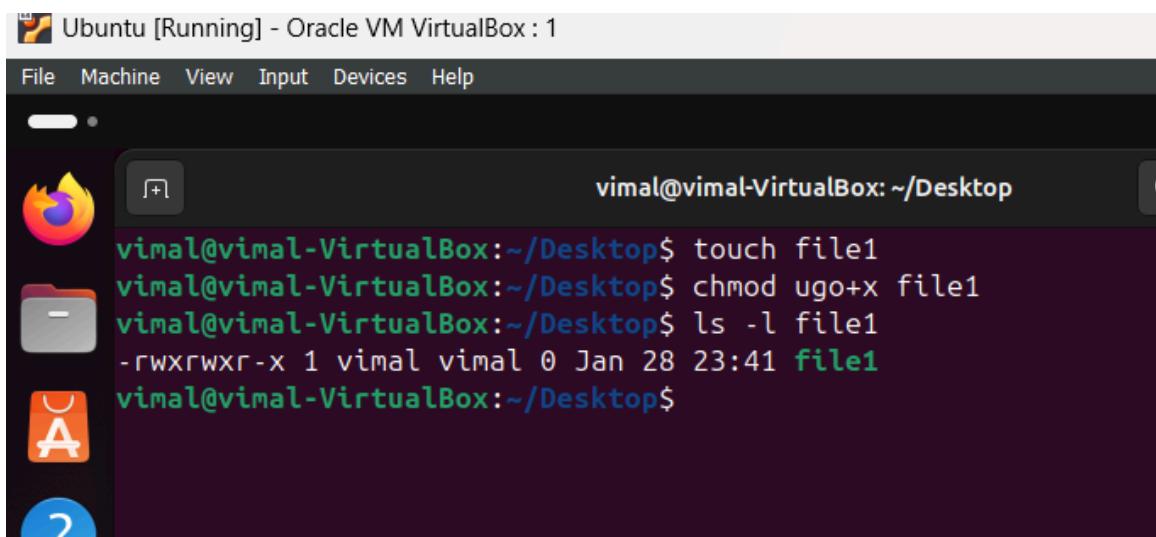


Campus Hires 2026

LINUX Weekly Assessment - 1

S Vimal

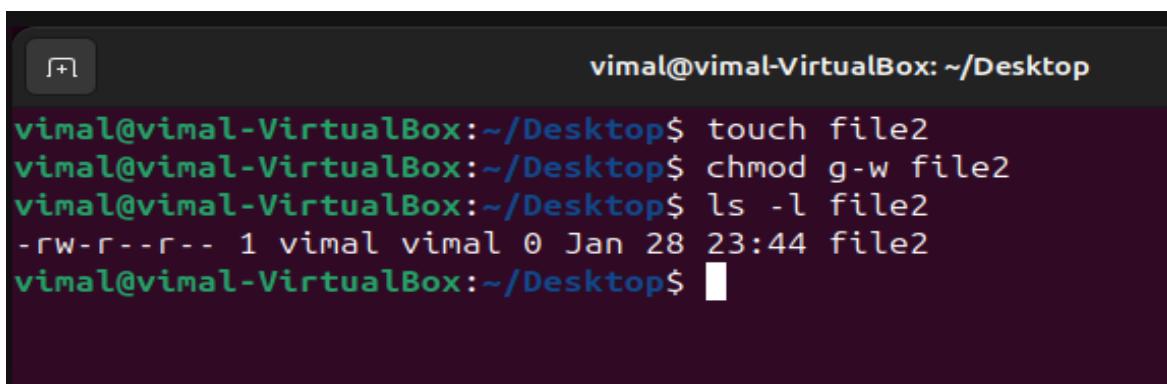
- 1) Create a file and add executable permission to all users (user, group and others)



```
vimal@vimal-VirtualBox:~/Desktop$ touch file1
vimal@vimal-VirtualBox:~/Desktop$ chmod ugo+x file1
vimal@vimal-VirtualBox:~/Desktop$ ls -l file1
-rwxrwxr-x 1 vimal vimal 0 Jan 28 23:41 file1
vimal@vimal-VirtualBox:~/Desktop$
```

file1 is created and executable permission is added for all users and is checked using ls -l command.

