

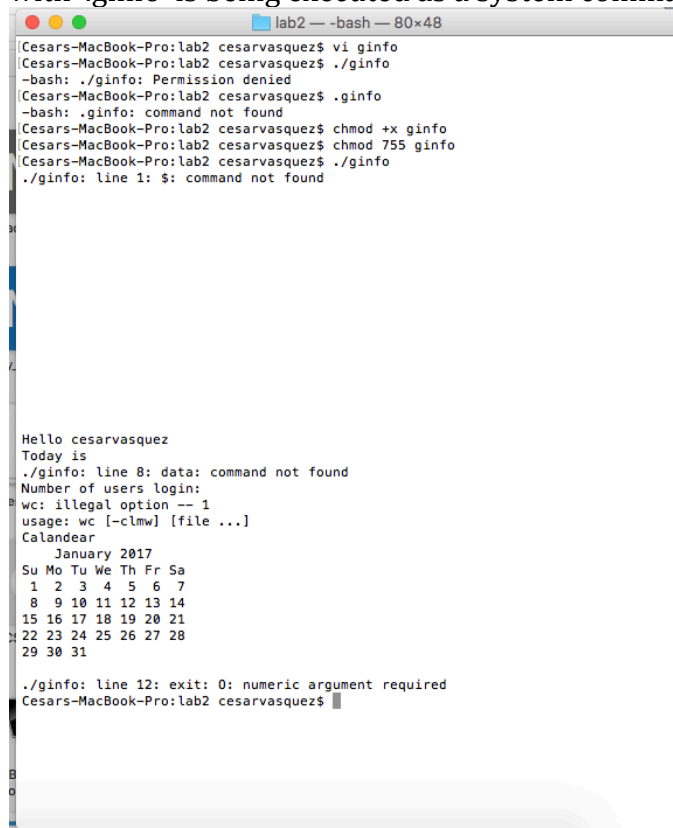
-Cesar Vasquez
-Lab2 Report
-January 19, 2016

Lab Objective

- 1. Basic Shell Programming:
- 2. AWK scripting language:
- 3. Viewing Processes:
- 4. Starting New Processes:
- 5. Shell Programming Practice:

-1. Basic Shell Programming:

-The difference between './ginfo' and 'ginfo' after writing the script and setting permissions is that with './ginfo' is being executed from the current directory. And, with 'ginfo' is being executed as a system command.



```
lab2 — -bash — 80x48
Cesars-MacBook-Pro:lab2 cesarvasquez$ vi ginfo
Cesars-MacBook-Pro:lab2 cesarvasquez$ ./ginfo
-bash: ./ginfo: Permission denied
Cesars-MacBook-Pro:lab2 cesarvasquez$ .ginfo
-bash: .ginfo: command not found
Cesars-MacBook-Pro:lab2 cesarvasquez$ chmod +x ginfo
Cesars-MacBook-Pro:lab2 cesarvasquez$ chmod 755 ginfo
Cesars-MacBook-Pro:lab2 cesarvasquez$ ./ginfo
./ginfo: line 1: $: command not found

Hello cesarvasquez
Today is
./ginfo: line 8: data: command not found
Number of users login:
wc: illegal option -- 1
usage: wc [-clmw] [file ...]
Calandear
    January 2017
Su Mo Tu We Th Fr Sa
 1  2  3  4  5  6  7
 8  9 10 11 12 13 14
15 16 17 18 19 20 21
22 23 24 25 26 27 28
29 30 31

./ginfo: line 12: exit: 0: numeric argument required
Cesars-MacBook-Pro:lab2 cesarvasquez$
```

