CSCD 240
Lab 2

NOTE: Capture means copy and paste from a command line into a text editor. "Capture command xyz" means to capture the xyz command AND its resulting output. If the question does not say capture still capture all the commands.
NOTE: You must do it on the cslinux machine by using remote login.

1. Clearly explain why programs should be placed in /bin or /usr/bin.

   /bin and /usr/bin/ by default is added in PATH, which is a environment variable specifies a list of directories the shell searches for the commands.

2. You are asked to use a program named mystery which you have never used before. Explain how you would find information on the program and what it does. List all the ways you know.

   Way 1: Using ls -al command
   Command: ls -al
   Way 2: Using the nano command
   Command: nano mystery
   Way 3: Using the cat command
   Command: cat mystery

   There are three ways to figure out information on the file the first way is by using the command ls -al. The second way to figure it out information on the file is the nano command to manipulate the content of the mystery file as well as find out what is contained in it. The third way to figure out three ways to figure out information on the file is the cat command.

3. There are many other environment variables available to the user. Capture the printenv command. Describe of the environment variables.

   XDG_VTNR=7
SSH_AGENT_PID=1820
XDG_SESSION_ID=c2
CLUTTER_IM_MODULE=xim
XDG_GREETER_DATA_DIR=/var/lib/lightdm-data/bigboss424
GPG_AGENT_INFO=/run/user/1000/keyring-UBUh72/gpg:0:1
TERM=xterm
SHELL=/bin/bash
VTE_VERSION=3409
GJS_DEBUG_OUTPUT=stderr
WINDOWID=39851506
GNOME_KEYRING_CONTROL=/run/user/1000/keyring-UBUh72
GJS_DEBUG_TOPICS=JS ERROR;JS LOG
GTK_MODULES=overlay-scrollbar
USER=bigboss424

LS_COLORS=rs=0:di=01;34:ln=01;36:mh=00:pi=40;33:so=01;35:do=01;35:bd=40;33;01:cd=40;33;01:
or=40;31;01:su=37;41:sg=30;43:ca=30;41:tw=30;42:ow=34;42:st=37;44:ex=01;32:*.tar=01;31:*.tgz=0
1;31:*.arj=01;31:*.taz=01;31:*.lzh=01;31:*.lzma=01;31:*.tlz=01;31:*.txz=01;31:*.zip=01;31:*.z=01;3
1:*.Z=01;31:*.dz=01;31:*.gz=01;31:*.lz=01;31:*.xz=01;31:*.bz2=01;31:*.bz=01;31:*.tbz=01;31:*.tbz2
=01;31:*.tz=01;31:*.deb=01XDG_VTNR=7
SSH_AGENT_PID=1820
XDG_SESSION_ID=c2
CLUTTER_IM_MODULE=xim
XDG_GREETER_DATA_DIR=/var/lib/lightdm-data/bigboss424
GPG_AGENT_INFO=/run/user/1000/keyring-UBUh72/gpg:0:1
TERM=xterm
SHELL=/bin/bash
VTE_VERSION=3409
GJS_DEBUG_OUTPUT=stderr
WINDOWID=39851506
GNOME_KEYRING_CONTROL=/run/user/1000/keyring-UBUh72
GJS_DEBUG_TOPICS=JS ERROR;JS LOG
GTK_MODULES=overlay-scrollbar
USER=bigboss424
LS_COLORS=rs=0:di=01;34:ln=01;36:mh=00:pi=40;33:so=01;35:do=01;35:bd=40;33;01:cd=40;33;01:
or=40;31;01:su=37;41:sg=30;43:ca=30;41:tw=30;42:ow=34;42:st=37;44:ex=01;32:*.tar=01;31:*.tgz=0
1;31:*.arj=01;31:*.taz=01;31:*.lzh=01;31:*.lzma=01;31:*.tlz=01;31:*.txz=01;31:*.zip=01;31:*.z=01;3
1:*.Z=01;31:*.dz=01;31:*.gz=01;31:*.lz=01;31:*.xz=01;31:*.bz2=01;31:*.bz=01;31:*.tbz=01;31:*.tbz2
=01;31:*.tz=01;31:*.deb=01;31:*.rpm=01;31:*.jar=01;31:*.war=01;31:*.ear=01;31:*.sar=01;31:*.rar=0
1;31:*.ace=01;31:*.zoo=01;31:*.cpio=01;31:*.7z=01;31:*.rz=01;31:*.jpg=01;35:*.jpeg=01;35:*.gif=01
;35:*.bmp=01;35:*.pbm=01;35:*.pgm=01;35:*.ppm=01;35:*.tga=01;35:*.xbm=01;35:*.xpm=01;35:*.ti
f=01;35:*.tiff=01;35:*.png=01;35:*.svg=01;35:*.svgz=01;35:*.mng=01;35:*.pcx=01;35:*.mov=01;35:*
.mpg=01;35:*.mpeg=01;35:*.m2v=01;35:*.mkv=01;35:*.webm=01;35:*.ogm=01;35:*.mp4=01;35:*.m
4v=01;35:*.mp4v=01;35:*.vob=01;35:*.qt=01;35:*.nuv=01;35:*.wmv=01;35:*.asf=01;35:*.rm=01;35:
.rmvb=01;35:.flc=01;35:*.avi=01;35:*.fli=01;35:*.flv=01;35:*.gl=01;35:*.dl=01;35:*.xcf=01;35:*.x
wd=01;35:*.yuv=01;35:*.cgm=01;35:*.emf=01;35:*.axv=01;35:*.anx=01;35:*.ogv=01;35:*.ogx=01;35
:*.aac=00;36:*.au=00;36:*.flac=00;36:*.mid=00;36:*.midi=00;36:*.mka=00;36:*.mp3=00;36:*.mpc=0
0;36:*.ogg=00;36:*.ra=00;36:*.wav=00;36:*.axa=00;36:*.oga=00;36:*.spx=00;36:*.xspf=00;36:
XDG_SESSION_PATH=/org/freedesktop/DisplayManager/Session0
XDG_SEAT_PATH=/org/freedesktop/DisplayManager/Seat0
SSH_AUTH_SOCK=/run/user/1000/keyring-UBUh72/ssh
DEFAULTS_PATH=/usr/share/gconf/cinnamon.default.path
SESSION_MANAGER=local/bigboss424-Aspire-V3-731:@/tmp/.ICE-unix/1760,unix/bigboss424-
Aspire-V3-731:/tmp/.ICE-unix/1760
XDG_CONFIG_DIRS=/etc/xdg/xdg-cinnamon:/etc/xdg
PATH=/usr/local/sbin:/usr/local/bin:/usr/sbin:/usr/bin:/sbin:/bin:/usr/games:/usr/local/games:/home/bigb
oss424/.rvm/bin:/home/bigboss424/.rvm/bin
DESKTOP_SESSION=cinnamon
QT_IM_MODULE=ibus
QT_QPA_PLATFORMTHEME=appmenu-qt5
PWD=/home/bigboss424/Documents/CandUnix/Labs/Lab_2

