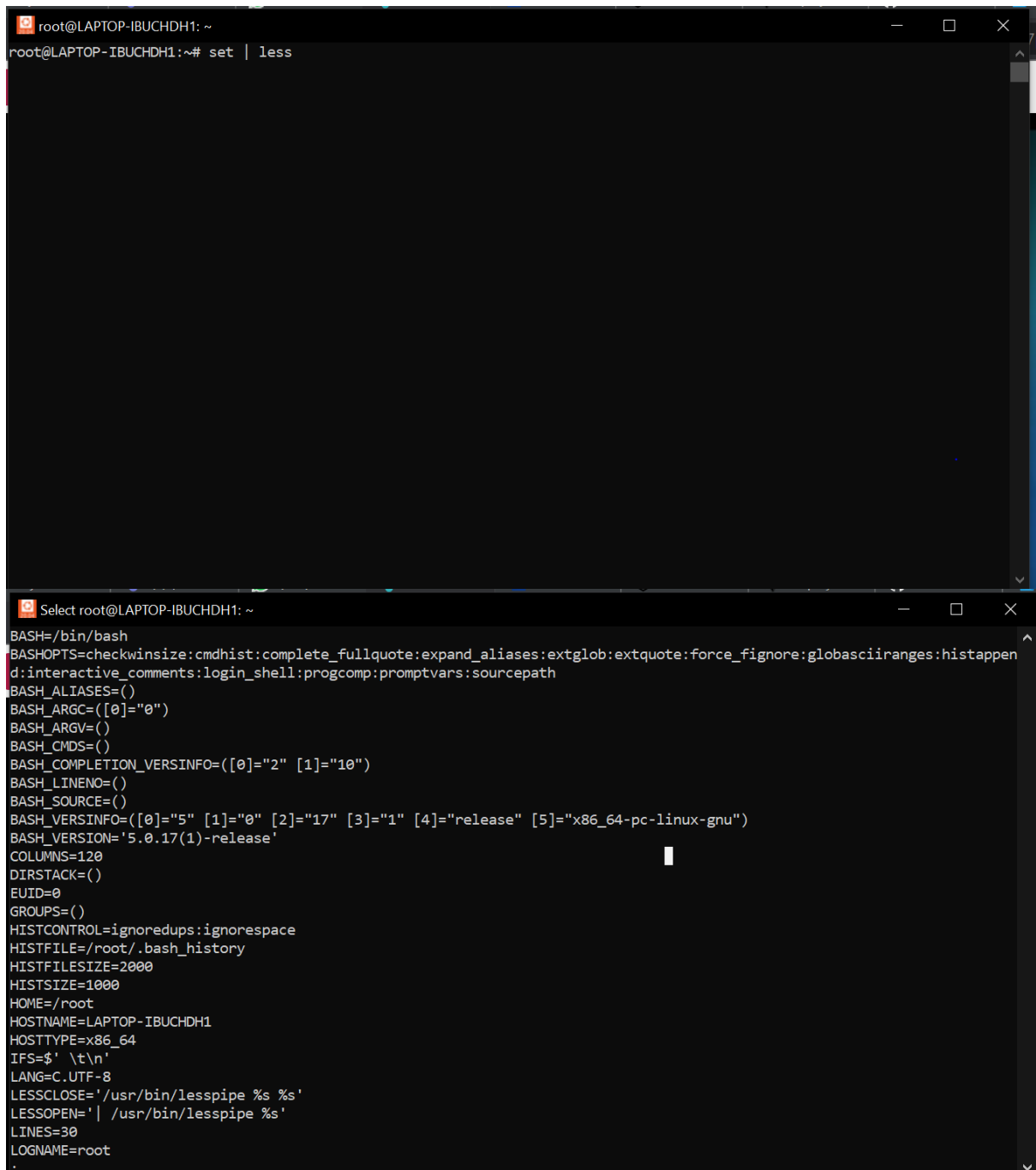


1. State the command for the following.

a. view current environment variables



The image shows a terminal window with a dark background. The prompt is 'root@LAPTOP-IBUCHDH1: ~'. The command 'set | less' has been entered. The output is a long list of environment variables, including BASH, BASHOPTS, BASH_ALIASES, BASH_ARGC, BASH_ARGV, BASH_CMDS, BASH_COMPLETION_VERSION, BASH_LINENO, BASH_SOURCE, BASH_VERSION, COLUMNS, DIRSTACK, EUID, GROUPS, HISTCONTROL, HISTFILE, HISTFILESIZE, HISTSIZE, HOME, HOSTNAME, HOSTTYPE, IFS, LANG, LESSCLOSE, LESSOPEN, LINES, and LOGNAME. The output is displayed in a scrollable window.

```
root@LAPTOP-IBUCHDH1: ~  
root@LAPTOP-IBUCHDH1:~# set | less  
BASH=/bin/bash  
BASHOPTS=checkwinsize:cmdhist:complete_fullquote:expand_aliases:extglob:extquote:force_ignore_globasciiranges:histappend:interactive_comments:login_shell:progcomp:promptvars:sourcepath  
BASH_ALIASES=()  
BASH_ARGC=([0]="0")  
BASH_ARGV=()  
BASH_CMDS=()  
BASH_COMPLETION_VERSION=([0]="2" [1]="10")  
BASH_LINENO=()  
BASH_SOURCE=()  
BASH_VERSION=([0]="5" [1]="0" [2]="17" [3]="1" [4]="release" [5]="x86_64-pc-linux-gnu")  
BASH_VERSION='5.0.17(1)-release'  
COLUMNS=120  
DIRSTACK=()  
EUID=0  
GROUPS=()  
HISTCONTROL=ignoredups:ignorespace  
HISTFILE=/root/.bash_history  
HISTFILESIZE=2000  
HISTSIZE=1000  
HOME=/root  
HOSTNAME=LAPTOP-IBUCHDH1  
HOSTTYPE=x86_64  
IFS=$' \t\n'  
LANG=C.UTF-8  
LESSCLOSE='/usr/bin/lesspipe %s %s'  
LESSOPEN='| /usr/bin/lesspipe %s'  
LINES=30  
LOGNAME=root  
;
```

