

Name: Chey Naryvety

ID: IDTB110199

LAP 4

## Lab: Your Work (1)

1. Enter command “**jobs**”. What is the result? Why?
2. Delay system run by using command “**sleep**” and then run the command to create a file “*mydelaytesting.txt*” by using command “**touch**”, and wait them in the background process:
  - o Sleep 600; touch mydelaytesting.txt &
3. Try to check if the file “*mydelaytesting.txt*” is created immediately or not? (**ls**)
4. Enter command “**jobs**”. What is the result? Why?

```
ashxio@ashio:~$ (sleep 15; touch mydelaytesting.txt) &
[1] 1002
ashxio@ashio:~$ ls
public_html
ashxio@ashio:~$ jobs
[1]+  Running                  ( sleep 15; touch mydelaytesting.txt ) &
ashxio@ashio:~$ jobs
[1]+  Done                    ( sleep 15; touch mydelaytesting.txt )
ashxio@ashio:~$ ls
mydelaytesting.txt  public_html
```

1. The first “**jobs**” doesn’t give any result bcos there is nth running in the background
2. The ; tells the system to do the command in order. Sleep command tells the system to wait then do the second command which is to create the file and the & put them both to run in the background.
3. The file isn’t created immediately when using **ls** to check bcos it still have to wait
4. Command **jobs** now show that there is task running, after it’s done the file is now created.
5. Download “**Linux eBook**” from course syllabus by using command “**wget**” and wait them in background process:
  - o **wget** --limit-rate=20 -O thelinuxcommandline.pdf  
<https://www.kea.nu/files/textbooks/humblesec/thelinuxcommandline.pdf> &
6. Try to check if the file is downloaded or not? (using **ls**)
7. Enter command “**jobs**”. What is the result? Why?

2

```
ashxio@ashio:~$ wget --limit-rate=20 -O thelinuxcommandline.pdf https://www.kea.nu/files/textbooks/humblesec/thelinuxcom
mandline.pdf &
[1] 1075
ashxio@ashio:~$ 
Redirecting output to 'wget-log'.
ls
mydelaytesting.txt  public_html  thelinuxcommandline.pdf  wget-log
ashxio@ashio:~$ jobs
[1]+  Running                  wget --limit-rate=20 -O thelinuxcommandline.pdf https://www.kea.nu/files/textbooks/humb
lesec/thelinuxcommandline.pdf &
ashxio@ashio:~$ jobs
[1]+  Running                  wget --limit-rate=20 -O thelinuxcommandline.pdf https://www.kea.nu/files/textbooks/humb
lesec/thelinuxcommandline.pdf &
ashxio@ashio:~$ |
```

5. --limit-rate=20, the file is downloading at 20byte per sec making it super slow
6. Using ls will show the file since it was created immediately by using the -o (output doc) but it will be empty until the download is fully done
7. Jobs still show the tasking running in the background meaning it is still downloading

## Lab: Your Work (1) - Continue

1. Download "**Operating System eBook**" from course syllabus by using command "**wget**" and wait them in background process:
  - o **wget** --limit-rate=50 -O Operating-System-Concepts.pdf  
https://os.ecci.ucr.ac.cr/slides/Abraham-Silberschatz-Operating-System-Concepts-10th-2018.pdf &
2. Try to check if any file is downloaded or not (using **ls**)? Why?
3. Enter command "**jobs**". What is the result?
4. Enter command to bring the process of downloading "**Linux eBook**" to the **foreground**
  - o What happen?
  - o How to suspend current foreground process?
5. Enter command "**jobs**". What is the result?
6. How to **resume** the suspended above process (download "Linux eBook")?
7. Where does "**sleep**" command gone from this "**jobs**" listing?

```
ashxio@ashio:~$ wget --limit-rate=50 -O Operating-System-Concepts.pdf https://os.ecci.ucr.ac.cr/slides/Abraham-Silberschatz-Operating-System-Concepts-10th-2018.pdf &
[2] 1283
ashxio@ashio:~$ 
Redirecting output to 'wget-log.1'.
ls
Operating-System-Concepts.pdf mydelaytesting.txt public_html thelinuxcommandline.pdf wget-log wget-log.1
ashxio@ashio:~$ jobs
[1]-  Running                  wget --limit-rate=20 -O thelinuxcommandline.pdf https://www.kea.nu/files/textbooks/humblesec/thelinuxcommandline.pdf &
[2]+  Running                  wget --limit-rate=50 -O Operating-System-Concepts.pdf https://os.ecci.ucr.ac.cr/slides/Abraham-Silberschatz-Operating-System-Concepts-10th-2018.pdf &
ashxio@ashio:~$ fg %1
wget --limit-rate=20 -O thelinuxcommandline.pdf https://www.kea.nu/files/textbooks/humblesec/thelinuxcommandline.pdf
--2026-02-05 15:43:11-- https://www.kea.nu/files/textbooks/humblesec/thelinuxcommandline.pdf
Resolving www.kea.nu (www.kea.nu)... 172.67.131.243, 104.21.12.76, 2606:4700:3030::ac43:83f3, ...
Connecting to www.kea.nu (www.kea.nu)|172.67.131.243|:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 7458677 (7.1M) [application/pdf]
Saving to: 'thelinuxcommandline.pdf'

100%[=====] 7,458,677      1.00K/s   in 1.5s
```