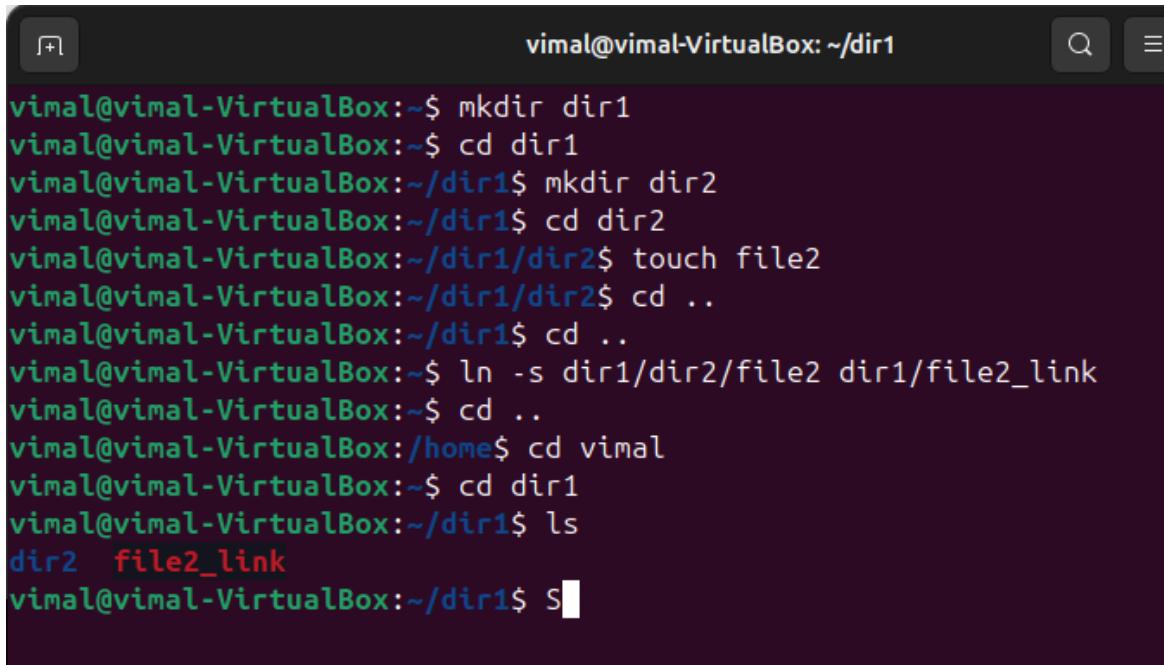
- 2) Create a file and remove write permission for group user alone.



```
vimal@vimal-VirtualBox:~/Desktop$ touch file2
vimal@vimal-VirtualBox:~/Desktop$ chmod g-w file2
vimal@vimal-VirtualBox:~/Desktop$ ls -l file2
-rw-r--r-- 1 vimal vimal 0 Jan 28 23:44 file2
vimal@vimal-VirtualBox:~/Desktop$
```

file2 is created and write permission is removed for the group

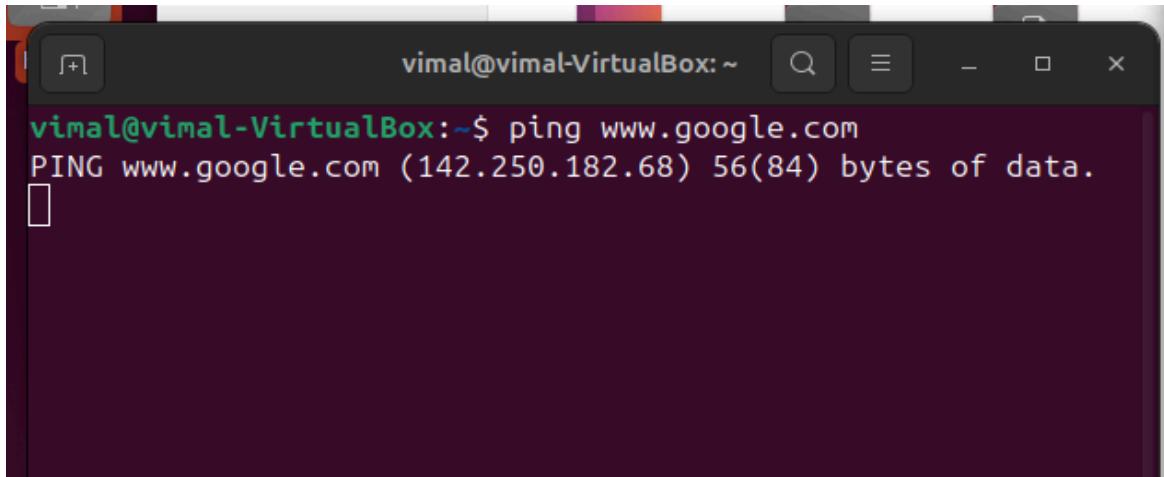
3) Create a file and add a softlink to the file in different directory
(Eg : Create a file in dir1/dir2/file and create a softlink for file inside dir1)



```
vimal@vimal-VirtualBox:~$ mkdir dir1
vimal@vimal-VirtualBox:~$ cd dir1
vimal@vimal-VirtualBox:~/dir1$ mkdir dir2
vimal@vimal-VirtualBox:~/dir1$ cd dir2
vimal@vimal-VirtualBox:~/dir1/dir2$ touch file2
vimal@vimal-VirtualBox:~/dir1/dir2$ cd ..
vimal@vimal-VirtualBox:~/dir1$ cd ..
vimal@vimal-VirtualBox:~$ ln -s dir1/dir2/file2 dir1/file2_link
vimal@vimal-VirtualBox:~$ cd ..
vimal@vimal-VirtualBox:/home$ cd vimal
vimal@vimal-VirtualBox:~$ cd dir1
vimal@vimal-VirtualBox:~/dir1$ ls
dir2  file2_link
vimal@vimal-VirtualBox:~/dir1$ S
```