b. Display the PATH environment variable value

c. update PATH to include the path to your home directory

```
root@LAPTOP-IBUCHDH1: ~/Project
root@LAPTOP-IBUCHDH1:~# echo $PATH
/usr/local/sbin:/usr/local/bin:/usr/sbin:/usr/bin:/sbin:/bin:/usr/games:/usr/local/games:/mnt/c/Program Files/WindowsApps/CanonicalGroupLimited.Ubuntu20.04LTS_2004.5.11.0_x64__79rhkp1fndgsc:/mnt/c/Program Files (x86)/Common Files/Oracle/Java/javapath:/mnt/c/windows/system32:/mnt/c/windows:/mnt/c/windows/System32/Wbem:/mnt/c/windows/System32/WindowsPowerShell/v1.0:/mnt/c/windows/System32/OpenSSH:/mnt/c/Program Files/Java/jdk1.8.0_251/bin:/mnt/c/Program Files/Java/jre1.8.0_251/bin:/mnt/c/Program Files/nodejs:/mnt/c/Users/Pavilion/anaconda3/Scripts:/mnt/c/Users/Pavilion/anaconda3/Library/bin:/mnt/c/Users/Pavilion/AppData/Local/Programs/Python/Python310/Scripts:/mnt/c/Users/Pavilion/AppData/Local/Programs/Python/Python310:/mnt/c/Users/Pavilion/AppData/Local/Microsoft/WindowsApps:/mnt/c/Users/Pavilion/AppData/Local/Programs/Microsoft VS Code/bin:/mnt/c/Users/Pavilion/AppData/Roaming/npm:/snap/bin:/root/Assignment/
root@LAPTOP-IBUCHDH1:~# mkdir Project
root@LAPTOP-IBUCHDH1:~# cd Project
CD: command not found
root@LAPTOP-IBUCHDH1:~# cd Project
root@LAPTOP-IBUCHDH1:~/Project# vim MESSAGE
root@LAPTOP-IBUCHDH1:~/Project# chmod x+ MESSAGE
chmod: invalid mode: 'x+'
Try 'chmod --help' for more information.
root@LAPTOP-IBUCHDH1:~/Project# chmod +x MESSAGE
root@LAPTOP-IBUCHDH1:~/Project# vim /root/.bashrc
root@LAPTOP-IBUCHDH1:~/Project# vim /root/.bashrc
root@LAPTOP-IBUCHDH1:~/Project#
```

```
root@LAPTOP-IBUCHDH1: ~/Project
#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

# some more ls aliases
alias ll='ls -alF'
alias la='ls -A'
alias l='ls -CF'

# 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 ~/.bash_aliases ]; then
    . ~/.bash_aliases
fi

PATH=$PATH:/root/Assignment/
PATH=$PATH:/root/Project/

# 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 [ -f /etc/bash_completion ] && ! shopt -oq posix; then
    . /etc/bash_completion
-- INSERT --
```

```
root@LAPTOP-IBUCHDH1: ~  
root@LAPTOP-IBUCHDH1:~# echo $PATH  
/usr/local/sbin:/usr/local/bin:/usr/sbin:/usr/bin:/sbin:/bin:/usr/games:/usr/local/games:/mnt/c/Program Files/WindowsApp  
s/CanonicalGroupLimited.Ubuntu20.04LTS_2004.5.11.0_x64__79rhkp1fndgsc:/mnt/c/Program Files (x86)/Common Files/Oracle/Jav  
a/javapath:/mnt/c/windows/system32:/mnt/c/windows:/mnt/c/windows/System32/Wbem:/mnt/c/windows/System32/WindowsPowerShell  
/v1.0:/mnt/c/windows/System32/OpenSSH:/mnt/c/Program Files/Java/jdk1.8.0_251/bin:/mnt/c/Program Files/Java/jre1.8.0_25  
1/bin:/mnt/c/Program Files/nodejs:/mnt/c/Users/Pavilion/anaconda3/Scripts:/mnt/c/Users/Pavilion/anaconda3/Library/bin:/m  
nt/c/Users/Pavilion/AppData/Local/Programs/Python/Python310/Scripts:/mnt/c/Users/Pavilion/AppData/Local/Programs/Pytho  
n/Python310:/mnt/c/Users/Pavilion/AppData/Local/Microsoft/WindowsApps:/mnt/c/Users/Pavilion/AppData/Local/Programs/Micr  
osoft VS Code/bin:/mnt/c/Users/Pavilion/AppData/Roaming/npm:/snap/bin:/root/Assignment:/root/Project/  
root@LAPTOP-IBUCHDH1:~#
```

2. How will you make the environment changes applicable to all users? Which script is to be modified?

Ans. To make the environment changes applicable to all users, go to your /etc/skel files, such as .bashrc , and change the ones that are already there or enter the new ones. When you create new users, these /etc/skel files will be copied to the new user's home directory.