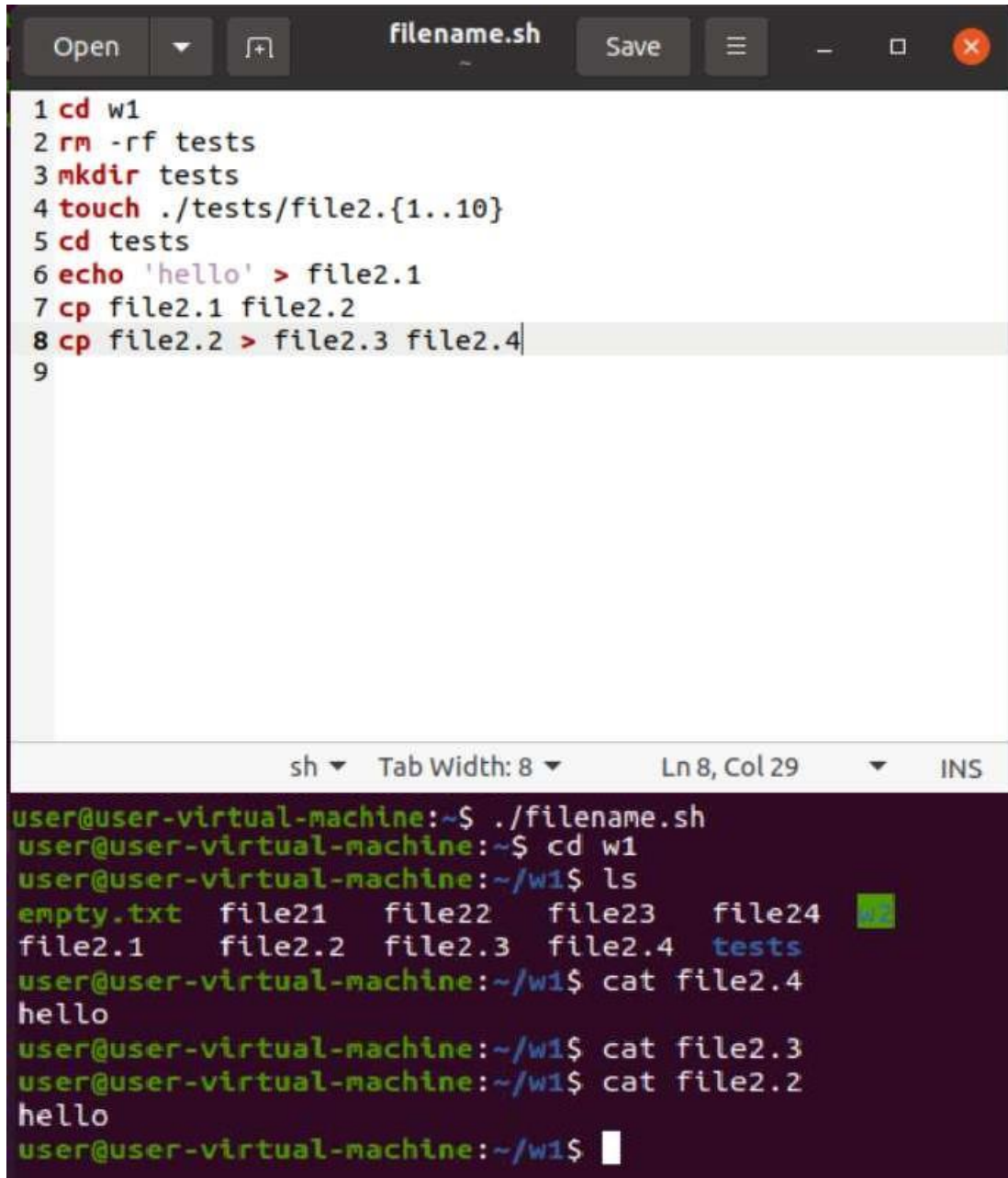


Session 9 Bash commands

Use `./filename.sh` to run a any file.



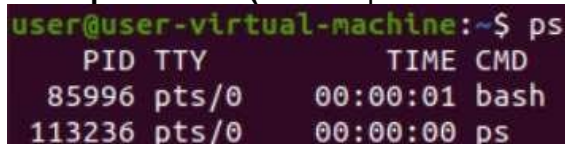
The image shows a code editor window titled 'filename.sh' with a dark theme. The editor contains a shell script with the following lines:

```
1 cd w1
2 rm -rf tests
3 mkdir tests
4 touch ./tests/file2.{1..10}
5 cd tests
6 echo 'hello' > file2.1
7 cp file2.1 file2.2
8 cp file2.2 > file2.3 file2.4
9
```

Below the editor is a terminal window showing the execution of the script. The prompt is `user@user-virtual-machine:~$`. The commands and their outputs are:

```
user@user-virtual-machine:~$ ./filename.sh
user@user-virtual-machine:~$ cd w1
user@user-virtual-machine:~/w1$ ls
empty.txt  file21    file22    file23    file24
file2.1    file2.2  file2.3   file2.4   tests
user@user-virtual-machine:~/w1$ cat file2.4
hello
user@user-virtual-machine:~/w1$ cat file2.3
hello
user@user-virtual-machine:~/w1$ cat file2.2
hello
user@user-virtual-machine:~/w1$
```

Use `ps` to display the **current running process** and **kill process ID** to kill the process or use **kill -9 process ID** (-9 to kill process forcefully).



```
user@user-virtual-machine:~$ ps
  PID TTY          TIME CMD
 85996 pts/0        00:00:01 bash
113236 pts/0        00:00:00 ps
```

```

user@user-virtual-machine:~$ ps
  PID TTY          TIME CMD
 85996 pts/0        00:00:01 bash
113236 pts/0        00:00:00 ps
user@user-virtual-machine:~$ kill 85996
user@user-virtual-machine:~$ kill -9 85996

```

Use **ps -f** to display full info about the process. PID is process id and PPID is Parent Process ID.

```

user@user-virtual-machine:~$ ps -f
UID          PID    PPID  C STIME TTY          TIME CMD
user        113259  113251  0 11:54 pts/0        00:00:00 bash
user        113273  113259  0 11:55 pts/0        00:00:00 ps -f

```

Use **ps -e** display all the **process past or present** running in the system.

```

user@user-virtual-machine:~$ ps -e
  PID TTY          TIME CMD
    1 ?           00:00:50 systemd
    2 ?           00:00:00 kthreadd
    3 ?           00:00:00 rcu_gp
    4 ?           00:00:00 rcu_par_gp
    6 ?           00:00:00 kworker/0:0H-events_highpri
    8 ?           00:00:00 mm_percpu_wq
    9 ?           00:00:00 rcu_tasks_rude_
   10 ?           00:00:00 rcu_tasks_trace
   11 ?           00:00:07 ksoftirqd/0
   12 ?           00:01:22 rcu_sched
   13 ?           00:00:04 migration/0
   14 ?           00:00:00 idle_inject/0
   16 ?           00:00:00 cpuhp/0
   17 ?           00:00:00 cpuhp/1
   18 ?           00:00:00 idle_inject/1
   19 ?           00:00:08 migration/1
   20 ?           00:00:07 ksoftirqd/1
   22 ?           00:00:00 kworker/1:0H-events_highpri
   23 ?           00:00:00 kdevtmpfs
   24 ?           00:00:00 netns
   25 ?           00:00:00 inet_frag_wq
   26 ?           00:00:00 kauditd
   30 ?           00:00:00 khungtaskd

```