

시스템 S/W 실습9

학번: 2016110056

학과: 불교학부

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날짜: 2016년 11월 23일



- 1. 다음에 주어진 리눅스 명령을 입력하고, 실습하시오.
 - (a) 환경변수: 문자열변수: \$HOME, \$PATH, \$MAIL, \$USER, \$TERM, \$SHELL

\$echo HOME=\$HOME, PATH=\$PATH

```
zezeon@ubuntuZ:~/Programming/SIC
zezeon@ubuntuZ:~/Programming/SIC$ echo HOME = $HOME, PATH = $PATH
HOME = /home/zezeon, PATH = /home/zezeon/bin:/usr/local/sbin:/usr/local/bin:/usr
in:/usr/bin:/sbin:/bin:/usr/games:/usr/local/games:/snap/bin
zezeon@ubuntuZ:~/Programming/SIC$
```

- (b) 내장변수: \$\$(셸의 프로세스 id), \$0(셸 스크립트 이름), \$1...\$9(명령어 줄 인수 참조), \$*(모든 명령어 줄 인수의 목록), \$@(\$*의 변형)
- (c) 셀 스크립트 파일 작성

Listing 1: cat - >script.sh

```
#!/bin/sh
#This is a sample Born shell script .
echo "the name of the script is $0"
echo "the first argument is $1"
echo "a list of all the argument is $*"
echo "the script places the date into a temporary file called $1.$$"
date > $1.$$ # redirect the output of date
```

\$chmod +x script.sh

```
zezeon@ubuntuZ:~/Programming/SIC$ ./script.sh paul ringo george john the name of the script is ./script.sh the first argument is paul a list of all the argument is paul ringo george john the script places the date into a temporary file called paul.5923 zezeon@ubuntuZ:~/Programming/SIC$
```

(d) .login file 보기

Listing 2: \$cat /.bashrc − more

```
# ~/. bashrc: executed by bash(1) for non-login shells.
# see /usr/share/doc/bash/examples/startup-files (in the package bash-doc)
# for examples

# If not running interactively, don't do anything
case $- in
    *i*) ;;
    *) return;;
```

```
esac
# don't put duplicate lines or lines starting with space in the history.
# See bash(1) for more options
HISTCONTROL=ignoreboth
# append to the history file, don't overwrite it
shopt -s histappend
# for setting history length see HISTSIZE and HISTFILESIZE in bash(1)
HISTSIZE=1000
HISTFILESIZE=2000
# check the window size after each command and, if necessary,
# update the values of LINES and COLUMNS.
shopt —s checkwinsize
# If set, the pattern "**" used in a pathname expansion context will
# match all files and zero or more directories and subdirectories.
#shopt -s globstar
# make less more friendly for non-text input files, see lesspipe (1)
[-x/usr/bin/lesspipe] && eval "$(SHELL=/bin/sh lesspipe)"
# set variable identifying the chroot you work in (used in the prompt below)
if [-z *{debian\_chroot:-}] && [-r/etc/debian\_chroot]; then
    debian_chroot=$(cat /etc/debian_chroot)
fi
# set a fancy prompt (non-color, unless we know we "want" color)
case "$TERM" in
   xterm-color|*-256color) color_prompt=yes;;
esac
# uncomment for a colored prompt, if the terminal has the capability; turned
# off by default to not distract the user: the focus in a terminal window
# should be on the output of commands, not on the prompt
#force_color_prompt=yes
if [ -n "$force_color_prompt" ]; then
```

```
if [-x/usr/bin/tput] && tput setaf 1 > \&/dev/null; then
                          # We have color support; assume it's compliant with Ecma-48
                          # (ISO/IEC-6429). (Lack of such support is extremely rare, and such
                          # a case would tend to support setf rather than setaf.)
                         color_prompt=yes
                           else
                          color_prompt=
                           \mathbf{fi}
 fi
 if [ "$color_prompt" = yes ]; then
                        PS1='\{debian\_chroot:+(\$debian\_chroot)\} \setminus [\ 033[01;32m \ ] \setminus u@ \setminus h \setminus [\ 033[00m]] \setminus u@ \setminus [\ 033[00m]] \setminus u@ \setminus h \setminus [\ 033[00m
                                                  \[ \] \[ \] \] \[ \] \] \] \[ \] \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[ \] \[\] \[\] \[\] \[\] \[ \] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\]
 else
                         PS1='\{debian\_chroot:+(\$debian\_chroot)\}\setminus u@\h:\w\'
 fi
unset color_prompt force_color_prompt
# If this is an xterm set the title to user@host:dir
case "$TERM" in
xterm* | rxvt *)
                        ;;
*)
                             ;;
esac
# enable color support of ls and also add handy aliases
if \left[-\frac{x}{usr}\right] if \left[-\frac{x}{usr}\right]; then
                            test -r ^{\sim}/. dircolors && eval "$( dircolors -b ^{\sim}/. dircolors )" || eval "$( dircolors -b)"
                            alias ls='ls --color=auto'
                         # alias dir='dir --color=auto'
                          # alias vdir='vdir --color=auto'
                             alias grep='grep --color=auto'
                              alias fgrep='fgrep --color=auto'
                              alias egrep='egrep --color=auto'
 fi
# colored GCC warnings and errors
```

```
#export GCC_COLORS='error=01;31:warning=01;35:note=01;36:caret=01;32:locus=01:quote=01'
# some more ls aliases
alias ll = 'ls -alF'
alias la='ls -A'
alias l='ls -CF'
# Add an "alert " alias for long running commands. Use like so:
    sleep 10; alert
alias alert = 'notify - send - urgency = low - i "([\$? = 0] \&\& echo terminal || echo error)"
   "$(history | tail -n1|sed -e '\" s/\ s*[0-9]\+\s*//; s/[;&|]\ s* alert$ //'\") "'
# Alias definitions .
# You may want to put all your additions into a separate file like
# ~/. bash_aliases , instead of adding them here directly .
# See /usr/share/doc/bash-doc/examples in the bash-doc package.
if [-f^{\sim}]. bash_aliases ]; then
    . ~/. bash_aliases
fi
# enable programmable completion features (you don't need to enable
# this, if it's already enabled in /etc/bash.bashrc and /etc/profile
# sources / etc/bash.bashrc).
if ! shopt -oq posix; then
 if [ -f/usr/share/bash-completion/bash_completion]; then
    . /usr/share/bash-completion/bash_completion
  elif [-f/etc/bash\_completion]; then
    . /etc/bash_completion
  fi
fi
CDPATH=:/home/zezeon/Programming:/media/zezeon/ESD-ISO/dongguk
/usr/local/bin/asciiart.x
dhamma
```

