

(1Q

```
osoolian_99521073@99521073:~$ last -4
testuser tty9      :2          Tue Apr 11 13:01    gone - no logout
testuser tty8      :1          Tue Apr 11 12:57    gone - no logout
osoolian tty7      :0          Tue Apr 11 12:40    gone - no logout
reboot   system boot 4.15.0-112-gener Tue Apr 11 12:39    still running

wtmp begins Tue Apr 11 12:39:57 2023
osoolian_99521073@99521073:~$ last -4 | head -4 | awk '{print $1}' | awk '{print length}'
8
8
8
6
osoolian_99521073@99521073:~$
```

(Q2

```
osoolian_99521073@99521073:~$ sudo lastb -4
osoolian          Tue Apr 11 13:01 - 13:01 (00:00)
testuser          Tue Apr 11 13:00 - 13:00 (00:00)
osoolian tty9      :2          Tue Apr 11 13:00 - 13:00 (00:00)
testuser          Tue Apr 11 12:59 - 12:59 (00:00)

btmtp begins Tue Apr 11 12:57:08 2023
osoolian_99521073@99521073:~$ sudo lastb -4 | head -4 > badlogins.txt && wc badlogins.txt -wl
 4 34 badlogins.txt
osoolian_99521073@99521073:~$ cat badlogins.txt
osoolian          Tue Apr 11 13:01 - 13:01 (00:00)
testuser          Tue Apr 11 13:00 - 13:00 (00:00)
osoolian tty9      :2          Tue Apr 11 13:00 - 13:00 (00:00)
testuser          Tue Apr 11 12:59 - 12:59 (00:00)
osoolian_99521073@99521073:~$
```

(Q3

```
osoolian_99521073@99521073:~$ echo "Hi my name is Mohammad
Hi your name is farzen
Hi her name is farzaneh" > sentences.txt
osoolian_99521073@99521073:~$ cat sentences.txt
Hi my name is Mohammad
Hi your name is farzen
Hi her name is farzaneh
osoolian_99521073@99521073:~$ read -p "word num: "
word num: 5
osoolian_99521073@99521073:~$ cut -d ' ' -f $REPLY sentences.txt
Mohammad
farzen
farzaneh
osoolian_99521073@99521073:~$
```

(Q4

```
osoolian_99521073@99521073:~$ hostname
99521073
osoolian_99521073@99521073:~$ read -p "hostname: "
hostname: newhostname
osoolian_99521073@99521073:~$ sudo hostname $REPLY
[sudo] password for osoolian_99521073:
osoolian_99521073@99521073:~$ hostname
newhostname
osoolian_99521073@99521073:~$
```

(Q5

```
osoolian_99521073@99521073:~$ last
osoolian tty7 :0 Tue Apr 11 13:36 gone - no logout
reboot system boot 4.15.0-112-gener Tue Apr 11 13:35 still running
osoolian tty7 :0 Tue Apr 11 13:31 - down (00:04)
osoolian tty7 :0 Tue Apr 11 13:26 - 13:31 (00:04)
reboot system boot 4.15.0-112-gener Tue Apr 11 13:26 - 13:35 (00:09)
testuser tty9 :2 Tue Apr 11 13:01 - crash (00:25)
testuser tty8 :1 Tue Apr 11 12:57 - crash (00:29)
osoolian tty7 :0 Tue Apr 11 12:40 - crash (00:45)
reboot system boot 4.15.0-112-gener Tue Apr 11 12:39 - 13:35 (00:55)

wtmp begins Tue Apr 11 12:39:57 2023
osoolian_99521073@99521073:~$ last -5 | head -5 | rev | cut -d ' ' -f1 | rev
logout
running
(00:04)
(00:04)
(00:09)
osoolian_99521073@99521073:~$
```