XMODIFIERS=@im=ibus
GNOME_KEYRING_PID=1758
LANG=en_US.UTF-8
GDM_LANG=en_US
MANDATORY_PATH=/usr/share/gconf/cinnamon.mandatory.path
GDMSESSION=cinnamon
CINNAMON_VERSION=2.4.5
SHLVL=1
XDG_SEAT=seat0
HOME=/home/bigboss424
LANGUAGE=en_US
GNOME_DESKTOP_SESSION_ID=this-is-deprecated
LOGNAME=bigboss424
QT4_IM_MODULE=xim
XDG_DATA_DIRS=/usr/share/cinnamon:/usr/share/gnome:/usr/local/share/:/usr/share/
DBUS_SESSION_BUS_ADDRESS=unix:abstract=/tmp/dbus-Hlu6ktNfBl,guid=03832f3e7e1ae5d6caae222c54b80df6
LESSOPEN=| /usr/bin/lesspipe %s
TEXTDOMAIN=im-config
XDG_RUNTIME_DIR=/run/user/1000
DISPLAY=:0
XDG_CURRENT_DESKTOP=X-Cinnamon
GTK_IM_MODULE=ibus
LESSCLOSE=/usr/bin/lesspipe %s %s
TEXTDOMAINDIR=/usr/share/locale/
COLORTERM=gnome-terminal
XAUTHORITY=/home/bigboss424/.Xauthority
_=/usr/bin/printenv;31:*.rpm=01;31:*.jar=01;31:*.war=01;31:*.ear=01;31:*.sar=01;31:*.rar=01;31:*.ace=01;31:*.zoo=01;31:*.cpio=01;31:*.7z=01;31:*.rz=01;31:*.jpg=01;35:*.jpeg=01;35:*.gif=01;35:*.bmp=01;35:*.pbm=01;35:*.pgm=01;35:*.ppm=01;35:*.tga=01;35:*.xbm=01;35:*.xpm=01;35:*.tif=01;35:*.tiff=01;35:*.png=01;35:*.svg=01;35:*.svgz=01;35:*.mng=01;35:*.pcx=01;35:*.mov=01;35:*.mpg=01;35:*.mpeg=01;35:*.m2v=01;35:*.mkv=01;35:*.webm=01;35:*.ogm=01;35:*.mp4=01;35:*.m4v=01;35:*.mp4v=01;35:*.vob=01;35:*.qt=01;35:*.nuv=01;35:*.wmv=01;35:*.asf=01;35:*.rm=01;35:*.rmvb=01;35:*.flc=01;35:*.avi=01;35:*.fli=01;35:*.flv=01;35:*.gl=01;35:*.dl=01;35:*.xcf=01;35:*.xwd=01;35:*.yuv=01;35:*.cgm=01;35:*.emf=01;35:*.axv=01;35:*.anx=01;35:*.ogv=01;35:*.ogx=01;35:*.aac=00;36:*.au=00;36:*.flac=00;36:*.mid=00;36:*.midi=00;36:*.mka=00;36:*.mp3=00;36:*.mpc=00;36:*.ogg=00;36:*.ra=00;36:*.wav=00;36:*.axa=00;36:*.oga=00;36:*.spx=00;36:*.xspf=00;36:
XDG_SESSION_PATH=/org/freedesktop/DisplayManager/Session0
XDG_SEAT_PATH=/org/freedesktop/DisplayManager/Seat0
SSH_AUTH_SOCK=/run/user/1000/keyring-UBUh72/ssh
DEFAULTS_PATH=/usr/share/gconf/cinnamon.default.path
SESSION_MANAGER=local/bigboss424-Aspire-V3-731:@/tmp/.ICE-unix/1760,unix/bigboss424-Aspire-V3-731:/tmp/.ICE-unix/1760
XDG_CONFIG_DIRS=/etc/xdg/xdg-cinnamon:/etc/xdg
PATH=/usr/local/sbin:/usr/local/bin:/usr/sbin:/usr/bin:/sbin:/bin:/usr/games:/usr/local/games:/home/bigboss424/.rvm/bin:/home/bigboss424/.rvm/bin