- (e) 터미널 특성 변경 : stty \$stty erase 'Ĥ' 이미 터미널에 Ctrl-H가 셋팅되어 있었다.
- (f) 수행중인 프로세스 보기: ps

Listing 3: 출력결과

```
PID TTY TIME CMD

2203 pts/18 00:00:00 bash

7025 pts/18 00:00:00 ps
```

- (g) 지역변수 보기 : set env로 실행시 환경변수를 볼 수 있었다.
- (h) 지역변수 설정 : set 변수명 = 변수값

```
zezeon@ubuntuZ:~/비디오$ echo $name

zezeon@ubuntuZ:~/비디오$ name=kim
zezeon@ubuntuZ:~/비디오$ echo $name
kim =
zezeon@ubuntuZ:~/비디오$
```

- 2. 다음과 같은 기능을 수행하는 script 파일 sample.sh을 생성하고 실행하시오.
 - (a) date 명령을 사용해서 현재 시간을 display 한다.
 - (b) who 명령을 사용해서 login 되어 있는 사용자 수를 display 한다.
 - (c) du -a 명령을 사용해서 disk file 크기를 display한다.

Listing 4: sample.sh

```
date
who
du -a
```

Listing 5: 출력결과

```
2016. 11. 23. ( 个 ) 13:48:44 KST
         tty7
                      2016-11-23 12:49 (:0)
zezeon
        pts/18
                      2016-11-23 12:49 (ubuntuZ)
zezeon
3828
        ./ sic .mkv
24448
        ./ IMG_0113.MOV
14652
       ./1. mkv
        ./ iceland .mkv
15532
        ./ IMG_0530.MOV
41344
    ./ Webcam
29932
        ./ IMG_0663.MOV
        ./ IMG_0541.MOV
62144
50400
        ./ IMG_0421.MOV
85872
        ./ IMG_0803.MOV
170396
       ./ IMG_0389.MOV
```

```
5136
        ./IMG_{-}0110.MOV
8
    ./ sci .xges
       ./ IMG_0489.MOV
29236
69388
       ./ IMG_0094.MOV
        ./ AirBaloon.mkv
16620
       ./ IMG_0804.MOV
4652
8 ./ spider .xges
       ./Top 5 Things to Do After Installing Ubuntu—E8eSog_bhsk.mkv
28532
       ./ IMG_0539.MOV
98996
       ./ IMG_0802.MOV
50360
       ./ space.mkv
53576
855076 .
```

소감

스크립트가 매우 유용하다는 것을 느꼈다.