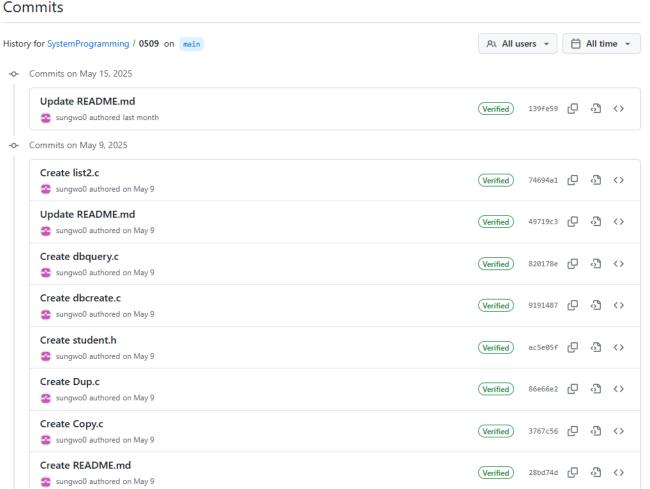


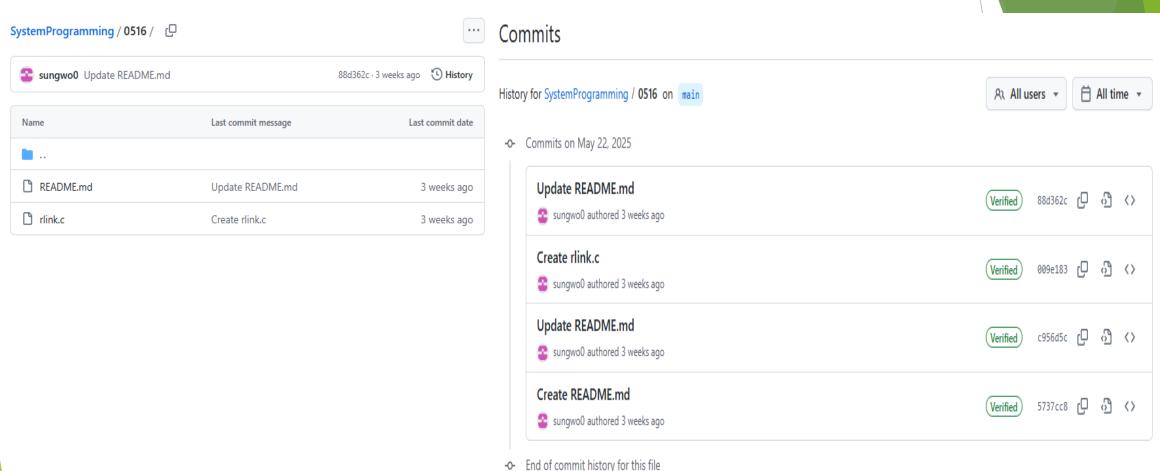


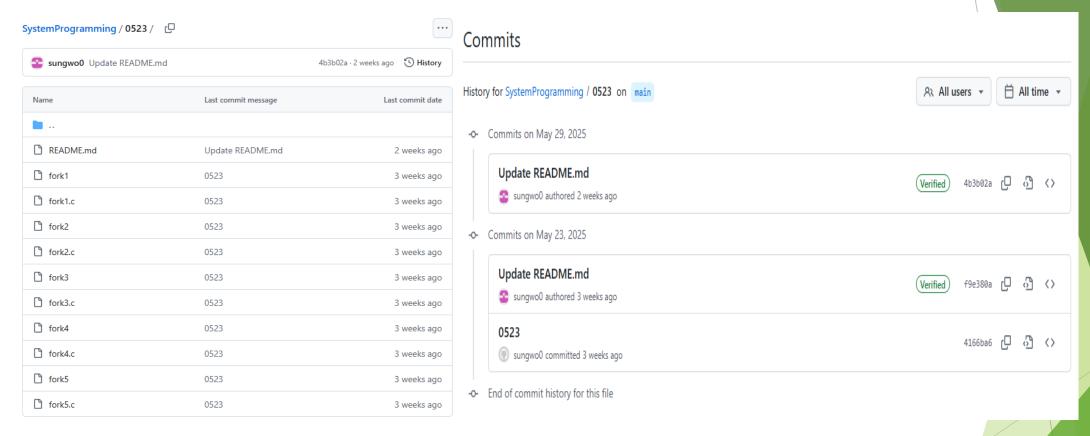


-O- End of commit history for this file









점수: 12

▶ 6주차 및 7주차를 늦게 제출 하였기 때문에 3점을 깐 12점을 생각하였습니다.