Lab1 for Advanced Big Data Analytics

Baichuan Liu

March 16, 2019

1 Easy part

0. $uname\ -s\ -v$
-s shows the name of operate system
-v shows the version of operate system

1. $echo\ \ \$HOME$
$HOME means my home directory

2. $whoami$

3. $chmod\ a+x\ 1.sh$
a means all users
+x means adding authority of executing

4. $du\ --max-depth=1\ -h$
–max-depth= directories that exceed a specified number of levels are ignored
-h means human-readable

5. $mv\ 1.sh\ 2.sh$

6. $apt-get\ install\ jq$

7. $ssh\ oyel$@10.19.248.12

8. $vi\ 1.sh$

2 Normal part

1. $cat\ /ect/hosts\ |\ head\ -n\ 10\ |\ tail\ -n\ 5$
head -n 10 shows 1-10 lines of this file
use pipe and tail -n 5 shows 6-10 of the file

2. $cp\ -p\ 1.sh\ \sim$

-p preserves the modification time
$\sim$ means my home directory

3. $chmod\ -R\ 777\ /dir$
-R means recursively read files and subdirectories
777 means rwxrwxrwx(readable, writable, executable to all users)

4. $grep\ -C\ 1\ 'url'\ commits.json$
-C 1 means printing 1 line before and 1 line after the matching row

3 Hard part

1.$ls\ -A\ |\ grep\ \backslash\backslash .$
ls -A shows all files exclude . and ..
\\. matches all the hidden files

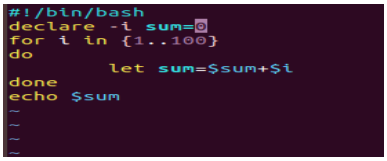
2.$echo\ \{a..d\}\{a..d\}$
{a..d} means all letters in a-d

3.$ls\ -l\ |\ awk\ '\{print\ \$1,\$2\}'\ |\ grep\ -v\ "total"$
awk 'print $1,$2' shows the first and the second column
grep -v "total" excludes the header

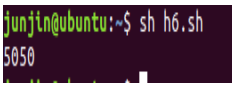
4.$cat\ input.txt\ |\ tr\ [:\ upper\ :]\ [:\ lower\ :]\ >>\ output.txt$
tr [:upper:] [:lower:] transforms all uppercase letters to lowercase
>> outputs the result

5.$du\ -a\ |\ sort\ -n\ -r\ |\ head\ -n\ 3$
sort -n -r means the reverse order by space-consuming

h6 - h9 are shown by pictures.
I will explain some point line.
use location parameters in Linux $1.
use ‘pwd‘ to show current directory.
use [! -d $1"/"$file] to distinguish between files and subdirectories.

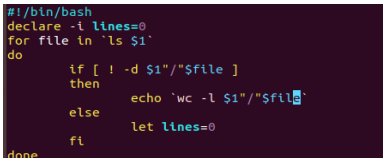


(a) 1

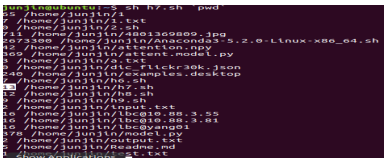


(b) 2

Figure 1: h6

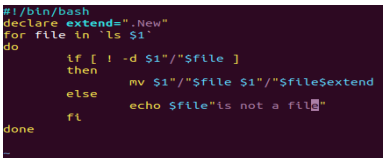


(a) 1

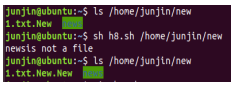


(b) 2

Figure 2: h7

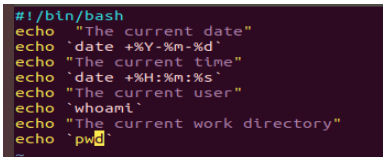


(a) 1

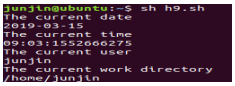


(b) 2

Figure 3: h8



(a) 1



(b) 2

Figure 4: h9