DESKTOP_SESSION=cinnamon
QT_IM_MODULE=ibus
QT_QPA_PLATFORMTHEME=appmenu-qt5
PWD=/home/bigboss424/Documents/CandUnix/Labs/Lab_2
XMODIFIERS=@im=ibus
GNOME_KEYRING_PID=1758
LANG=en_US.UTF-8
GDM_LANG=en_US
MANDATORY_PATH=/usr/share/gconf/cinnamon.mandatory.path
GDMSESSION=cinnamon
CINNAMON_VERSION=2.4.5
SHLVL=1
XDG_SEAT=seat0
HOME=/home/bigboss424
LANGUAGE=en_US
GNOME_DESKTOP_SESSION_ID=this-is-deprecated
LOGNAME=bigboss424
QT4_IM_MODULE=xim
XDG_DATA_DIRS=/usr/share/cinnamon:/usr/share/gnome:/usr/local/share/:/usr/share/
DBUS_SESSION_BUS_ADDRESS=unix:abstract=/tmp/dbus-Hlu6ktNfBl,guid=03832f3e7e1ae5d6caae222c54b80df6
LESSOPEN=| /usr/bin/lesspipe %s
TEXTDOMAIN=im-config
XDG_RUNTIME_DIR=/run/user/1000
DISPLAY=:0
XDG_CURRENT_DESKTOP=X-Cinnamon
GTK_IM_MODULE=ibus
LESSCLOSE=/usr/bin/lesspipe %s %s
TEXTDOMAINDIR=/usr/share/locale/
COLORTERM=gnome-terminal
XAUTHORITY=/home/bigboss424/.Xauthority
_=/usr/bin/printenv

The three environment variables that stood out to me were the following:

1) LANG: This environment variable describes what language my kernel is in
2) HOME: This environment variable describes the path to my home directory.
3) PWD: This environment variable describes the current directory in which I'm working in.

4. Capture the output of the file command on the chmod executable. (Where does chmod live?) Explain the information being displayed.

chmod: /bin/chmod /usr/share/man/man2/chmod.2.gz /usr/share/man/man1/chmod.1.gz

This command shows the location of the chmod command and it's files.

5. Capture the output of the stat command on the chmod executable. Explain the information being displayed.

File: ‘lab2.sh’
Size: 22349 Blocks: 48 IO Block: 4096 regular file
Device: 806h/2054d Inode: 7734742 Links: 1
Access: (0775/-rwxrwxr-x) Uid: (1000/bigboss424) Gid: (1000/bigboss424)
Access: 2015-01-15 16:55:22.643487088 -0800
Modify: 2015-01-14 21:49:11.972394303 -0800
Change: 2015-01-14 21:49:11.972394303 -0800
Birth: -

6. Try and delete chmod. Did it delete why or why not?
It wouldn't delete because I didn't have root privileges.
7. Try and delete chmod and capture the output from standard error to a file named err.txt

8. Capture the command to create test1, test2, test3, test33, stu1, stu2, stu22.

```
bigboss424@bigboss424-Aspire-V3-731:~/Documents/CandUnix/Labs/Lab_2$ touch test1 test2 test3 test3
3 stu1 stu2 stu22
bigboss424@bigboss424-Aspire-V3-731:~/Documents/CandUnix/Labs/Lab_2$ ls
cscd240lab2.docx  lab2.sh       statchmod.txt  stu1  stu22  test2  test33
cscd240lab2.odt   printenv.txt  stat.txt       stu2  test1  test3  whereischmod.txt
bigboss424@bigboss424-Aspire-V3-731:~/Documents/CandUnix/Labs/Lab_2$
```

