

시스템 S/W 실습10

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- 1. 다음에 주어진 리눅스 명령을 입력하고, 실습하시오.
 - (a) 별명 (Aliases) \$alias ls='ls -aF'

\$ls *.*

```
zezeon@ubuntuz:~/Programming/Sic$
1.0
            20.s?o
                           ee.s
                                             0.S
                                                          sic.h
            3.o
                           ee2.s
                                                          sic.o
1 spng
                                             open. c
            3.png
                           ex2.s
                                             open. x*
                                                          sic.x*
l.sy
1.txt
            3.s
                           example.s
                                             pass2.cpp
                                                          SS.S
            3.x
                           fi.sh*
1.X
                                             pre.cc
                                                          sum.c
11-16.pdf
            4.s
                           interpreter.cc
                                             pre.cpp
                                                          sum. dump
11-2.pdf
            5.s
                           interpreter.h
                                             pre.h
                                                          sum. o
11-23.pdf
            Session.vim
                           interpreter.o
                                             pre.o
                                                          sum.s
11-9.pdf
            [ . aux
                           link.cc
                                             pre. x*
                                                          test4.c
16astion={\$c.code.c
                           link.h
                                             report.aux
                                                          test4old.c
16.s?o
            code.s
                           link.o
                                             report.log
                                                          test5.c
17.s
            compile.cpp
                           linker.cpp
                                             report.tex
                                                          test5.png
                                                          test6.c
            compile.x
                           linker.x
                                             run.cpp
            compiler.cc
                           logo.jpg
                                             run.x'
                                                          test6.png
                          main.c
                                                          tt.png
            compiler.h
                                             sample.sh*
 . png
2.s
                                                          실 습 5 . pdf
            compiler.o
                           main.o
                                             script.sh*
                           menu.sh*
                                             sic.cc
                                                          실 습 6선 택 과 제 . pd1
2.txt
            e.s
20.s
            e2.s
                          nonexist.txt
                                            sic.cpp
```

- (b) 산술계산 : expr \$x = 1 \$ x='expr \$x + 1' 2
- (c) 제어구조
 - i. case .. in .. esac

Listing 1: menu.sh

```
#!/bin/sh
echo menu test program
stop=0
while test $stop -eq 0
do
    echo -n 'your choice?'
    read reply
    echo
    case $reply in
        "1")
        date
        ;;
        "2")
        stop=1
```

```
;;
*0)
echo illegal choice
;;
esac
done
```

```
zezeon@ubuntuZ:~/Programming/SIC$ ./menu.sh
menu test program
your choice?1
2016. 11. 30. (今) 13:34:54 KST
your choice?2
```

ii. for .. do .. done

Listing 2: for.sh

```
#!/bin/sh

for color in red yellow green blue

do

echo one color is $color

done
```

```
zezeon@ubuntuZ:~/Programming/SIC$ ./for.sh
one color is red
one color is yellow
one color is green
one color is blue
```

iii. if .. then .. fi

Listing 3: fi.sh

```
#!/bin/sh
echo -n 'enter a number:'
read number
if [ $number -lt 0 ]
then
    echo negative
elif [ $number -eq 0 ]
then
    echo zero
else
    echo positive
fi
```

```
zezeon@ubuntuZ:~/Programming/SIC$ ./fi.sh
enter a number:34
positive
zezeon@ubuntuZ:~/Programming/SIC$ ./fi.sh
enter a number:-21
negative
```

2. 다음에 주어진 Linux 시스템 호출(error 처리)과 관련된 프로그램을 입력하고, 실습하시오.

Listing 4: open.c

```
#include <stdio.h>
#include <sys/ file .h>
#include <errno.h>
int main()
{
   int fd;
   fd = open("nonexist.txt", O_RDONLY);
    if (fd == -1) {
        printf ("errno = %d n", errno);
        perror("main");
   }
    fd = open("/", O_WRONLY);
    if (fd == -1) {
        printf ("errno = %d n", errno);
        perror("main");
   fd = open("nonexist.txt", O_RDONLY | O_CREAT, 0644);
    printf ("errno = %d n", errno);
   perror("main");
   errno = 0;
   perror("main");
```

```
zezeon@ubuntuZ:~/Programming/SIC$ ./open.x
errno = 21
main: Is a directory
errno = 21
main: Is a directory
main: Success A A
```

소감 스크립트가 매우 유용하다는 것을 느꼈다.