Assignment 2
CS-370 (Operating Systems)

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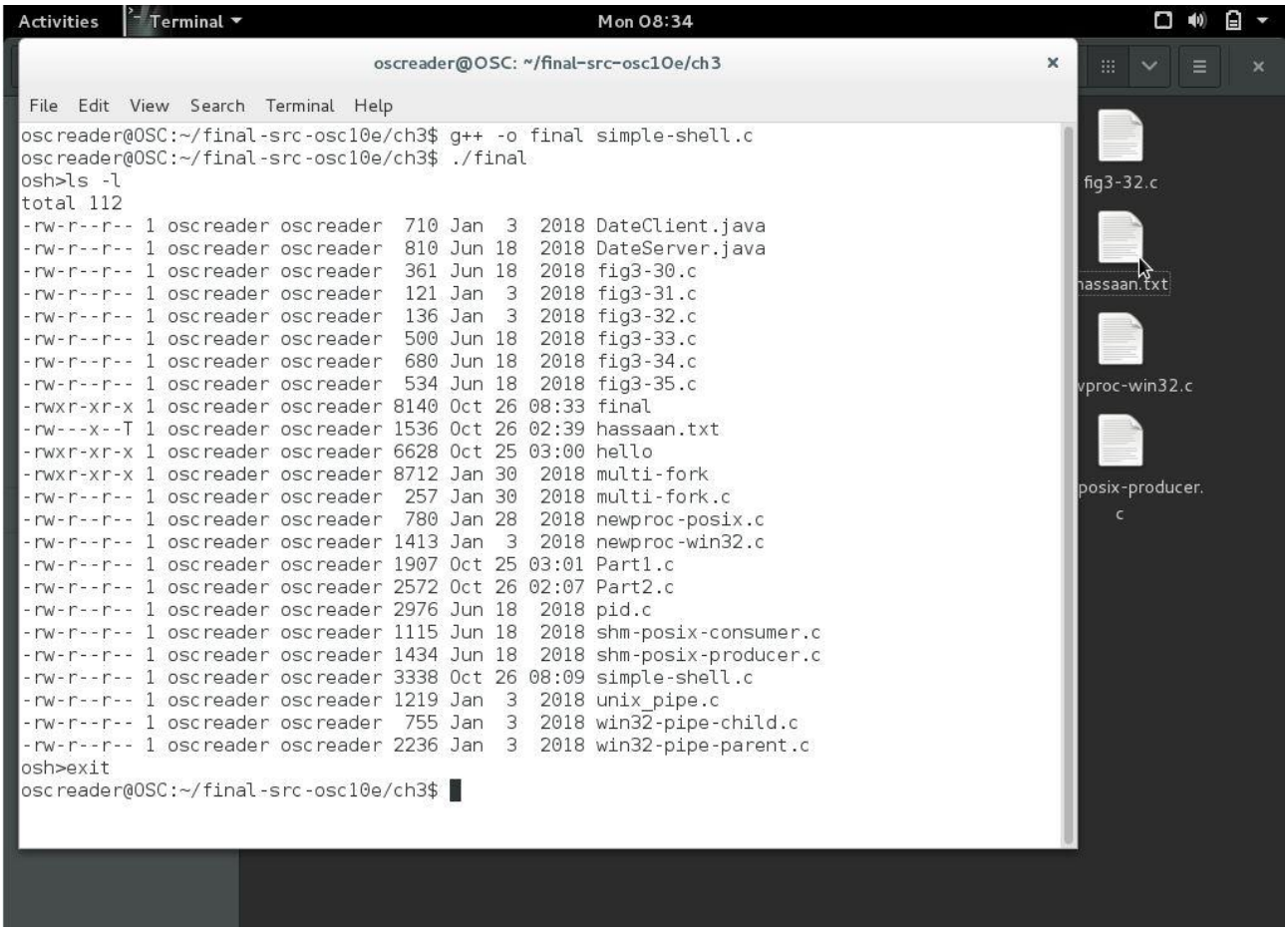
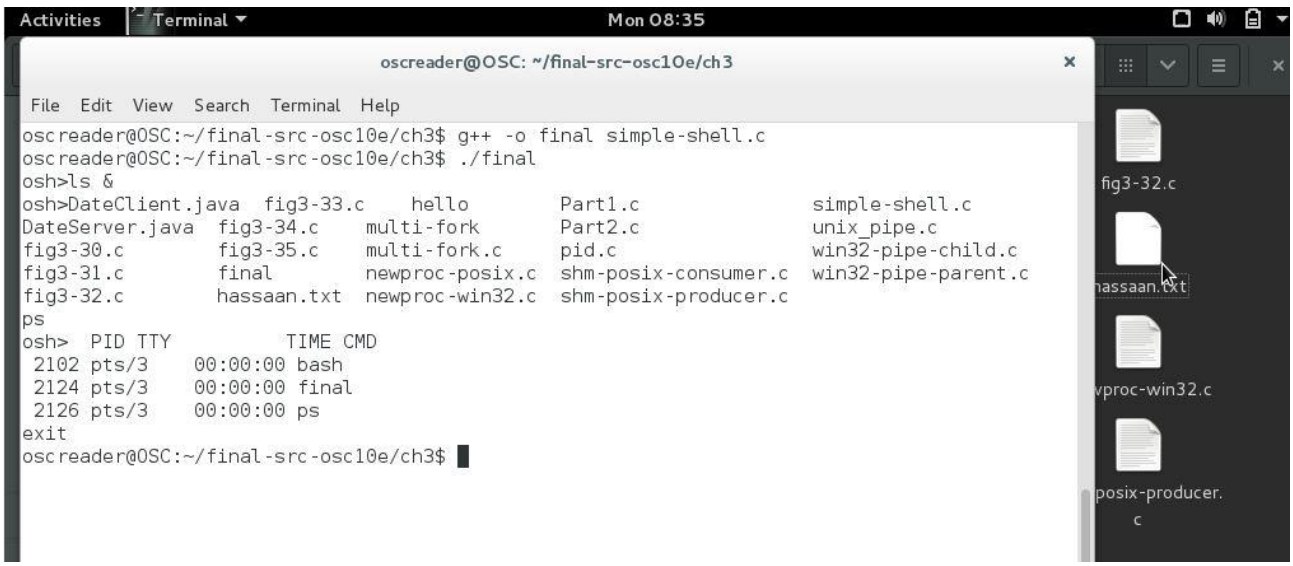
Project 1 —UNIX Shell:

Part II:

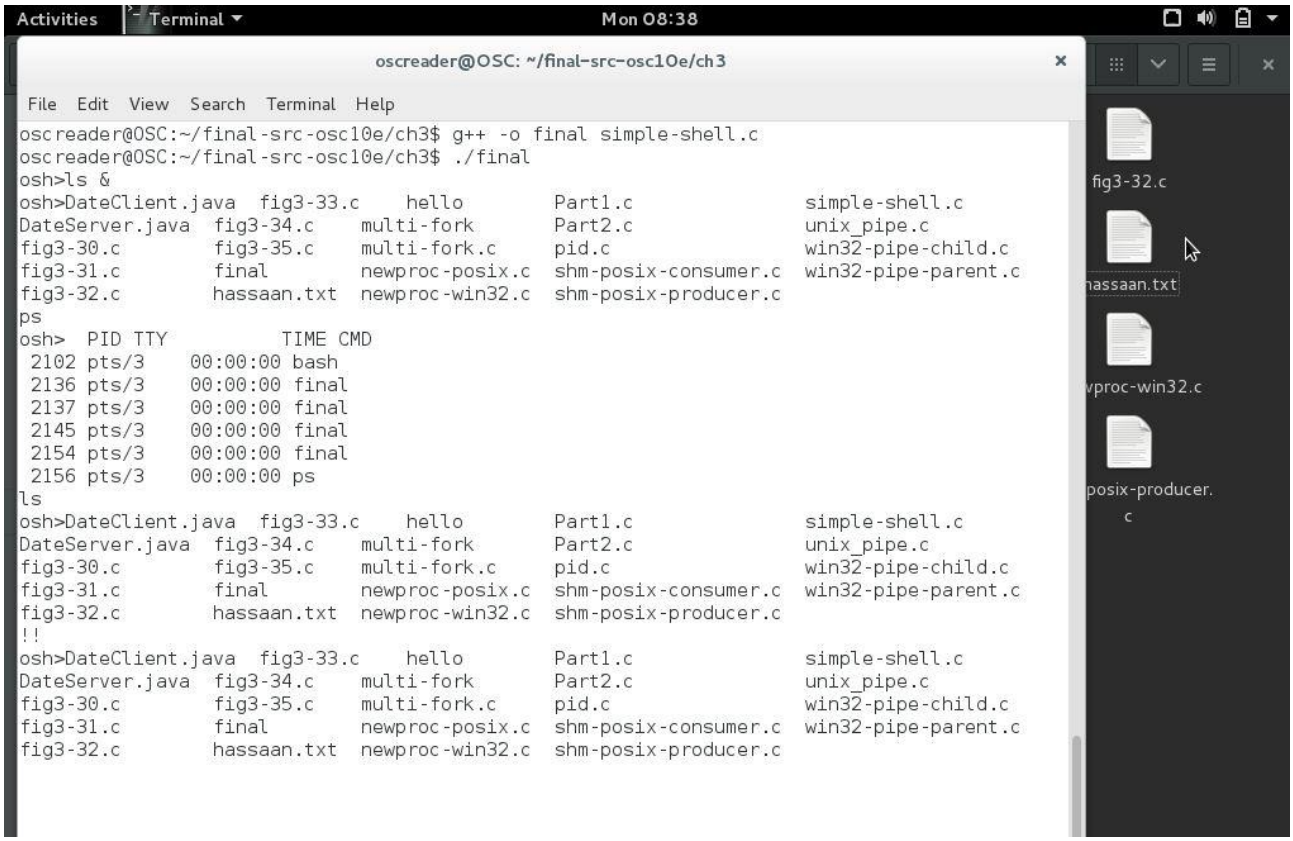




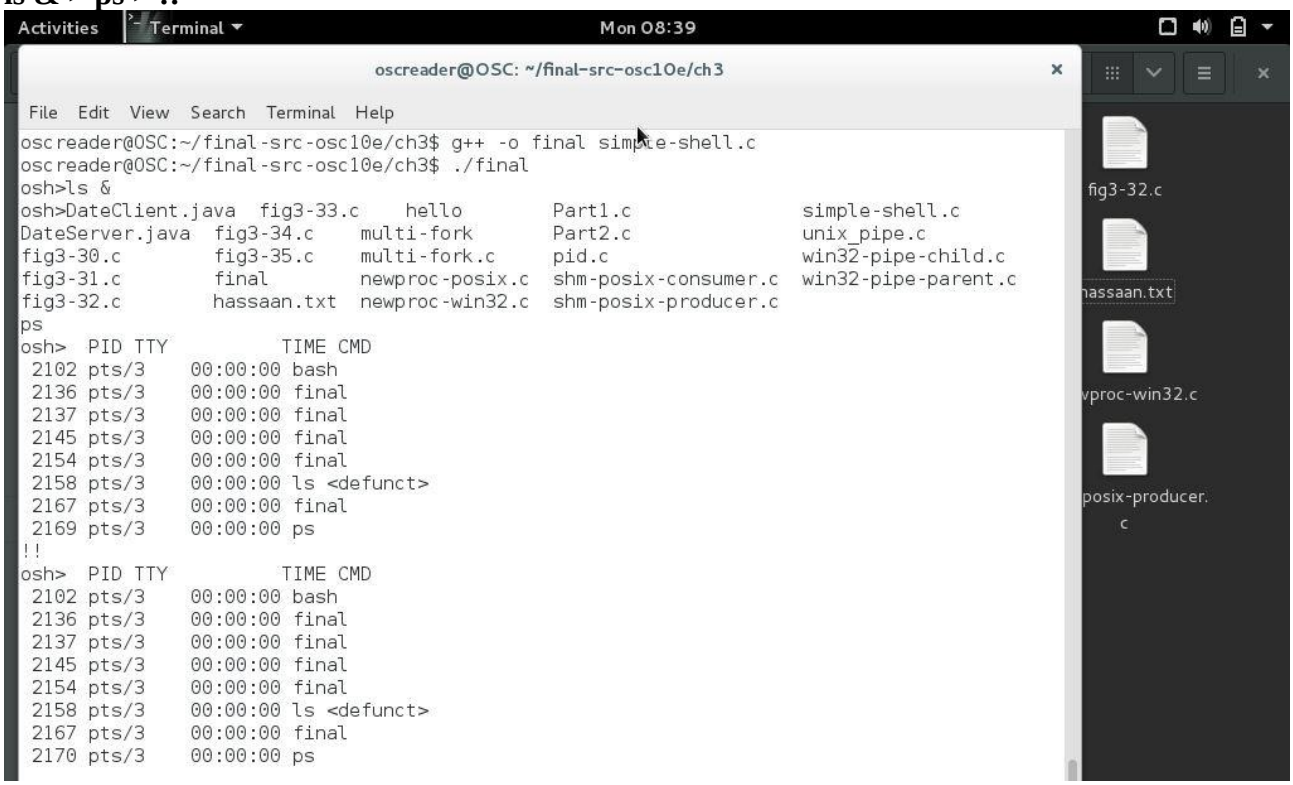
Part III:

Error Message when no history is available

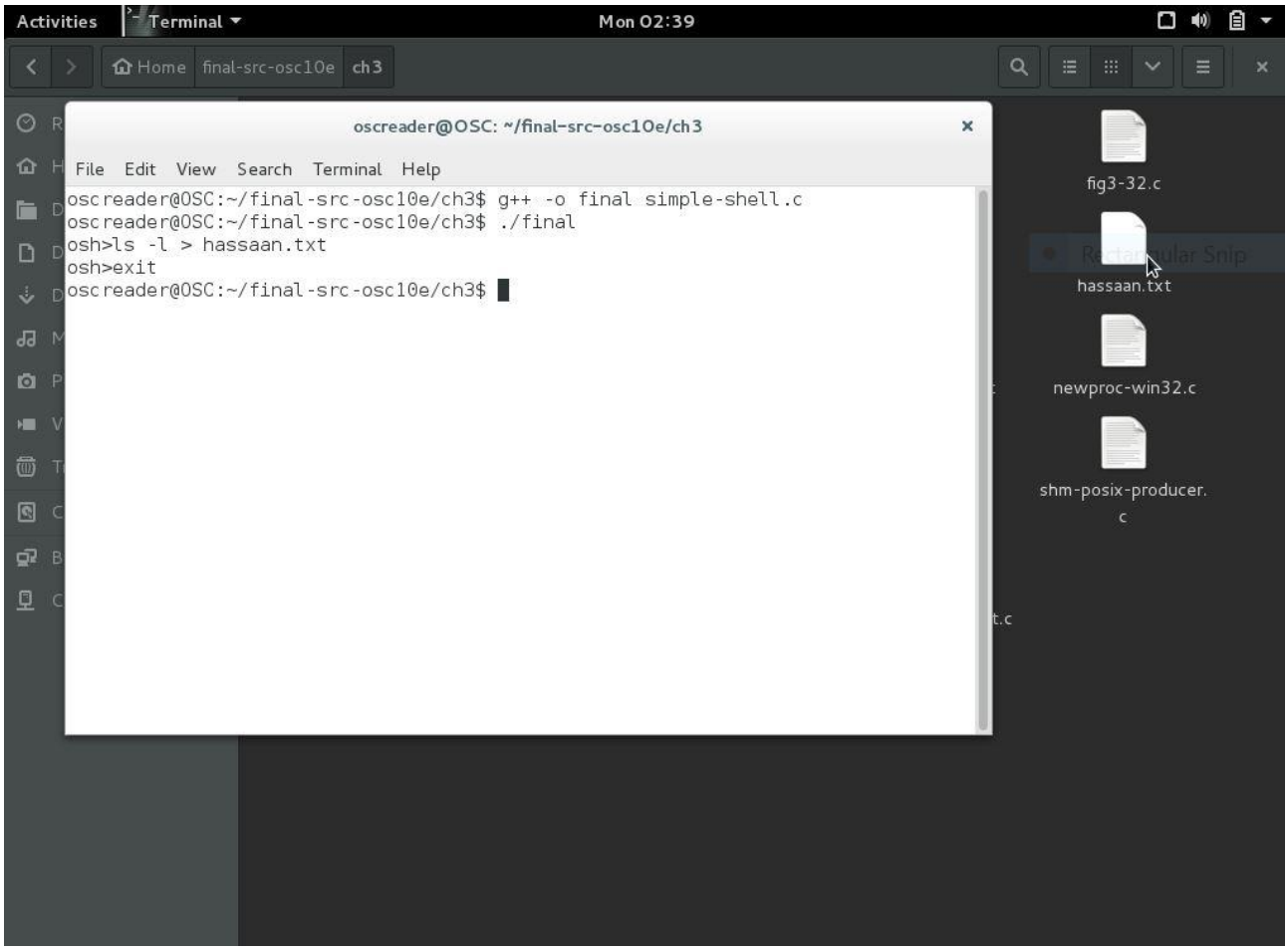
ls & > ps > ls > !!