9. Using meta characters and a single ls command list all files named test.

```
bigboss424@bigboss424-Aspire-V3-731:~/Documents/CandUnix/Labs/Lab_2$ ls test*
test1  test2  test3  test33
bigboss424@bigboss424-Aspire-V3-731:~/Documents/CandUnix/Labs/Lab_2$
```

10. Using meta characters and a single ls command list only the files with the number 2 or 22 in them.

```
bigboss424@bigboss424-Aspire-V3-731:~/Documents/CandUnix/Labs/Lab_2$ ls *2 || ls *22
stu2  stu22  test2
bigboss424@bigboss424-Aspire-V3-731:~/Documents/CandUnix/Labs/Lab_2$
```

11. Using meta characters and a single ls command list only the files with a single 2 not 22 in them.

12. Issue the which command on ls. Was and where was the command found?

```
bigboss424@bigboss424-Aspire-V3-731:~/Documents/CandUnix/Labs/Lab_2$ which ls
/bin/ls
bigboss424@bigboss424-Aspire-V3-731:~/Documents/CandUnix/Labs/Lab_2$
```

13. Issue the which command on pthread.h. Was the command found? If it was not found why not? How would you modify this.

```
bigboss424@bigboss424-Aspire-V3-731:~/Documents/CandUnix/Labs/Lab_2$ which pthread.h
bigboss424@bigboss424-Aspire-V3-731:~/Documents/CandUnix/Labs/Lab_2$
```

The command wasn't found because it doesn't exist, this is a file not a command.

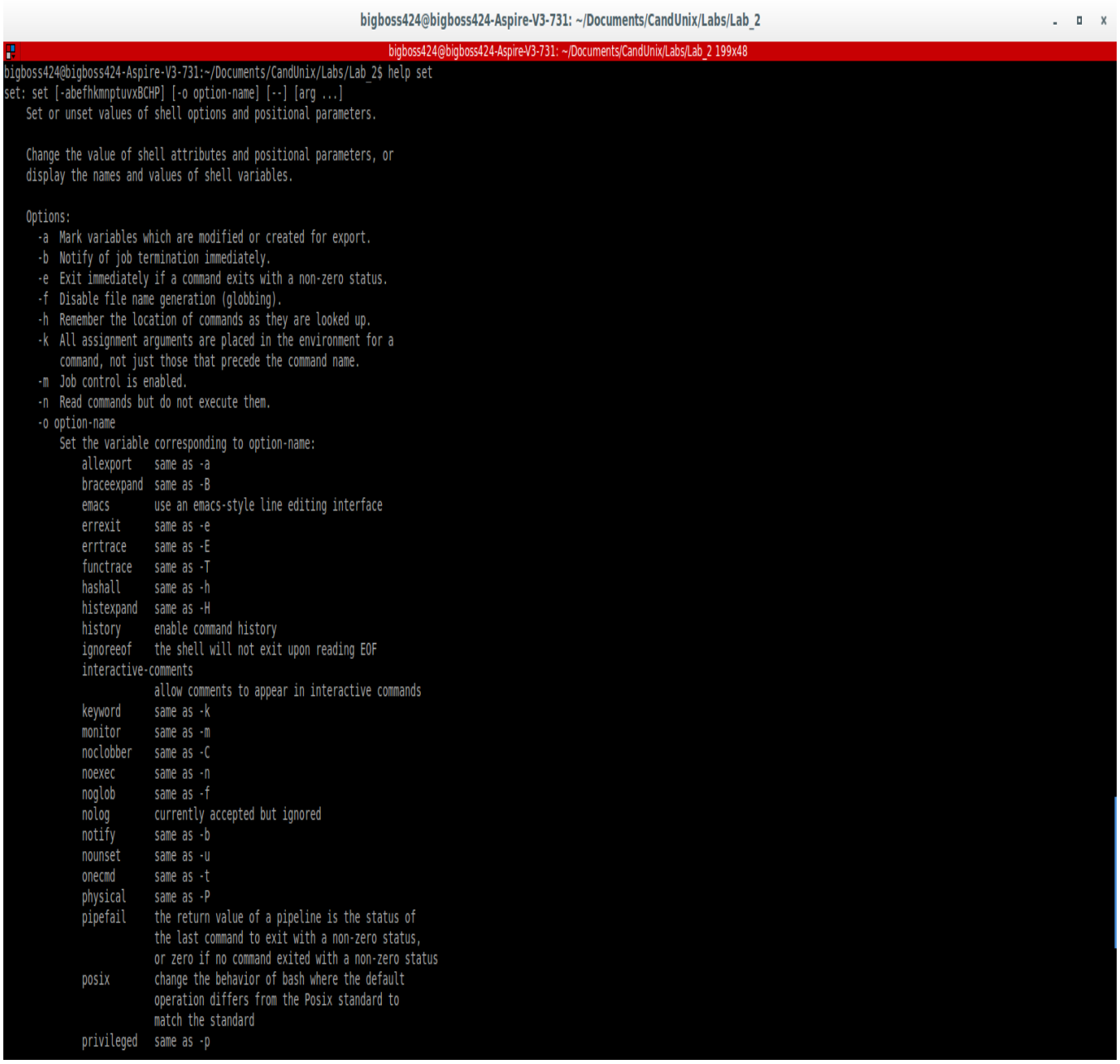
14. Using only octal values add executable access to test1, test2, test3.

```
bigboss424@bigboss424-Aspire-V3-731:~/Documents/CandUnix/Labs/Lab_2$ chmod 755 test1 test2 test3
bigboss424@bigboss424-Aspire-V3-731:~/Documents/CandUnix/Labs/Lab_2$ ls -al test1 test2 test3
-rwxr-xr-x 1 bigboss424 bigboss424 0 Jan 15 19:57 test1
-rwxr-xr-x 1 bigboss424 bigboss424 0 Jan 15 19:57 test2
-rwxr-xr-x 1 bigboss424 bigboss424 0 Jan 15 19:57 test3
bigboss424@bigboss424-Aspire-V3-731:~/Documents/CandUnix/Labs/Lab_2$
```

