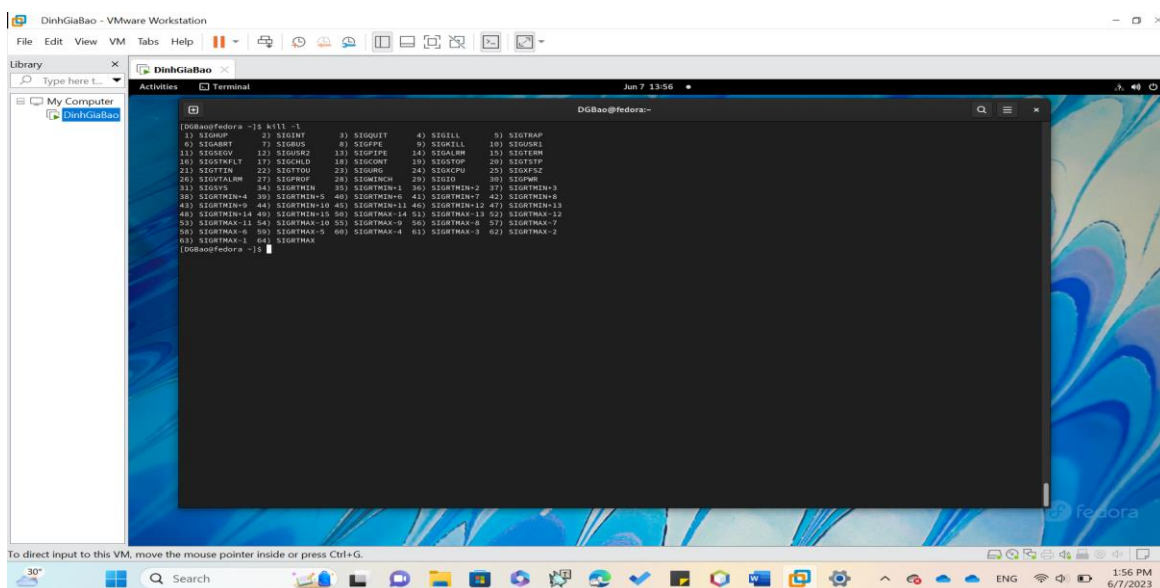
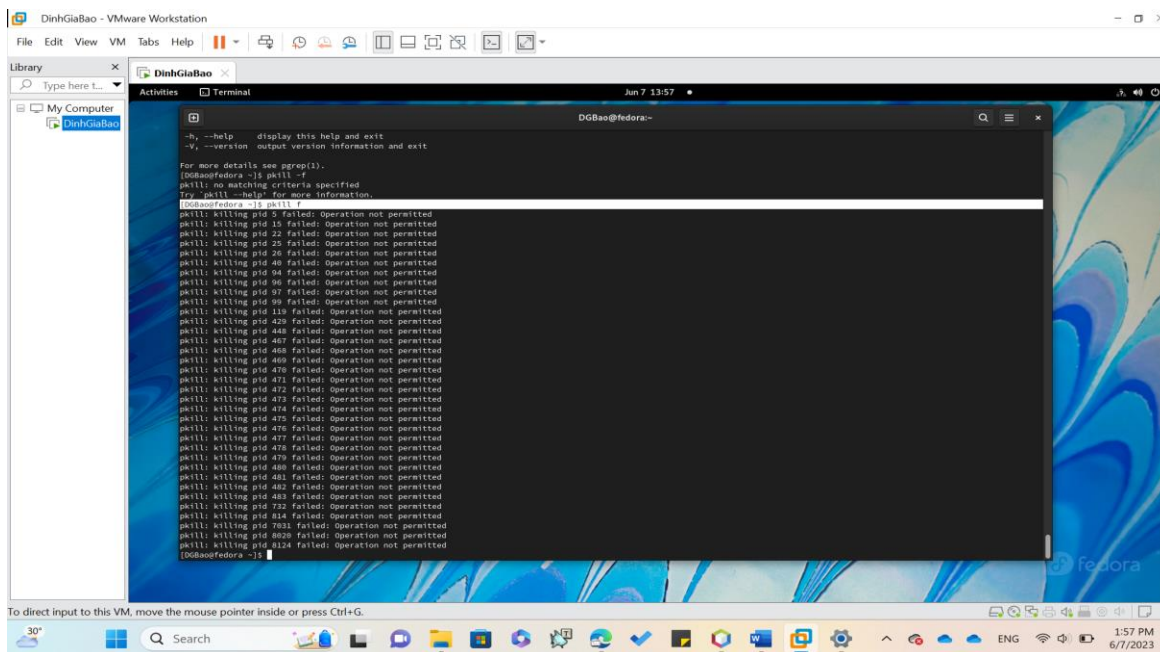


Pkill

pskill is a command-line utility that sends signals to the processes of a running program based on given criteria. The processes can be specified by their full or partial names, a user running the process, or other attributes.