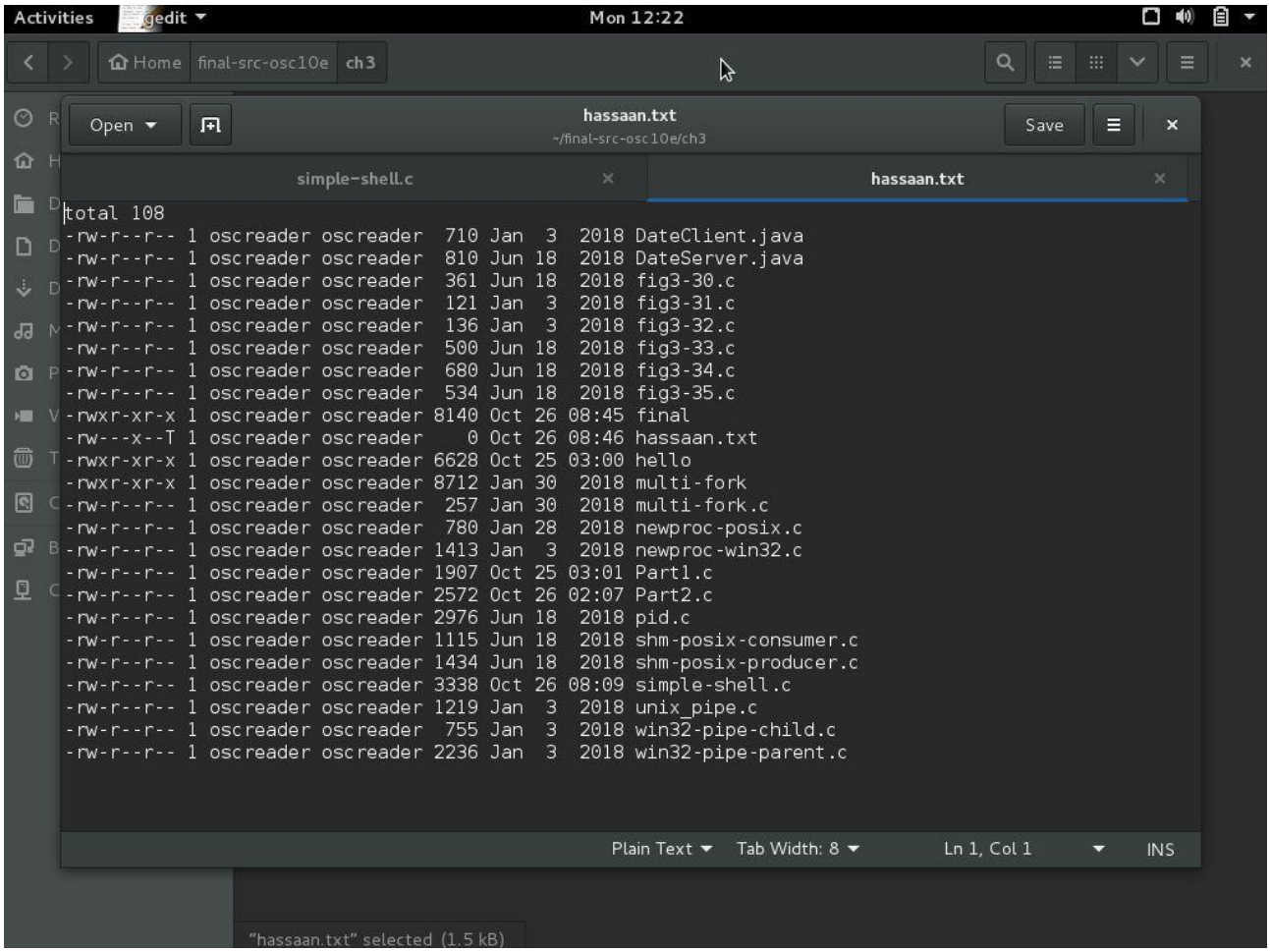