15. Using only alphanumeric characters remove read access from stu1 and stu2.

```
bigboss424@bigboss424-Aspire-V3-731:~/Documents/CandUnix/Labs/Lab_2$ chmod a-r stu1 stu2
bigboss424@bigboss424-Aspire-V3-731:~/Documents/CandUnix/Labs/Lab_2$ ls -al stu1 stu2
--w--w---- 1 bigboss424 bigboss424 0 Jan 15 19:57 stu1
--w--w---- 1 bigboss424 bigboss424 0 Jan 15 19:57 stu2
bigboss424@bigboss424-Aspire-V3-731:~/Documents/CandUnix/Labs/Lab_2$
```

16. Execute help set


bigboss424@bigboss424-Aspire-V3-731: ~/Documents/CandUnix/Labs/Lab_2
bigboss424@bigboss424-Aspire-V3-731: ~/Documents/CandUnix/Labs/Lab_2 199x48
bigboss424@bigboss424-Aspire-V3-731:~/Documents/CandUnix/Labs/Lab_2$ help set
set: set [-abefhkmnptuvxBCHP] [-o option-name] [--] [arg ...]
Set or unset values of shell options and positional parameters.
Change the value of shell attributes and positional parameters, or
display the names and values of shell variables.
Options:
-a Mark variables which are modified or created for export.
-b Notify of job termination immediately.
-e Exit immediately if a command exits with a non-zero status.
-f Disable file name generation (globbing).
-h Remember the location of commands as they are looked up.
-k All assignment arguments are placed in the environment for a
command, not just those that precede the command name.
-m Job control is enabled.
-n Read commands but do not execute them.
-o option-name
Set the variable corresponding to option-name:
allexport same as -a
braceexpand same as -B
emacs use an emacs-style line editing interface
errexit same as -e
errtrace same as -E
functrace same as -T
hashall same as -h
histexpand same as -H
history enable command history
ignoreeof the shell will not exit upon reading EOF
interactive-comments
allow comments to appear in interactive commands
keyword same as -k
monitor same as -m
noclobber same as -C
noexec same as -n
noglob same as -f
nolog currently accepted but ignored
notify same as -b
nounset same as -u
onecmd same as -t
physical same as -P
pipefail the return value of a pipeline is the status of
the last command to exit with a non-zero status,
or zero if no command exited with a non-zero status
posix change the behavior of bash where the default
operation differs from the Posix standard to
match the standard
privileged same as -p

```
            verbose      same as -v
            vi           use a vi-style line editing interface
            xtrace       same as -x
    -p  Turned on whenever the real and effective user ids do not match.
        Disables processing of the $ENV file and importing of shell
        functions.  Turning this option off causes the effective uid and
        gid to be set to the real uid and gid.
    -t  Exit after reading and executing one command.
    -u  Treat unset variables as an error when substituting.
    -v  Print shell input lines as they are read.
    -x  Print commands and their arguments as they are executed.
    -B  the shell will perform brace expansion
    -C  If set, disallow existing regular files to be overwritten
        by redirection of output.
    -E  If set, the ERR trap is inherited by shell functions.
    -H  Enable ! style history substitution.  This flag is on
        by default when the shell is interactive.
    -P  If set, do not resolve symbolic links when executing commands
        such as cd which change the current directory.
    -T  If set, the DEBUG trap is inherited by shell functions.
    --  Assign any remaining arguments to the positional parameters.
        If there are no remaining arguments, the positional parameters
        are unset.
    -   Assign any remaining arguments to the positional parameters.
        The -x and -v options are turned off.

   Using + rather than - causes these flags to be turned off.  The
   flags can also be used upon invocation of the shell.  The current
   set of flags may be found in $-.  The remaining n ARGs are positional
   parameters and are assigned, in order, to $1, $2, .. $n.  If no
   ARGs are given, all shell variables are printed.

   Exit Status:
   Returns success unless an invalid option is given.
bigboss424@bigboss424-Aspire-V3-731:~/Documents/CandUnix/Labs/Lab_2$
```