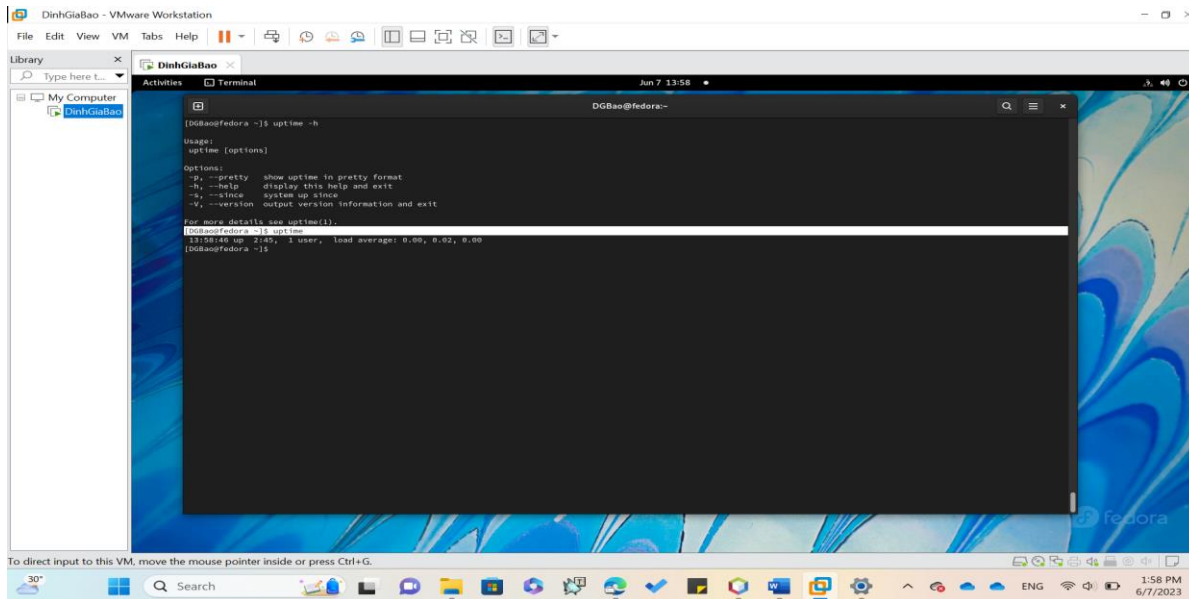
Syntax: pkill [OPTIONS] <PATTERN>



Uptime

Uptime Command In Linux: It is used to find out how long the system is active (running). This command returns set of values that involve, the current time, and the amount of time system is in running state, number of users currently logged into, and

Syntax: uptime [-options]