file2 created in dir1/dir2/ and its softlink “file2_link” is created on dir1 using ln command

4) Use ps command with options to display all active process running on the system



```
vimal@vimal-VirtualBox:~$ ping www.google.com
PING www.google.com (142.250.182.68) 56(84) bytes of data.
```

```

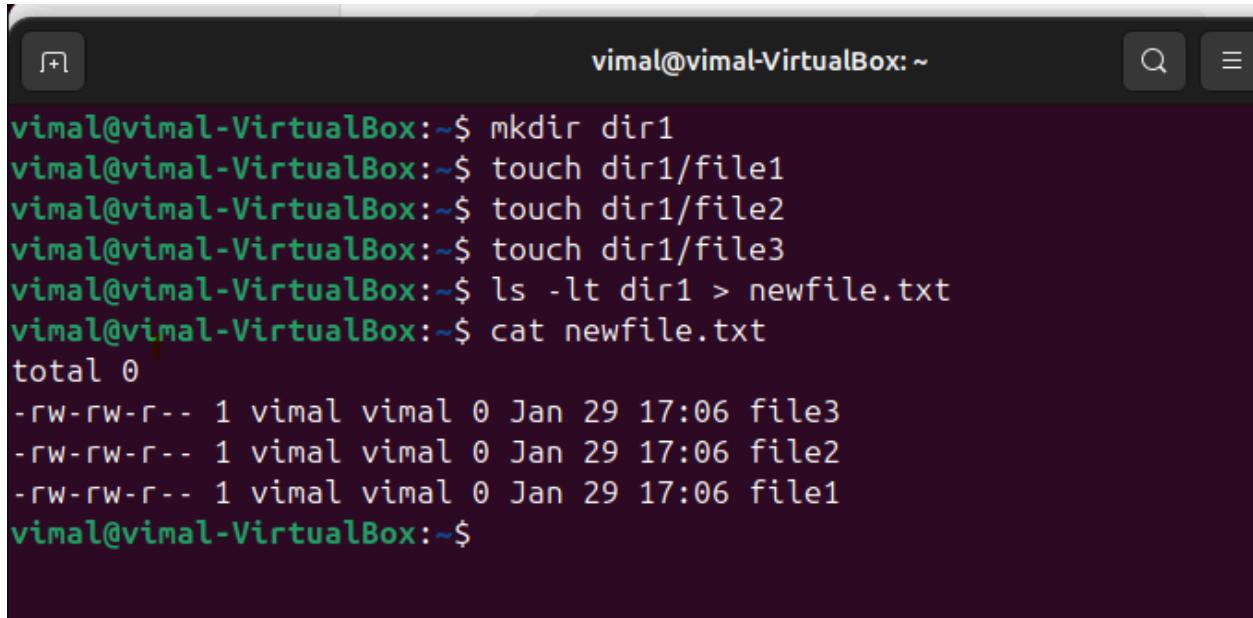
vimal@vimal-VirtualBox:~/Desktop$ ps -ef
UID      PID  PPID  C STIME TTY          TIME CMD
root      1      0  0 Jan28 ?        00:00:07 /sbin/init splash
root      2      0  0 Jan28 ?        00:00:00 [kthreadd]
root      3      2  0 Jan28 ?        00:00:00 [pool_workqueue_release]
root      4      2  0 Jan28 ?        00:00:00 [kworker/R-rcu_g]
root      5      2  0 Jan28 ?        00:00:00 [kworker/R-rcu_p]
root      6      2  0 Jan28 ?        00:00:00 [kworker/R-slub_]
root      7      2  0 Jan28 ?        00:00:00 [kworker/R-netns]
root      9      2  0 Jan28 ?        00:00:01 [kworker/0:1-events]
root     10      2  0 Jan28 ?        00:00:00 [kworker/0:0H-events_highpri]
root     12      2  0 Jan28 ?        00:00:00 [kworker/R-mm_pe]
root     13      2  0 Jan28 ?        00:00:00 [rcu_tasks_kthread]
root     14      2  0 Jan28 ?        00:00:00 [rcu_tasks_rude_kthread]
root     15      2  0 Jan28 ?        00:00:00 [rcu_tasks_trace_kthread]
root     16      2  0 Jan28 ?        00:00:00 [ksoftirqd/0]
root     17      2  0 Jan28 ?        00:00:03 [rcu_preempt]
root     18      2  0 Jan28 ?        00:00:00 [migration/0]
root     19      2  0 Jan28 ?        00:00:00 [idle_inject/0]
root     20      2  0 Jan28 ?        00:00:00 [cpuhp/0]
root     21      2  0 Jan28 ?        00:00:00 [cpuhp/1]
root     22      2  0 Jan28 ?        00:00:00 [idle_inject/1]

root    4882      1  1 Jan28 ?        00:02:11 /usr/lib/snapd/snapd
root    5199      2  0 Jan28 ?        00:00:03 [kworker/u8:10-events_unbound]
root    5749      1  0 Jan28 ?        00:00:03 /usr/libexec/fwupd/fwupd
root    5760      2  0 Jan28 ?        00:00:00 [kworker/0:2H-kblockd]
root    6028      2  0 Jan28 ?        00:00:00 [kworker/2:2H-kblockd]
root    6776      2  0 Jan28 ?        00:00:00 [psimon]
root    6786      2  0 Jan28 ?        00:00:00 [kworker/1:2H-kblockd]
root    7265      2  0 Jan28 ?        00:00:02 [kworker/u8:1-events_unbound]
root    7276      2  0 Jan28 ?        00:00:00 [kworker/0:0]