17. Explain the --help option for a program.

    The –help option for a program helps give the user a better explanation of what the program can do. It acts somewhat like a manual for the program.

18. Using the **man** page describe what is output by the **env** command with no arguments.

    The output by the **env** command with no arguments is that is will print out the resulting environment.

19. Show a shell command that will add the current directory to the **PATH** (without removing any existing variables from the current value of **PATH**.)

20. Describe what you would have to do to make a change to the Shell permanent.

    I must add the command in my .bashrc file, or make a alias permanent by adding it to my .bashrc file.

21. Capture the output from the **echo "Current time and date is `date`"** command.

```
bigboss424@bigboss424-Aspire-V3-731:~/Documents/CandUnix/Labs/Lab_2$ echo "Current time and date is 'date'"
Current time and date is 'date'
bigboss424@bigboss424-Aspire-V3-731:~/Documents/CandUnix/Labs/Lab_2$
```

22. Issue the **date** command and capture its output. Now, capture the output from the **echo 'Current time and date is `date`'** command. Note that the ` character is an accent NOT an apostrophe ' . Explain why the output is different in particular to the single and double quotes. Also explain what the ` character does.

23. Create a symbolic link called **almost** that links to the lab1 directory (hint **ln** command). Capture the output.o

```
bigboss424@bigboss424-Aspire-V3-731:~/Documents/CandUnix/Labs/Lab_2$ ln -s ../lab1 almost
bigboss424@bigboss424-Aspire-V3-731:~/Documents/CandUnix/Labs/Lab_2$ ls -al almost
lrwxrwxrwx 1 bigboss424 bigboss424 7 Jan 15 21:13 almost -> ../lab1
bigboss424@bigboss424-Aspire-V3-731:~/Documents/CandUnix/Labs/Lab_2$
```

24. Following #23, change to **almost** and capture the output.

```
bigboss424@bigboss424-Aspire-V3-731:~/Documents/CandUnix/Labs/Lab_2$ cd almost/
bigboss424@bigboss424-Aspire-V3-731:~/Documents/CandUnix/Labs/lab1$
```

25. Use "help" to get information on how to use the alias command.
    a. What information is provided in from “help”?
       Help provided information about how to use the alias command in a similar fashion to a manual entry.
    b. When should you use “help” compared to when you should use “man”?
       There isn't any manual entry for alias which is why you have to use help.