2. Using ls will show the file since it was created immediately by using the -o (output doc) but it will be empty until the download is fully done
3. Jobs will list two running jobs, one from the last download that is still running
4. Once we enter the command to bring the linux ebook to the front we will lose control of the terminal again as it is now a foreground task and it will also show the download status bar. Use ctrl z to suspend the current job
5. Use bg %1 to resume the download in the background
6. The sleep command is gone bcus it has alr finished running

(note: only put the sleep for 15sec cus wanted to test it on a shorter duration)

# Lab: Your Work (2)

1. Display all processes are running by using command “**ps**” and “**ps aux**”
2. Filter the processes that are currently is running “**wget**” by using **ps aux**, **grep** and pipelines
3. Output the result of filtering above to a file located in **~/mynscmd.txt**
4. Show result inside that file “**mynscmd.txt**”
5. Describe the result.
6. Kill process “**PID = 1**” that is running, and what happen? why?
7. Kill those “**wget**” processes that are still running
8. Check those processes again, do they still existing?

```
ashxio@ashxio:~$ ps aux
USER          PID %CPU %MEM    VSZ   RSS TTY      STAT START  TIME COMMAND
root           1  0.0  0.1 21712 12148 ?        Ss  18:26  0:01 /sbin/init
root           2  0.0  0.0  3120  2048 ?        Sl  18:26  0:00 /init
root           7  0.0  0.0 3136  1792 ?        Sl  18:26  0:00 plan9 --control-socket 7 --log-level 4 --server-fd 8
root          59  0.0  0.1 50424 15624 ?        Ss  18:26  0:00 /usr/lib/systemd/systemd-journald
root         104  0.0  0.0 25268  6272 ?        Ss  18:26  0:01 /usr/lib/systemd/systemd-udevd
systemd+     115  0.0  0.1 21452 11776 ?        Ss  18:26  0:00 /usr/lib/systemd/systemd-resolved
systemd+     116  0.0  0.0 91020  7552 ?        Ss  18:26  0:00 /usr/lib/systemd/systemd-timesyncd
root          81  0.0  0.0 4236  2432 ?        Ss  18:26  0:00 /usr/sbin/cron -f -P
message+    182  0.0  0.0  9628  4864 ?        Ss  18:26  0:00 @dbus-daemon --system --address=systemd: --nofork --name=org.freedesktop.DBus
root          213  0.0  0.1 17964  8448 ?        Ss  18:26  0:00 /usr/lib/systemd/systemd-logind
root          216  0.0  0.0 1755840 12416 ?       Ssl 18:26  0:00 /usr/libexec/wsl-pro-service -vv
syslog        232  0.0  0.0 222588  5248 ?       Ssl 18:26  0:00 /usr/sbin/rsyslogd -n -iNONE
root          237  0.0  0.0  3160  1920 hvc0    Ss+ 18:26  0:00 /sbin/getty -o -p -- \u0000 --noclear --keep-baud - 1152
root          238  0.0  0.0  6804  4628 ?       Ss  18:26  0:00 /usr/sbin/apache2 -k start
www-data      239  0.0  0.0 1999320  5156 ?       Sl  18:26  0:00 /usr/sbin/apache2 -k start
www-data      241  0.0  0.0 1999320  5284 ?       Sl  18:26  0:00 /usr/sbin/apache2 -k start
root          282  0.0  0.0  3116  1792 tty1    Ss+ 18:26  0:00 /sbin/getty -o -p -- \u0000 --noclear - linux
root          315  0.0  0.2 107008  22016 ?       Ssl 18:26  0:00 /usr/bin/python3 /usr/share/unattended-upgrades/unatt
root          388  0.0  0.0  3124  896 ?        Ss  18:26  0:00 /init
root          382  0.0  0.0  3140  1156 ?       S  18:26  0:00 /init
ashxio        389  0.0  0.0  6720  5760 pts/0    Ss  18:26  0:00 -bash
root          391  0.0  0.0  6692  4224 pts/1    Ss  18:26  0:00 /bin/login -f
ashxio        448  0.0  0.1 20308 11136 ?       Ss  18:26  0:00 /usr/lib/systemd/systemd --user
ashxio        449  0.0  0.0 21144  3516 ?       S  18:26  0:00 (sd-pam)
ashxio        475  0.0  0.0  6072  4736 pts/1    S+ 18:26  0:00 -bash
ashxio        1277 0.0  0.1 13692  9472 pts/0    S  20:08  0:00 wget --limit-rate=20 -O thelinuxcommandline.pdf https://www.kea.nu/files/textbooks/humblesec/thelinuxcommandline.pdf
ashxio        1375 0.0  0.0  8280  4096 pts/0    R+ 20:22  0:00 ps aux
ashxio@ashxio:~$ ps aux | grep wget > ~/mynscmd.txt
ashxio@ashxio:~$ cat ~/mynscmd.txt
ashxio@ashxio:~$ wget --limit-rate=20 -O thelinuxcommandline.pdf https://www.kea.nu/files/textbooks/humblesec/thelinuxcommandline.pdf
ashxio@ashxio:~$ kill 1
-bash: kill: (1) - Operation not permitted
ashxio@ashxio:~$ pkill wget
ashxio@ashxio:~$ ps aux | grep wget
ashxio        1405 0.0  0.0  4088  1920 pts/0    S+ 20:26  0:00 grep --color=auto wget
[1]+  Terminated                  wget --limit-rate=20 -O thelinuxcommandline.pdf https://www.kea.nu/files/textbooks/humblesec/thelinuxcommandline.pdf
ashxio@ashxio:~$ jobs
```

