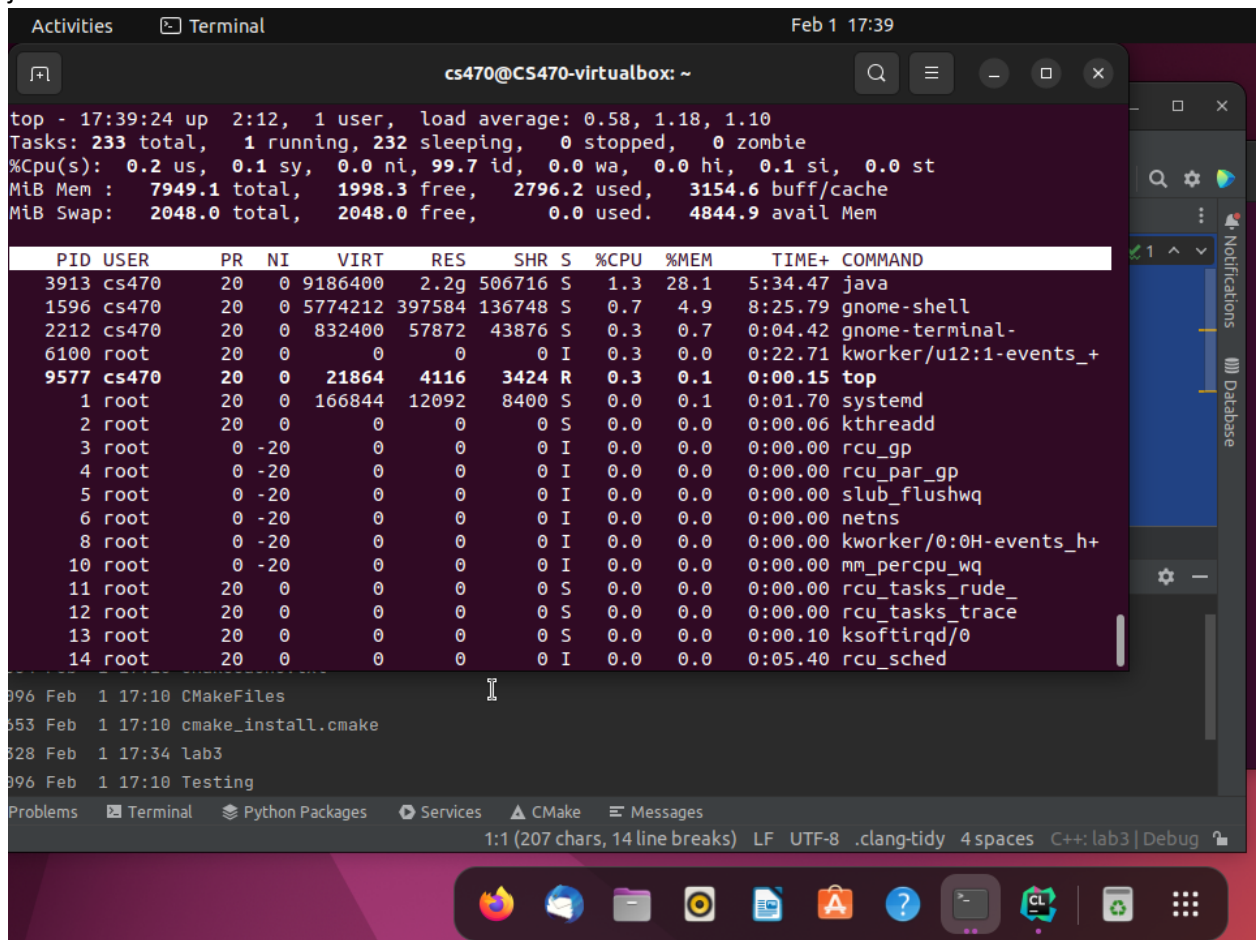


Austin Brooks

CS470

Lab 3:

- 3.
- CPU and memory
- As I have it currently configured 8GB
- java



The screenshot shows a terminal window titled "cs470@CS470-virtualbox: ~" with the following output:

```
top - 17:39:24 up 2:12, 1 user, load average: 0.58, 1.18, 1.10
Tasks: 233 total, 1 running, 232 sleeping, 0 stopped, 0 zombie
%Cpu(s): 0.2 us, 0.1 sy, 0.0 ni, 99.7 id, 0.0 wa, 0.0 hi, 0.1 st, 0.0 st
MiB Mem : 7949.1 total, 1998.3 free, 2796.2 used, 3154.6 buff/cache
MiB Swap: 2048.0 total, 2048.0 free, 0.0 used, 4844.9 avail Mem
```

PID	USER	PR	NI	VIRT	RES	SHR	S	%CPU	%MEM	TIME+	COMMAND
3913	cs470	20	0	9186400	2.2g	506716	S	1.3	28.1	5:34.47	java
1596	cs470	20	0	5774212	397584	136748	S	0.7	4.9	8:25.79	gnome-shell
2212	cs470	20	0	832400	57872	43876	S	0.3	0.7	0:04.42	gnome-terminal-
6100	root	20	0	0	0	0	I	0.3	0.0	0:22.71	kworker/u12:1-events_+
9577	cs470	20	0	21864	4116	3424	R	0.3	0.1	0:00.15	top
1	root	20	0	166844	12092	8400	S	0.0	0.1	0:01.70	systemd
2	root	20	0	0	0	0	S	0.0	0.0	0:00.06	kthreadd
3	root	0	-20	0	0	0	I	0.0	0.0	0:00.00	rcu_gp
4	root	0	-20	0	0	0	I	0.0	0.0	0:00.00	rcu_par_gp
5	root	0	-20	0	0	0	I	0.0	0.0	0:00.00	slub_flushwq
6	root	0	-20	0	0	0	I	0.0	0.0	0:00.00	netns
8	root	0	-20	0	0	0	I	0.0	0.0	0:00.00	kworker/0:0H-events_h+
10	root	0	-20	0	0	0	I	0.0	0.0	0:00.00	mm_percpu_wq
11	root	20	0	0	0	0	S	0.0	0.0	0:00.00	rcu_tasks_rude_
12	root	20	0	0	0	0	S	0.0	0.0	0:00.00	rcu_tasks_trace
13	root	20	0	0	0	0	S	0.0	0.0	0:00.10	ksoftirqd/0
14	root	20	0	0	0	0	I	0.0	0.0	0:05.40	rcu_sched

Below the table, the terminal shows a list of files and directories:

```
996 Feb 1 17:10 CMakeFiles
653 Feb 1 17:10 cmake_install.cmake
328 Feb 1 17:34 lab3
996 Feb 1 17:10 Testing
```

- java
- apt-get: a cli tool for handling packages  
yum: a package manager for RPM-based Linux  
wget: a utility for non-interactive download of files from the web  
gzip: a tool for compressing files using Lempel-Ziv Coding  
tar: an archiving utility  
rar: a program for manipulating and creation of rar archives
- 

#include <iostream>

```

#include <unistd.h>

int main() {
    pid_t pid = fork();
    if (pid == 0){
        for (int i = 0; i < 200 ; ++i) {
            printf("I am a child process");
        }
    }
    else{
        for (int i = 0; i < 200 ; ++i) {
            printf("I am a parent process");
        }
    }
}

```

8.

```

#include <iostream>
#include <unistd.h>

#include <sys/wait.h>

int main() {
    pid_t cpid;
    if (fork() == 0){
        exit(0);
    }
    else{
        cpid = wait(NULL);
        system("ls -l");
    }
}

```

}

9.

tbd