26. Create an alias named LA that is ls –al. Capture the output and show it worked.

```
bigboss424@bigboss424-Aspire-V3-731:~/Documents/CandUnix/Labs/lab1$ alias LA="ls -al"
bigboss424@bigboss424-Aspire-V3-731:~/Documents/CandUnix/Labs/lab1$ LA
total 16460
drwxrwxr-x  2 bigboss424 bigboss424    4096 Jan 15 21:14 .
drwxrwxr-x 14 bigboss424 bigboss424    4096 Jan 15 21:13 ..
-rw-rw-r--  1 bigboss424 bigboss424  374595 Jan 14 21:49 cscd240_lab1.docx
-rw-rw-r--  1 bigboss424 bigboss424   10240 Jan 14 21:49 files.tgz
-rw-rw-r--  1 bigboss424 bigboss424 8084633 Jan 14 21:49 jonesalab1.zip
lrwxrwxrwx  1 bigboss424 bigboss424       7 Jan 15 21:14 lab1 -> ../lab1
-rw-rw-r--  1 bigboss424 bigboss424    9476 Jan 14 21:49 lab1_cslinux.sh
-rw-rw-r--  1 bigboss424 bigboss424   30268 Jan 14 21:49 lab1part1.png
-rw-rw-r--  1 bigboss424 bigboss424   52881 Jan 14 21:49 lab1part2.png
-rw-rw-r--  1 bigboss424 bigboss424   23445 Jan 14 21:49 lab1part3.png
-rw-rw-r--  1 bigboss424 bigboss424   20256 Jan 14 21:49 lab1part4.png
-rw-rw-r--  1 bigboss424 bigboss424   47038 Jan 14 21:49 lab1part5.png
-rw-rw-r--  1 bigboss424 bigboss424   50611 Jan 14 21:49 lab1part6.png
-rw-rw-r--  1 bigboss424 bigboss424   50759 Jan 14 21:49 lab1part7.png
-rw-rw-r--  1 bigboss424 bigboss424   25069 Jan 14 21:49 lab1part8.png
-rw-rw-r--  1 bigboss424 bigboss424    9476 Jan 14 21:49 lab1.sh
-rw-rw-r--  1 bigboss424 bigboss424    6401 Jan 14 21:49 question16.png
-rw-rw-r--  1 bigboss424 bigboss424   38640 Jan 14 21:49 question20.png
-rw-rw-r--  1 bigboss424 bigboss424  746435 Jan 14 21:49 Screenshot from 2015-01-12 23:48:00.png
-rw-rw-r--  1 bigboss424 bigboss424  714183 Jan 14 21:49 Screenshot from 2015-01-12 23:48:52.png
-rw-rw-r--  1 bigboss424 bigboss424  806666 Jan 14 21:49 Screenshot from 2015-01-12 23:48:59.png
-rw-rw-r--  1 bigboss424 bigboss424  800281 Jan 14 21:49 Screenshot from 2015-01-12 23:49:13.png
-rw-rw-r--  1 bigboss424 bigboss424  795078 Jan 14 21:49 Screenshot from 2015-01-12 23:49:21.png
-rw-rw-r--  1 bigboss424 bigboss424  780986 Jan 14 21:49 Screenshot from 2015-01-12 23:49:27.png
-rw-rw-r--  1 bigboss424 bigboss424  785790 Jan 14 21:49 Screenshot from 2015-01-12 23:49:44.png
-rw-rw-r--  1 bigboss424 bigboss424  800618 Jan 14 21:49 Screenshot from 2015-01-12 23:49:56.png
-rw-rw-r--  1 bigboss424 bigboss424  785259 Jan 14 21:49 Screenshot from 2015-01-12 23:50:03.png
-rw-rw-r--  1 bigboss424 bigboss424  787546 Jan 14 21:49 Screenshot from 2015-01-12 23:50:11.png
-rw-rw-r--  1 bigboss424 bigboss424  159232 Jan 14 21:49 Thumbs.db
```

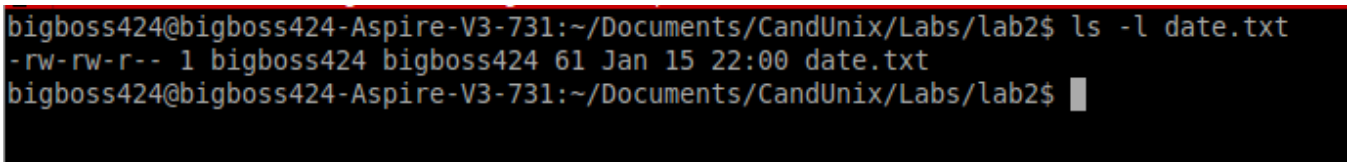
27. In #24 you issued the date command and captured the output. Issue the date command and redirect your output to a file named date.txt. Redirect the output of **echo "Current time and date is `date`"** to date.txt ensuring it appends to the end of the file.

```
bigboss424@bigboss424-Aspire-V3-731:~/Documents/CandUnix/Labs/lab2$ date > date.txt
bigboss424@bigboss424-Aspire-V3-731:~/Documents/CandUnix/Labs/lab2$ echo "Current time and date is
'date'"
Current time and date is 'date'
bigboss424@bigboss424-Aspire-V3-731:~/Documents/CandUnix/Labs/lab2$ echo "Current time and date is
'date'" > date.txt
bigboss424@bigboss424-Aspire-V3-731:~/Documents/CandUnix/Labs/lab2$
```

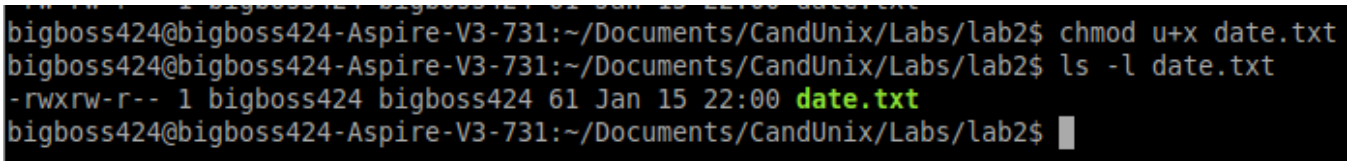
28. Issue the more command or the less command on date.txt and capture the output. How to move to the beginning of a file in less? How to move to the end of file in less? How to scroll down or up? Please explain if you cannot capture the screen.

    You can use the arrow keys to navigate the file. To move to the beginning of a file in less you use g option to move to the end of the file in less you use the G option.