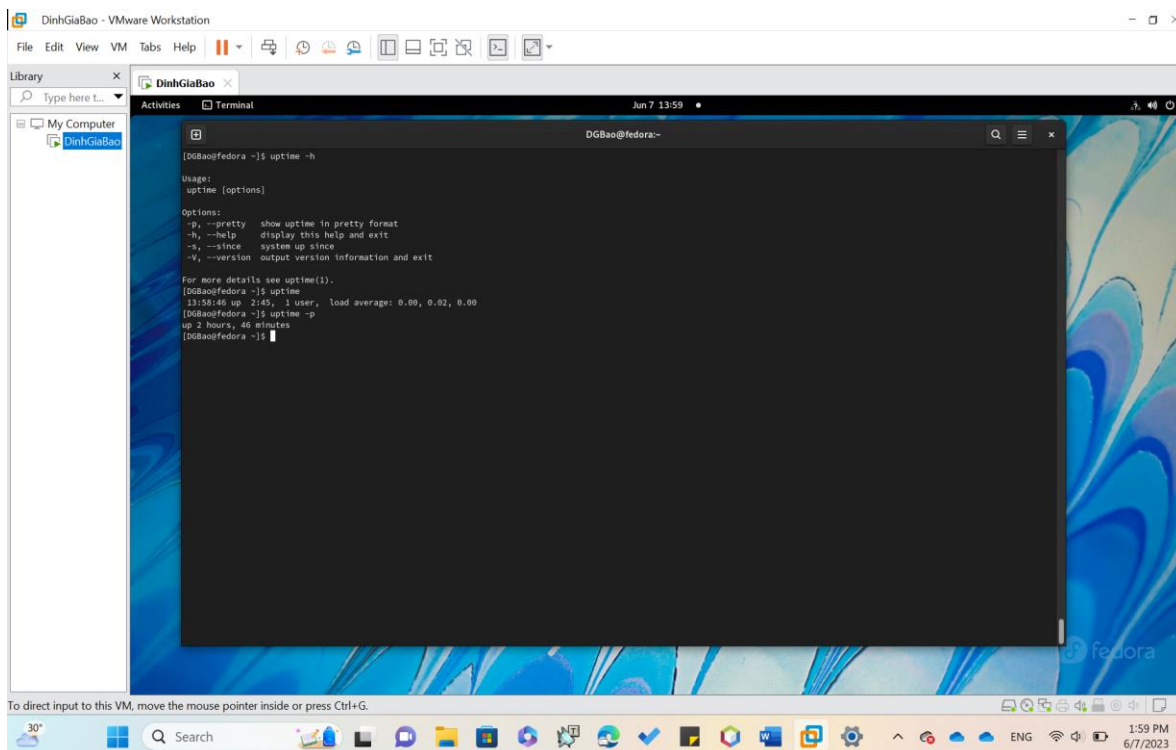


The screenshot shows a terminal window titled 'DinhGiaBao - VMware Workstation' with a sub-window 'DinhGiaBao'. The terminal prompt is 'DGBao@fedora:~'. The user has entered 'uptime -h', which displays the help text for the uptime command. The output includes usage instructions, options like --pretty, --help, --since, and --version, and a note to see uptime(1) for more details.

```
[DGBao@fedora ~]$ uptime -h
Usage:
uptime [options]

Options:
-p, --pretty    show uptime in pretty format
-h, --help      display this help and exit
-s, --since     system up since
-V, --version    output version information and exit

For more details see uptime(1).
[DGBao@fedora ~]$
```



The screenshot shows the same terminal window as above, but now the user has entered 'uptime' and 'uptime -p'. The first command shows the system has been up for 2:45 with 1 user and a load average of 0.00, 0.02, 0.00. The second command shows the uptime in a more human-readable format: 'up 2 hours, 46 minutes'.

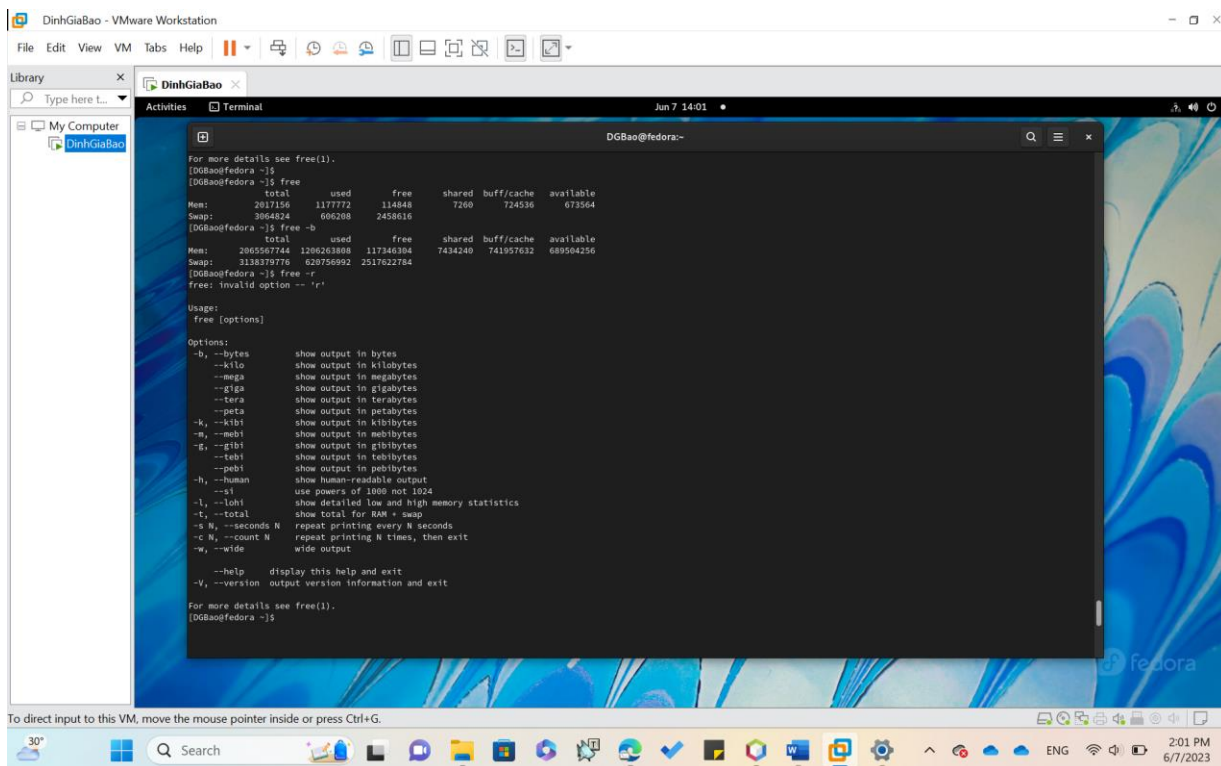
```
[DGBao@fedora ~]$ uptime
13:58:46 up 2:45, 1 user, load average: 0.00, 0.02, 0.00
[DGBao@fedora ~]$ uptime -p
up 2 hours, 46 minutes
[DGBao@fedora ~]$
```