The result shows only the wget commands we ran before

Kill 1 doesn't work bcus it is the parent of all process so we don't have perm to kill it or else everything would crash

The wget process don't exist anymore bcus we already terminated the tasks and the jobs would also show nth

# Lab: Your Work (3)

1. Access to remote server "ssh your\_student\_id@os.cammob.ovh"
2. Display all processes are running by using command **ps**
3. Filter the processes that are currently running by your user account by using **ps, grep** and pipelines
4. Output all processes running by your user account and redirect the output result to a file located in **~/public\_html/your.full.name/myps01.txt**
5. Go to browser enter
  - o [http://your\\_student\\_id.os.cammob.ovh/your.full.name/myps01.txt](http://your_student_id.os.cammob.ovh/your.full.name/myps01.txt)

```
ashxio@ashio:~$ ps
  PID TTY      TIME CMD
 367 pts/0    00:00:00 bash
 487 pts/0    00:00:00 ps
ashxio@ashio:~$ ps aux | grep ashxio
ashxio     367  0.0  0.0  6072 4992 pts/0    Ss  20:47  0:00 -bash
ashxio     428  0.1  0.1  20100 11136 ?      Ss  20:47  0:00 /usr/lib/systemd/systemd --user
ashxio     429  0.0  0.0  21148 3520 ?      S   20:47  0:00 (sd-pam)
ashxio     454  0.0  0.0  6072 4864 pts/1    S+  20:47  0:00 -bash
ashxio     495  0.0  0.0  8280 4096 pts/0    R+  20:48  0:00 ps aux
ashxio     496  0.0  0.0  4088 1920 pts/0    S+  20:48  0:00 grep --color=auto ashxio
ashxio@ashio:~$ ps aux | grep ashxio > ~/public_html/naryvety.chey/myps01.txt
← → C ⓘ localhost:8000/naryvety.chey/myps01.txt ☆ ⌂ a :
```

  

```
ashxio     367  0.0  0.0  6204 5120 pts/0    Ss  20:47  0:00 -bash
ashxio     428  0.0  0.1  20100 11136 ?      Ss  20:47  0:00 /usr/lib/systemd/systemd --user
ashxio     429  0.0  0.0  21148 3520 ?      S   20:47  0:00 (sd-pam)
ashxio     454  0.0  0.0  6072 4864 pts/1    S+  20:47  0:00 -bash
ashxio     509  0.0  0.0  8280 4096 pts/0    R+  20:51  0:00 ps aux
ashxio     510  0.0  0.0  4088 1920 pts/0    S+  20:51  0:00 grep --color=auto ashxio
```

# Assignment W04-1

1. Access to your account in remote server "ssh your\_student\_id@os.cammob.ovh"
2. Create new directory directory "**public\_html/your.full.name/lab04/output/**"
3. Save all of your access logs inside file "**~/logs/access\_log**" to a file "**public\_html/your.full.name/lab04/output/myaccess.log**" follow by criteria below:
  - a. Filter access log of today of this lab class start
    - i. For example today is "05/Feb/2026"
  - b. And filter more result of "/your.full.name/"

```
ashxio@ashio:~$ mkdir -p ~/public_html/naryvety.chey/lab04/output/
ashxio@ashio:~$ grep "05/Feb/2026" /var/log/apache2/access.log | grep "/naryvety.chey/" > ~/public_html/naryvety.chey/lab04/output/myaccess.log
ashxio@ashio:~$ cat ~/public_html/naryvety.chey/lab04/output/myaccess.log
ashxio@ashio:~$ python3 -m http.server --directory public_html 8000
Serving HTTP on 0.0.0.0 port 8000 (http://0.0.0.0:8000/) ...
127.0.0.1 - - [05/Feb/2026 21:11:22] "GET / HTTP/1.1" 200 -
127.0.0.1 - - [05/Feb/2026 21:11:24] "GET /naryvety.chey/ HTTP/1.1" 200 -
127.0.0.1 - - [05/Feb/2026 21:11:28] "GET /naryvety.chey/lab04/ HTTP/1.1" 200 -
127.0.0.1 - - [05/Feb/2026 21:11:30] "GET /naryvety.chey/lab04/output/ HTTP/1.1" 200 -
127.0.0.1 - - [05/Feb/2026 21:11:31] "GET /naryvety.chey/lab04/output/myaccess.log HTTP/1.1" 200 -
```

Theres nth cus theres no activity