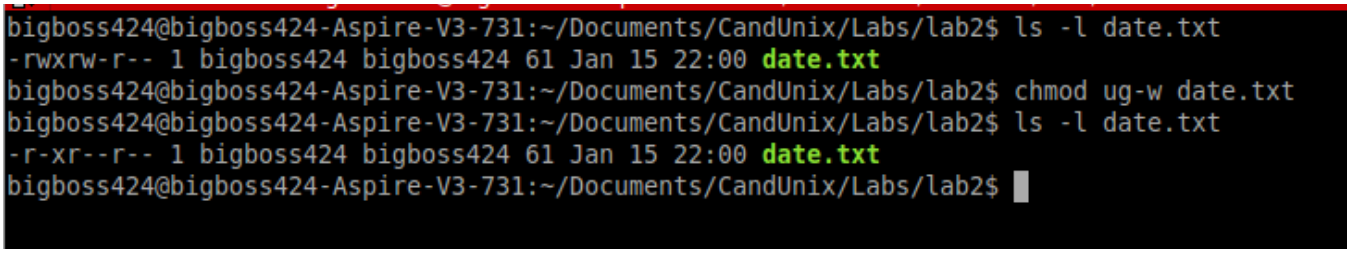
29. Capture the long listing of date.txt.



30. Modify date.txt to add **executable** privileges to date.txt for the owner, Capture the command and prove that the permissions were changed. No other permissions will be changed. You must do this with the octal values.



31. Modify date.txt to remove **w** from the group. Capture the command and prove that the permissions were changed. No other permissions will be changed. You must do this without using the octal values.



32. Capture the command echo $SHELL.
    a. What shell are you using?
       The Bash Shell

    b. Where do the "shells" live?
       The shell lives in /bin/bash directory.

c. Capture the command to switch to a different shell

```
bigboss424@bigboss424-Aspire-V3-731:~/Documents/CandUnix/Labs/lab2$ echo $SHELL
/bin/bash
bigboss424@bigboss424-Aspire-V3-731:~/Documents/CandUnix/Labs/lab2$
```

d. Capture the command echo $SHELL.

```
bigboss424@bigboss424-Aspire-V3-731:~/Documents/CandUnix/Labs/lab2$ echo $SHELL
/bin/bash
bigboss424@bigboss424-Aspire-V3-731:~/Documents/CandUnix/Labs/lab2$
```

e. What shell are you using? Why is the shell different than you expected?
I am using the exact same shell that I was using before. The shell isn't different at all.

f. Capture the command to leave the different shell

```
bigboss424@bigboss424-Aspire-V3-731:~/Documents/CandUnix/Labs/lab2$ exit
```

33. Using nano to create a text file myvi.txt in your home directory. The file myvi.txt contains the following texts.

I took a bus today
Making a tour the American way
I wondered as I was told

```
bigboss424@bigboss424-Aspire-V3-731:~/Documents/CandUnix/Labs/lab2$ cat myvi.txt
I took a bus today
Making a tour the American way
I wondered as I was toldbigboss424@bigboss424-Aspire-V3-731:~/Documents/CandUnix/Labs/lab2$
```

34. Try out the command **echo b{i,a,o}ke,** capture the output and explain what does the { do?

The { helps select out the words that need to be selected specifically.

35. Explain what does the following command do? **cp ~/play/old*.mp[34] /tmp/existingFolder**

This command copies files that are mp3 and mp4 that begin with the three letter word old into the /tmp/existingFolder.

36. Try out **!!** and **!cd** command, what do these commands do?

The !! command simply repeats the previous command that was entered earlier.

The !cd command simply shows the history that is tied to the command cd.

37. Assume you have 5 files in the current working directory, Section.pdf, Lecture.pdf, soundecho.mp3, neck.jpg, Monday.sh. If you type in **ls –l [^A-P]ec*,** what output you will see? Clearly explain why you see your output.

    The output would only list the files that have a an 'ec' in their name and no capital words. It will also list out the files with their permissions, date of creation and how much space the files take up.

    This is due to the the 'ls -l' part of the command lists out the files, shows permissions, how many symbolic links are in these files, creator, last modified, how much hard drive space the file takes up. The [^A-P] limits the values that aren't capitalized from the values A-P. The ec* selects all the files with characters ec within their name.

TO TURN IN:

- A PDF file - Name this text file your last name, first letter of your first name lab2.pdf. This file will contain all your answers. **I want the question copied and then the answer to the question below it.**

- A zip file that contains your pdf, and all text and files created for this lab.

- You could capture a screen using screen shot.

- You should turn in through the EWU Canvas system. Go to EWU Canvas 2014 CSCD240-01 ␣ Assignments ␣ Lab2 ␣ Submit Assignment, then you can choose your zip file to upload.

You zip will be named your last name first letter of your first name + lab2.zip (example smithjlab2.zip for John Smith)