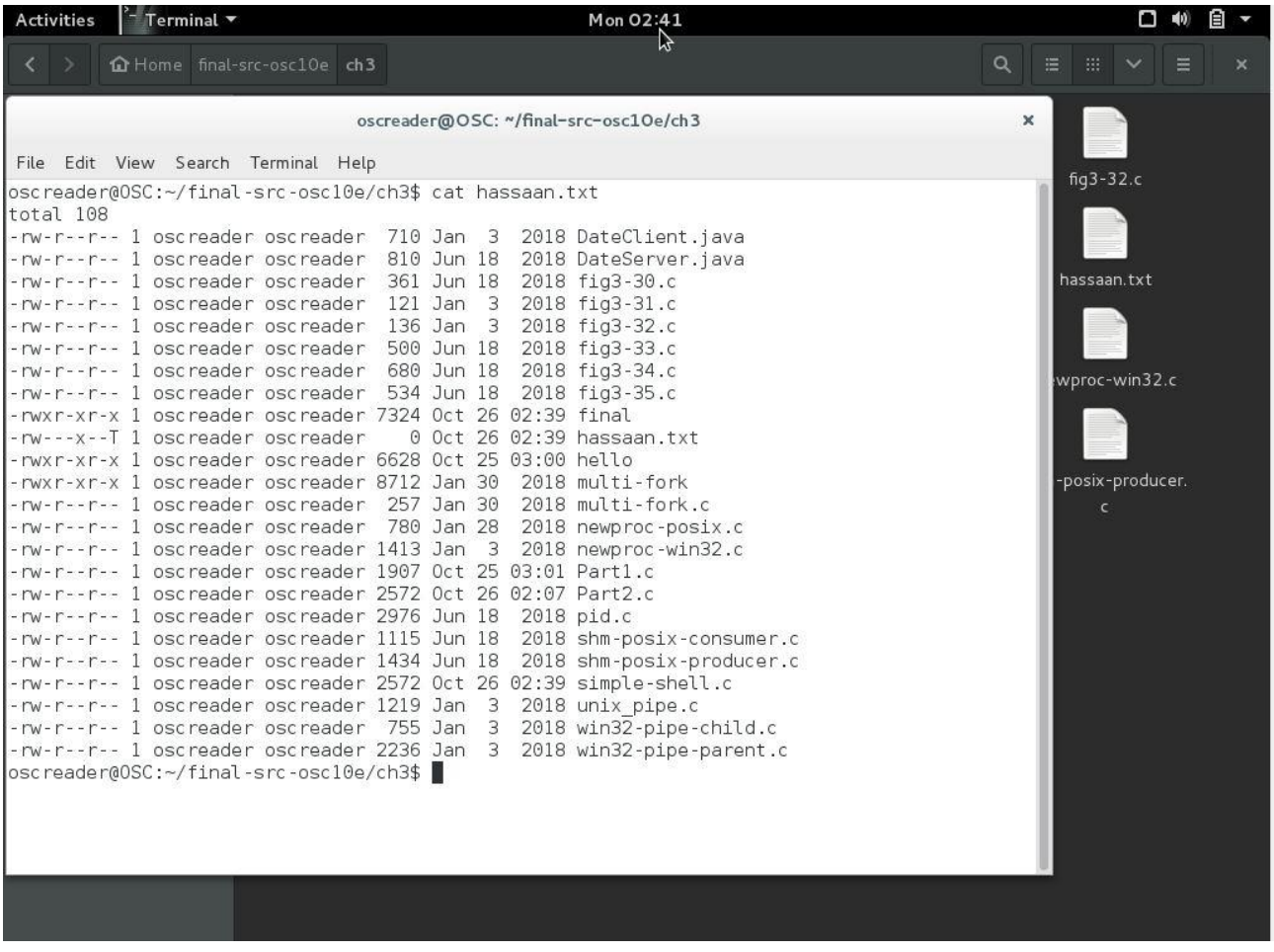
ls & > ps > !!