Free

In **LINUX**, there exists a command line utility for this and that is free command which displays the total amount of free space available along with the amount of memory used and swap memory in the system, and also the buffers used by the kernel.

Syntax: `$free [OPTION]`

OPTION : refers to the options compatible with free command.



The screenshot shows a VMware Workstation window titled "DinhGiaBao - VMware Workstation". Inside, a virtual machine named "DinhGiaBao" is running a Linux system. The terminal window displays the output of the `free` command. The output shows memory usage in various units (bytes, kilobytes, megabytes, gigabytes, terabytes, petabytes, kibibytes, mebibytes, gibibytes, tebibytes, pebibytes, and human-readable output). The output is as follows:

```
For more details see free(1).
[DGBao@fedora ~]$ free
              total        used        free      shared  buff/cache   available
Mem:      2617156      1177772      114848         7260       724536      673564
Swap:      3864024         60268      2456816

[DGBao@fedora ~]$ free -b
              total        used        free      shared  buff/cache   available
Mem:      266587744      120628888      117346304         7434240       741957632      689364256
Swap:      3138379776      620756992      2517622784

[DGBao@fedora ~]$ free -r
free: invalid option -- 'r'

Usage:
free [options]

Options:
-b, --bytes          show output in bytes
--kilo              show output in kilobytes
--mega             show output in megabytes
--giga             show output in gigabytes
--tera            show output in terabytes
--peta            show output in petabytes
-k, --kibi         show output in kibibytes
-m, --mebi        show output in mebibytes
-g, --gibi        show output in gibibytes
-t, --tebi        show output in tebibytes
--pebi           show output in pebibytes
-h, --human       show human-readable output
-si              use powers of 1000 not 1024
-l, --lohi       show detailed low and high memory statistics
-t, --total      show total for RAM + swap
-s N, --seconds N repeat printing every N seconds
-c N, --count N  repeat printing N times, then exit
-w, --wide       wide output

--help          display this help and exit
-V, --version    output version information and exit

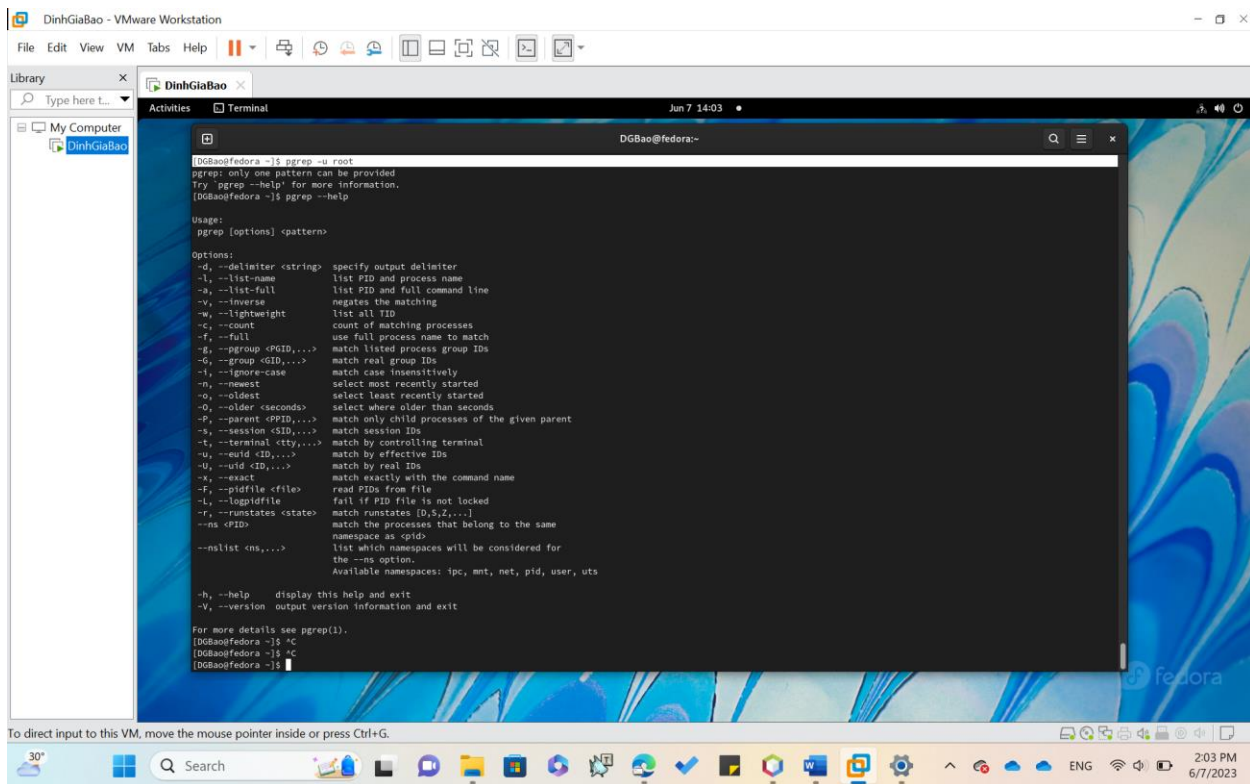
For more details see free(1).
[DGBao@fedora ~]$
```