-All the question of the exercises of the UDV section was done. I just had an issue with question 5 because the syntax was incorrect.

```
lab2 — -bash — 80x48
[Cesars-MacBook-Pro:lab2 cesarvasquez$ x=10
[Cesars-MacBook-Pro:lab2 cesarvasquez$ echo $x
10
[Cesars-MacBook-Pro:lab2 cesarvasquez$ xn=Rani
[Cesars-MacBook-Pro:lab2 cesarvasquez$ echo $xn
Rani
[Cesars-MacBook-Pro:lab2 cesarvasquez$ expr 6 + 3
9
[Cesars-MacBook-Pro:lab2 cesarvasquez$ x=20
[Cesars-MacBook-Pro:lab2 cesarvasquez$ y=5
[Cesars-MacBook-Pro:lab2 cesarvasquez$ expr x/y
x/y
[Cesars-MacBook-Pro:lab2 cesarvasquez$ expr x / y
expr: not a decimal number: 'x'
[Cesars-MacBook-Pro:lab2 cesarvasquez$ expr $x / $y
4
[Cesars-MacBook-Pro:lab2 cesarvasquez$ x=20
[Cesars-MacBook-Pro:lab2 cesarvasquez$ y=5
[Cesars-MacBook-Pro:lab2 cesarvasquez$ ((quotient=x/y))
[Cesars-MacBook-Pro:lab2 cesarvasquez$ z=quotient
[Cesars-MacBook-Pro:lab2 cesarvasquez$ echo $z
quotient
[Cesars-MacBook-Pro:lab2 cesarvasquez$ x=20
[Cesars-MacBook-Pro:lab2 cesarvasquez$ y=5
[Cesars-MacBook-Pro:lab2 cesarvasquez$ z=`expr $x / $y`
[Cesars-MacBook-Pro:lab2 cesarvasquez$ echo $z
4
[Cesars-MacBook-Pro:lab2 cesarvasquez$
```

-The 'testShell.sh' script was difficult to execute. The script will run after the './testShell.sh' executes, and the other dose not.

```
lab2 — vi testShell.sh — 80x48
$ vi testShell
#
#
clear
XYZ=2017
~
~
~
~
```

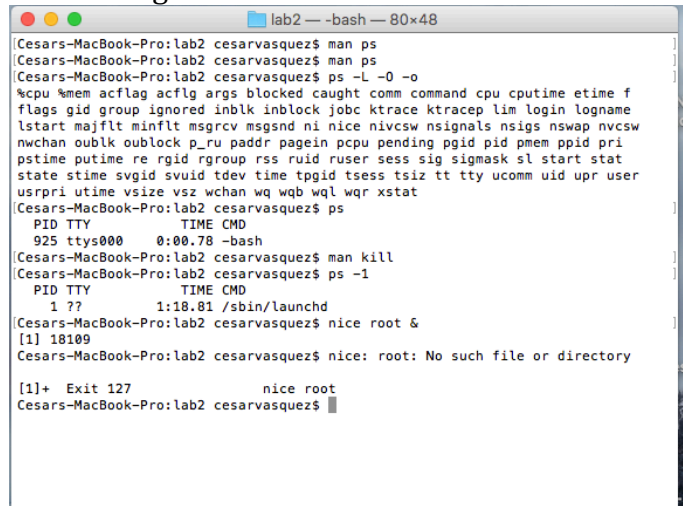
-2. AWK:

-PS reports a snap shot of the current processes.

```
lab2 — -bash — 80x48
[Cesars-MacBook-Pro:lab2 cesarvasquez$ ps auxw | awk '{print $1 "\t\t" $2}'
awk: non-terminated string " $2)... at source line 1
context is
>>> <<<
awk: giving up
source line number 2
[Cesars-MacBook-Pro:lab2 cesarvasquez$
```

-3. Viewing Processes:

-I studied the 'man ps' and the 'man kill'. I even went ahead and took screen shots from both guides.

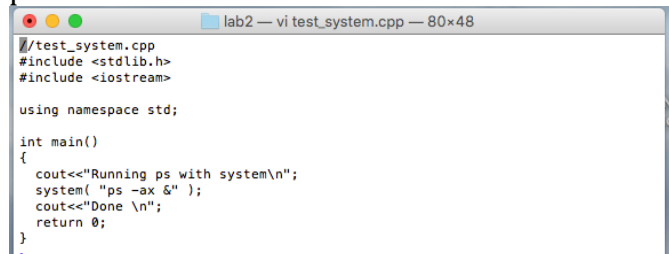


```
lab2 -- -bash -- 80x48
Cesars-MacBook-Pro:lab2 cesarvasquez$ man ps
Cesars-MacBook-Pro:lab2 cesarvasquez$ man ps
Cesars-MacBook-Pro:lab2 cesarvasquez$ ps -L -o -o
%cpu %mem acflag acflg args blocked caught comm command cpu cputime etime f
flags gid group ignored inblk inblock jobc ktrace ktracp lim login logname
lstart majflt minflt msgrcv msgsnd ni nice nivcsw nsignals nsigs nswap nvcs
nwchan oublk oublock p_ru paddr pagein pcpu pending pgid pid pmem ppid pri
pstime putime re rgid rgroup rss ruid ruser sess sig sigmask sl start stat
state stime svgid svuid tdev time tpgid tsess tsiz tt tty ucomm uid upr user
usrpri utime vsize vsz wchan wq wqb wql wqr xstat
Cesars-MacBook-Pro:lab2 cesarvasquez$ ps
  PID TTY          TIME CMD
  925 ttys000    0:00.78  -bash
Cesars-MacBook-Pro:lab2 cesarvasquez$ man kill
Cesars-MacBook-Pro:lab2 cesarvasquez$ ps -1
  PID TTY          TIME CMD
    1 ??            1:18.81  /sbin/launchd
Cesars-MacBook-Pro:lab2 cesarvasquez$ nice root &
[1] 18109
Cesars-MacBook-Pro:lab2 cesarvasquez$ nice: root: No such file or directory

[1]+  Exit 127              nice root
Cesars-MacBook-Pro:lab2 cesarvasquez$
```