Activities
Terminal
Mon 08:39
oscreader@OSC: ~/final-src-osc10e/ch3
File Edit View Search Terminal Help
oscreader@OSC:~/final-src-osc10e/ch3$ g++ -o final simple-shell.c
oscreader@OSC:~/final-src-osc10e/ch3$ ./final
osh>ls &
osh>DateClient.java fig3-33.c hello Part1.c simple-shell.c
DateServer.java fig3-34.c multi-fork Part2.c unix_pipe.c
fig3-30.c fig3-35.c multi-fork.c pid.c win32-pipe-child.c
fig3-31.c final newproc-posix.c shm-posix-consumer.c win32-pipe-parent.c
fig3-32.c hassaan.txt newproc-win32.c shm-posix-producer.c
ps
osh> PID TTY TIME CMD
2102 pts/3 00:00:00 bash
2136 pts/3 00:00:00 final
2137 pts/3 00:00:00 final
2145 pts/3 00:00:00 final
2154 pts/3 00:00:00 final
2158 pts/3 00:00:00 ls <defunct>
2167 pts/3 00:00:00 final
2169 pts/3 00:00:00 ps
!!
osh> PID TTY TIME CMD
2102 pts/3 00:00:00 bash
2136 pts/3 00:00:00 final
2137 pts/3 00:00:00 final
2145 pts/3 00:00:00 final
2154 pts/3 00:00:00 final
2158 pts/3 00:00:00 ls <defunct>
2167 pts/3 00:00:00 final
2170 pts/3 00:00:00 ps
fig3-32.c
hassaan.txt
wproc-win32.c
posix-producer.
c

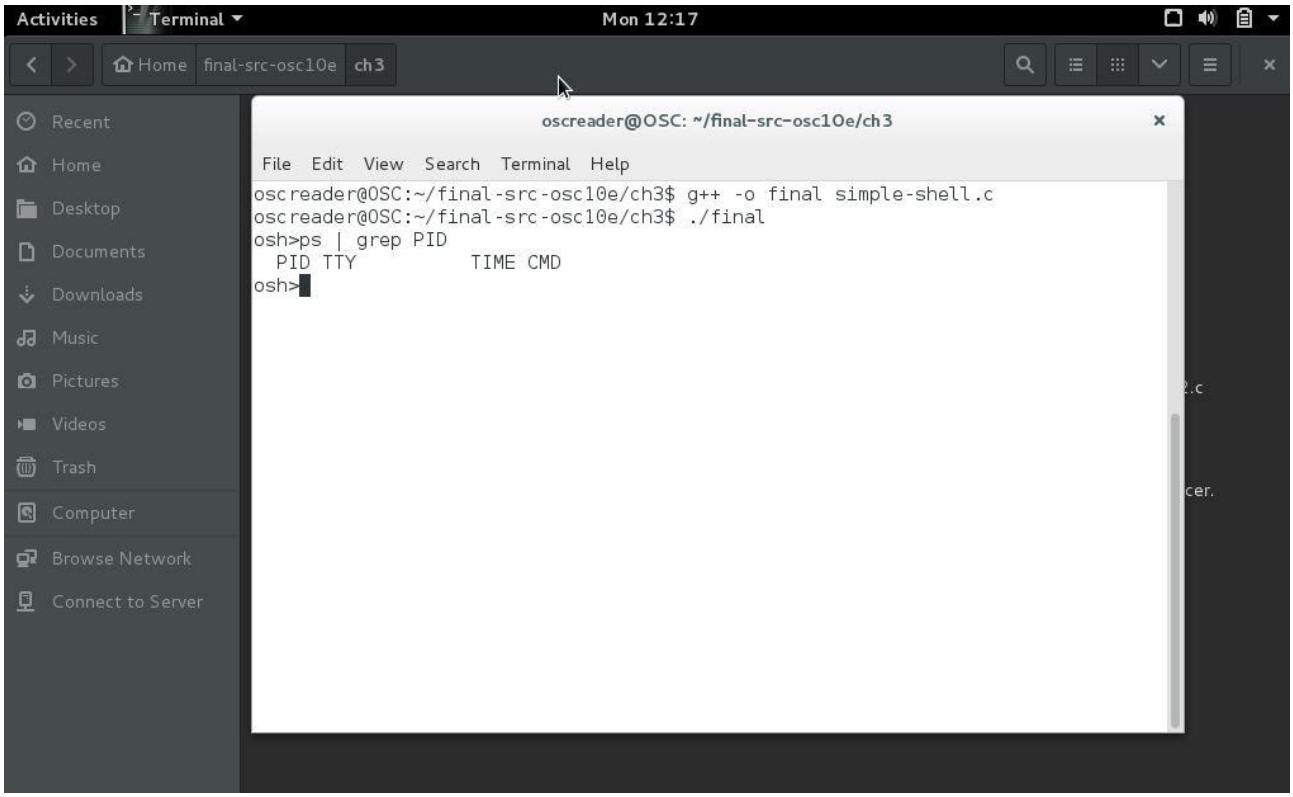
Part IV:

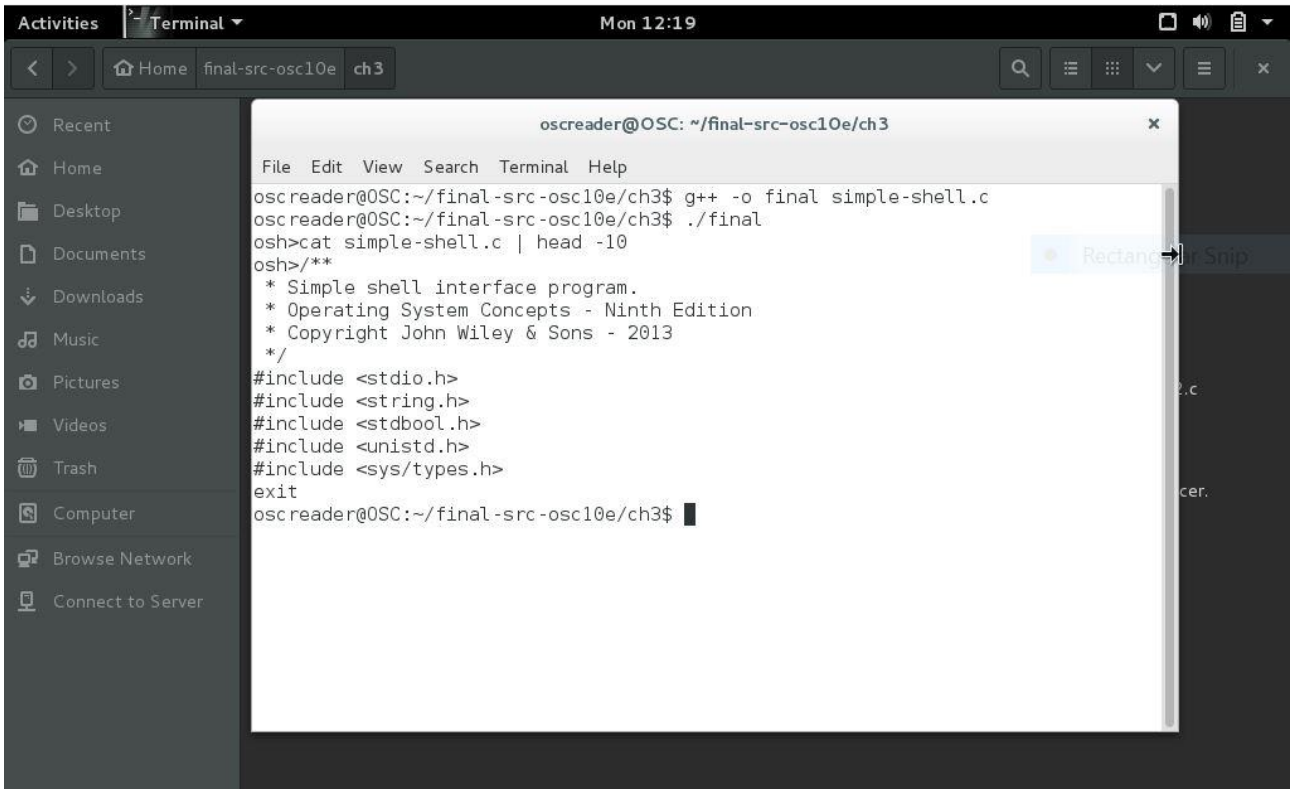

Activities
Terminal
Mon 02:39
Home
final-src-osc10e
ch3
oscreader@OSC: ~/final-src-osc10e/ch3
File Edit View Search Terminal Help
oscreader@OSC:~/final-src-osc10e/ch3$ g++ -o final simple-shell.c
oscreader@OSC:~/final-src-osc10e/ch3$ ./final
osh>ls -l > hassaan.txt
osh>exit
oscreader@OSC:~/final-src-osc10e/ch3$
fig3-32.c
hassaan.txt
newproc-win32.c
shm-posix-producer.
c


Activities
gedit
Mon 12:22
Home
final-src-osc10e
ch3
Open
hassaan.txt
~/final-src-osc10e/ch3
Save
simple-shell.c
hassaan.txt
total 108
-rw-r--r-- 1 oscreader oscreader 710 Jan 3 2018 DateClient.java
-rw-r--r-- 1 oscreader oscreader 810 Jun 18 2018 DateServer.java
-rw-r--r-- 1 oscreader oscreader 361 Jun 18 2018 fig3-30.c
-rw-r--r-- 1 oscreader oscreader 121 Jan 3 2018 fig3-31.c
-rw-r--r-- 1 oscreader oscreader 136 Jan 3 2018 fig3-32.c
-rw-r--r-- 1 oscreader oscreader 500 Jun 18 2018 fig3-33.c
-rw-r--r-- 1 oscreader oscreader 680 Jun 18 2018 fig3-34.c
-rw-r--r-- 1 oscreader oscreader 534 Jun 18 2018 fig3-35.c
-rwxr-xr-x 1 oscreader oscreader 8140 Oct 26 08:45 final
-rw---x--T 1 oscreader oscreader 0 Oct 26 08:46 hassaan.txt
-rwxr-xr-x 1 oscreader oscreader 6628 Oct 25 03:00 hello
-rwxr-xr-x 1 oscreader oscreader 8712 Jan 30 2018 multi-fork
-rw-r--r-- 1 oscreader oscreader 257 Jan 30 2018 multi-fork.c
-rw-r--r-- 1 oscreader oscreader 780 Jan 28 2018 newproc-posix.c
-rw-r--r-- 1 oscreader oscreader 1413 Jan 3 2018 newproc-win32.c
-rw-r--r-- 1 oscreader oscreader 1907 Oct 25 03:01 Part1.c
-rw-r--r-- 1 oscreader oscreader 2572 Oct 26 02:07 Part2.c
-rw-r--r-- 1 oscreader oscreader 2976 Jun 18 2018 pid.c
-rw-r--r-- 1 oscreader oscreader 1115 Jun 18 2018 shm-posix-consumer.c
-rw-r--r-- 1 oscreader oscreader 1434 Jun 18 2018 shm-posix-producer.c
-rw-r--r-- 1 oscreader oscreader 3338 Oct 26 08:09 simple-shell.c
-rw-r--r-- 1 oscreader oscreader 1219 Jan 3 2018 unix_pipe.c
-rw-r--r-- 1 oscreader oscreader 755 Jan 3 2018 win32-pipe-child.c
-rw-r--r-- 1 oscreader oscreader 2236 Jan 3 2018 win32-pipe-parent.c
Plain Text
Tab Width: 8
Ln 1, Col 1
INS
"hassaan.txt" selected (1.5 kB)