Question 2: Capture the terminal screen using the “pgrep -u root” command.

Explain the result of the capture

Explain: The pgrep -u root command in Linux is used to search and list the process IDs (PIDs) of running processes owned by the "root" user.

Syntax : pgrep [options] <pattern>



The screenshot shows a VMware Workstation window titled "DinhGiaBao - VMware Workstation". Inside, there is a terminal window titled "DinhGiaBao" with the prompt "DGBao@fedora:~". The terminal displays the output of the command "pgrep -u root", which is the help text for the pgrep command. The help text includes the usage, options, and a list of available namespaces.

```
DGBao@fedora ~$ pgrep -u root
pgrep only one pattern can be provided
Try 'pgrep --help' for more information.
[DGBao@fedora ~]$ pgrep --help

Usage:
  pgrep [options] <pattern>

Options:
  -d, --delimiter <string>  specify output delimiter
  -l, --list-name            list PID and process name
  -a, --list-full           list PID and full command line
  -v, --inverse             negates the matching
  -w, --lightweight         list all TID
  -c, --count               count of matching processes
  -f, --full                use full process name to match
  -g, --pgroup <PGID,...>  match listed process group IDs
  -G, --group <GID,...>    match real group IDs
  -i, --ignore-case         match case insensitively
  -n, --newest              select most recently started
  -o, --oldest              select least recently started
  -O, --older <seconds>    select where older than seconds
  -P, --parent <PPID,...>  match only child processes of the given parent
  -s, --session <SID,...>  match session IDs
  -t, --terminal <tty,...> match by controlling terminal
  -u, --uid <ID,...>       match by effective IDs
  -U, --uid <ID,...>       match by real IDs
  -x, --exact               match exactly with the command name
  -F, --pidfile <file>     read PIDs from file
  -l, --logpidfile          fail if PID file is not locked
  -r, --runstates <state>  match runstates (D,S,Z,...)
  -ns <PID>                match the processes that belong to the same
                           namespace as <pid>
  --nlist <ns,...>         list which namespaces will be considered for
                           the --ns option.
                           Available namespaces: ipc, mnt, net, pid, user, uts

-h, --help                display this help and exit
-V, --version              output version information and exit

For more details see pgrep(1).
[DGBao@fedora ~]$ ^C
[DGBao@fedora ~]$ ^C
[DGBao@fedora ~]$
```


Question 3: How to open same “Task Manager” as Windows in Linux that shows the processes tab? Capture that windows (using both command and GUI on taskbar).