-4. Starting New Processes

-Well, when the file is executed first with the 'ps -ax' code, the code is executed and exit the program automatically. Now, when the '&' is added, the code is executed and once is done, it pauses and the code is terminated once a key on the keyboard is press.

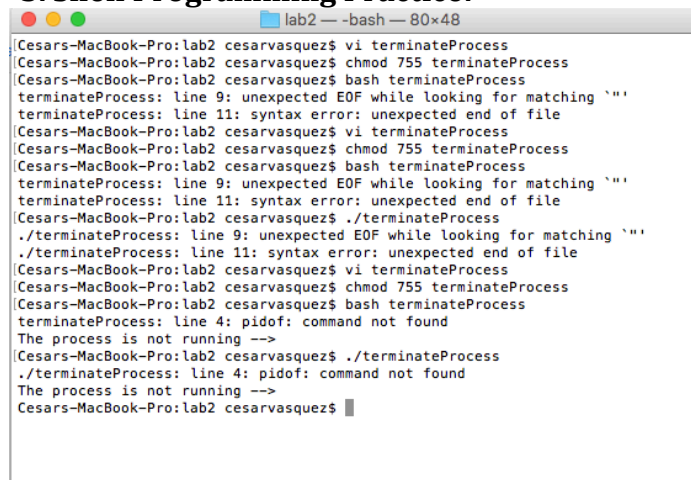


```
lab2 -- vi test_system.cpp -- 80x48
//test_system.cpp
#include <stdlib.h>
#include <iostream>

using namespace std;

int main()
{
    cout<<"Running ps with system\n";
    system( "ps -ax &" );
    cout<<"Done \n";
    return 0;
}
```

-5. Shell Programming Practice:



```
lab2 -- -bash -- 80x48
Cesars-MacBook-Pro:lab2 cesarvasquez$ vi terminateProcess
Cesars-MacBook-Pro:lab2 cesarvasquez$ chmod 755 terminateProcess
Cesars-MacBook-Pro:lab2 cesarvasquez$ bash terminateProcess
terminateProcess: line 9: unexpected EOF while looking for matching `"'
terminateProcess: line 11: syntax error: unexpected end of file
Cesars-MacBook-Pro:lab2 cesarvasquez$ vi terminateProcess
Cesars-MacBook-Pro:lab2 cesarvasquez$ chmod 755 terminateProcess
Cesars-MacBook-Pro:lab2 cesarvasquez$ bash terminateProcess
terminateProcess: line 9: unexpected EOF while looking for matching `"'
terminateProcess: line 11: syntax error: unexpected end of file
Cesars-MacBook-Pro:lab2 cesarvasquez$ ./terminateProcess
./terminateProcess: line 9: unexpected EOF while looking for matching `"'
./terminateProcess: line 11: syntax error: unexpected end of file
Cesars-MacBook-Pro:lab2 cesarvasquez$ vi terminateProcess
Cesars-MacBook-Pro:lab2 cesarvasquez$ chmod 755 terminateProcess
Cesars-MacBook-Pro:lab2 cesarvasquez$ bash terminateProcess
terminateProcess: line 4: pidof: command not found
The process is not running -->
Cesars-MacBook-Pro:lab2 cesarvasquez$ ./terminateProcess
./terminateProcess: line 4: pidof: command not found
The process is not running -->
Cesars-MacBook-Pro:lab2 cesarvasquez$
```

After running the code, I did not get any process running.

Below is a pic of the code it self.

[illegible]

Summery:

This lab was challenging. I give my self a 20/20.