Activities
Terminal
Mon 02:41
Home
final-src-osc10e
ch3
oscreader@OSC: ~/final-src-osc10e/ch3
File Edit View Search Terminal Help
oscreader@OSC:~/final-src-osc10e/ch3$ cat hassaan.txt
total 108
-rw-r--r-- 1 oscreader oscreader 710 Jan 3 2018 DateClient.java
-rw-r--r-- 1 oscreader oscreader 810 Jun 18 2018 DateServer.java
-rw-r--r-- 1 oscreader oscreader 361 Jun 18 2018 fig3-30.c
-rw-r--r-- 1 oscreader oscreader 121 Jan 3 2018 fig3-31.c
-rw-r--r-- 1 oscreader oscreader 136 Jan 3 2018 fig3-32.c
-rw-r--r-- 1 oscreader oscreader 500 Jun 18 2018 fig3-33.c
-rw-r--r-- 1 oscreader oscreader 680 Jun 18 2018 fig3-34.c
-rw-r--r-- 1 oscreader oscreader 534 Jun 18 2018 fig3-35.c
-rwxr-xr-x 1 oscreader oscreader 7324 Oct 26 02:39 final
-rw---x--T 1 oscreader oscreader 0 Oct 26 02:39 hassaan.txt
-rwxr-xr-x 1 oscreader oscreader 6628 Oct 25 03:00 hello
-rwxr-xr-x 1 oscreader oscreader 8712 Jan 30 2018 multi-fork
-rw-r--r-- 1 oscreader oscreader 257 Jan 30 2018 multi-fork.c
-rw-r--r-- 1 oscreader oscreader 780 Jan 28 2018 newproc-posix.c
-rw-r--r-- 1 oscreader oscreader 1413 Jan 3 2018 newproc-win32.c
-rw-r--r-- 1 oscreader oscreader 1907 Oct 25 03:01 Part1.c
-rw-r--r-- 1 oscreader oscreader 2572 Oct 26 02:07 Part2.c
-rw-r--r-- 1 oscreader oscreader 2976 Jun 18 2018 pid.c
-rw-r--r-- 1 oscreader oscreader 1115 Jun 18 2018 shm-posix-consumer.c
-rw-r--r-- 1 oscreader oscreader 1434 Jun 18 2018 shm-posix-producer.c
-rw-r--r-- 1 oscreader oscreader 2572 Oct 26 02:39 simple-shell.c
-rw-r--r-- 1 oscreader oscreader 1219 Jan 3 2018 unix_pipe.c
-rw-r--r-- 1 oscreader oscreader 755 Jan 3 2018 win32-pipe-child.c
-rw-r--r-- 1 oscreader oscreader 2236 Jan 3 2018 win32-pipe-parent.c
oscreader@OSC:~/final-src-osc10e/ch3$
fig3-32.c
hassaan.txt
wproc-win32.c
-posix-producer.
c

Part V:


Activities
Terminal
Mon 12:17
Home
final-src-osc10e
ch3
Recent
Home
Desktop
Documents
Downloads
Music
Pictures
Videos
Trash
Computer
Browse Network
Connect to Server
oscreader@OSC: ~/final-src-osc10e/ch3
File Edit View Search Terminal Help
oscreader@OSC:~/final-src-osc10e/ch3$ g++ -o final simple-shell.c
oscreader@OSC:~/final-src-osc10e/ch3$ ./final
osh>ps | grep PID
PID TTY TIME CMD
osh>


Activities
Terminal
Mon 12:19
Home
final-src-osc10e
ch3
Recent
Home
Desktop
Documents
Downloads
Music
Pictures
Videos
Trash
Computer
Browse Network
Connect to Server
oscreader@OSC: ~/final-src-osc10e/ch3
File Edit View Search Terminal Help
oscreader@OSC:~/final-src-osc10e/ch3$ g++ -o final simple-shell.c
oscreader@OSC:~/final-src-osc10e/ch3$ ./final
osh>cat simple-shell.c | head -10
osh>/**
* Simple shell interface program.
* Operating System Concepts - Ninth Edition
* Copyright John Wiley & Sons - 2013
*/
#include <stdio.h>
#include <string.h>
#include <stdbool.h>
#include <unistd.h>
#include <sys/types.h>
exit
oscreader@OSC:~/final-src-osc10e/ch3$