vimal   7315    3457  0 Jan28 ?        00:00:03 gjs /usr/share/gnome-shell/extensions/ding@rastersof
root    7359      2  0 Jan28 ?        00:00:00 [kworker/1:0-cgroup_destroy]
root    7683      2  0 Jan28 ?        00:00:00 [kworker/2:3-events]
vimal   7771    3196  1 Jan28 ?        00:00:10 /usr/bin/nautilus --gapplication-service
root    7833      2  0 Jan28 ?        00:00:00 [kworker/2:0-cgroup_destroy]
root    7849      2  0 Jan28 ?        00:00:01 [kworker/u8:2-events_unbound]
root    7891      2  0 Jan28 ?        00:00:00 [kworker/3:3-events]
root    7979      2  0 00:00 ?        00:00:00 [kworker/1:2-cgroup_destroy]
root    7988      2  0 00:00 ?        00:00:00 [kworker/2:1]
root    7990      2  0 00:00 ?        00:00:00 [kworker/2:2]
root    7991      1  0 00:00 ?        00:00:00 /usr/sbin/cupsd -l
cups-br+ 7992      1  0 00:00 ?        00:00:00 /usr/sbin/cups-browsed
root    7997      2  0 00:00 ?        00:00:00 [kworker/3:0-cgroup_destroy]
root    8084      2  0 00:00 ?        00:00:00 [kworker/u8:0]
vimal   8134    3196  3 00:01 ?        00:00:04 /usr/libexec/gnome-terminal-server
vimal   8142    8134  0 00:01 pts/0    00:00:00 bash
vimal   8148    8142  0 00:01 pts/0    00:00:00 ping www.google.com
vimal   8149    7315  0 00:01 ?        00:00:00 /usr/bin/python3 /usr/bin/gnome-terminal --wait
vimal   8150    8149  0 00:01 ?        00:00:00 /usr/bin/gnome-terminal.real --wait
vimal   8157    8134  0 00:01 pts/1    00:00:00 bash
root    8695      2  0 00:02 ?        00:00:00 [kworker/u8:3]
vimal   8910    8157  0 00:03 pts/1    00:00:00 ps -ef

```

“ping www.google.com” process can be seen in the terminal

5) Create 3 files in a dir1 and re-direct the output of list command with sorted by timestamp of the files to a file



```
vimal@vimal-VirtualBox:~$ mkdir dir1
vimal@vimal-VirtualBox:~$ touch dir1/file1
vimal@vimal-VirtualBox:~$ touch dir1/file2
vimal@vimal-VirtualBox:~$ touch dir1/file3
vimal@vimal-VirtualBox:~$ ls -lt dir1 > newfile.txt
vimal@vimal-VirtualBox:~$ cat newfile.txt
total 0
-rw-rw-r-- 1 vimal vimal 0 Jan 29 17:06 file3
-rw-rw-r-- 1 vimal vimal 0 Jan 29 17:06 file2
-rw-rw-r-- 1 vimal vimal 0 Jan 29 17:06 file1
vimal@vimal-VirtualBox:~$
```

All the contents of dir1 is sorted and the output is re-directed to newfile.txt