

Mod 1 Assessment

1) Create a file and add executable permission to all users

```
vishnu@vishnu:~/Documents/linux_assignments/assignment_1$ touch myscript.sh
vishnu@vishnu:~/Documents/linux_assignments/assignment_1$ chmod a+x myscript.sh
```

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

```
vishnu@vishnu:~/Documents/linux_assignments/assignment_1$ touch secure_file.txt
vishnu@vishnu:~/Documents/linux_assignments/assignment_1$ chmod g-w secure_file.txt
```

3) Create a file in dir1/dir2 and create a softlink in dir1

```
vishnu@vishnu:~/Documents/linux_assignments/assignment_1$ mkdir -p dir1/dir2
vishnu@vishnu:~/Documents/linux_assignments/assignment_1$ touch dir1/dir2/actual_file
vishnu@vishnu:~/Documents/linux_assignments/assignment_1$ ln -s dir2/actual_file dir1/softlink
```

4) Use ps command to display all active processes

```
vishnu@vishnu:~/Documents/linux_assignments/assignment_1$ ps aux
```

USER	PID	%CPU	%MEM	VSZ	RSS	TTY	STAT	START	TIME	COMMAND
root	1	0.1	0.3	23172	13692	?	ss	19:26	0:03	/sbin/init
root	2	0.0	0.0	0	0	?	S	19:26	0:00	[kthreadd]
root	3	0.0	0.0	0	0	?	S	19:26	0:00	[pool_workqueue_release]
root	4	0.0	0.0	0	0	?	I<	19:26	0:00	[kworker/R-rcu_ol]
root	5	0.0	0.0	0	0	?	I<	19:26	0:00	[kworker/R-rcu_ol]
root	6	0.0	0.0	0	0	?	I<	19:26	0:00	[kworker/R-slub_]
root	7	0.0	0.0	0	0	?	I<	19:26	0:00	[kworker/R-netns]
root	10	0.0	0.0	0	0	?	I<	19:26	0:00	[kworker/0:0H-events_highpri]
root	12	0.0	0.0	0	0	?	I<	19:26	0:00	[kworker/R-mm_0]
root	13	0.0	0.0	0	0	?	I	19:26	0:00	[rcu_tasks_kthread]
root	14	0.0	0.0	0	0	?	I	19:26	0:00	[rcu_tasks_rude_kthread]
root	15	0.0	0.0	0	0	?	I	19:26	0:00	[rcu_tasks_trace_kthread]
root	16	0.0	0.0	0	0	?	S	19:26	0:00	[ksoftirqd/0]
root	17	0.0	0.0	0	0	?	I	19:26	0:00	[rcu_preempt]
root	18	0.0	0.0	0	0	?	S	19:26	0:00	[migration/0]
root	19	0.0	0.0	0	0	?	S	19:26	0:00	[idle_inject/0]
root	20	0.0	0.0	0	0	?	S	19:26	0:00	[cpuhp/0]
root	21	0.0	0.0	0	0	?	S	19:26	0:00	[cpuhp/1]
root	22	0.0	0.0	0	0	?	S	19:26	0:00	[idle_inject/1]
root	23	0.0	0.0	0	0	?	S	19:26	0:00	[migration/1]
root	24	0.0	0.0	0	0	?	S	19:26	0:00	[ksoftirqd/1]
root	26	0.0	0.0	0	0	?	I<	19:26	0:00	[kworker/1:0H-events_highpri]
root	27	0.0	0.0	0	0	?	S	19:26	0:00	[cpuhp/2]
root	28	0.0	0.0	0	0	?	S	19:26	0:00	[idle_inject/2]
root	29	0.0	0.0	0	0	?	S	19:26	0:00	[migration/2]
root	30	0.0	0.0	0	0	?	S	19:26	0:00	[ksoftirqd/2]
root	32	0.0	0.0	0	0	?	I<	19:26	0:00	[kworker/2:0H-events_highpri]
root	33	0.0	0.0	0	0	?	S	19:26	0:00	[cpuhp/3]
root	34	0.0	0.0	0	0	?	S	19:26	0:00	[idle_inject/3]
root	35	0.0	0.0	0	0	?	S	19:26	0:00	[migration/3]
root	36	0.0	0.0	0	0	?	S	19:26	0:00	[ksoftirqd/3]
root	38	0.0	0.0	0	0	?	I<	19:26	0:00	[kworker/3:0H-events_highpri]
root	39	0.0	0.0	0	0	?	S	19:26	0:00	[kdevtmpfs]
root	40	0.0	0.0	0	0	?	I<	19:26	0:00	[kworker/R-inet_]
root	41	0.0	0.0	0	0	?	S	19:26	0:00	[kauditd]
root	42	0.0	0.0	0	0	?	S	19:26	0:00	[khungtaskd]
root	44	0.0	0.0	0	0	?	S	19:26	0:00	[oom_reaper]
root	45	0.0	0.0	0	0	?	I<	19:26	0:00	[kworker/R-write]
root	46	0.0	0.0	0	0	?	S	19:26	0:00	[kcompactd0]
root	47	0.0	0.0	0	0	?	SN	19:26	0:00	[ksmd]
root	49	0.0	0.0	0	0	?	SN	19:26	0:00	[khugepaged]
root	50	0.0	0.0	0	0	?	I<	19:26	0:00	[kworker/R-kint]
root	51	0.0	0.0	0	0	?	I<	19:26	0:00	[kworker/R-kbloc]

5) Create 3 files in `dir1`, list them sorted by time, and redirect to a file

```
vishnu@vishnu:~/Documents/linux_assignments/assignment_1$ touch dir1/f1
vishnu@vishnu:~/Documents/linux_assignments/assignment_1$ touch dir1/f2
vishnu@vishnu:~/Documents/linux_assignments/assignment_1$ touch dir1/f3
vishnu@vishnu:~/Documents/linux_assignments/assignment_1$ ls -lt dir1 > output.txt
vishnu@vishnu:~/Documents/linux_assignments/assignment_1$ cat output.txt
total 4
-rw-rw-r-- 1 vishnu vishnu    0 Feb 13 20:01 f3
-rw-rw-r-- 1 vishnu vishnu    0 Feb 13 20:00 f2
-rw-rw-r-- 1 vishnu vishnu    0 Feb 13 20:00 f1
lrwxrwxrwx 1 vishnu vishnu   16 Feb 13 19:58 softlink -> dir2/actual_file
drwxrwxr-x 2 vishnu vishnu 4096 Feb 13 19:58 dir2
```