

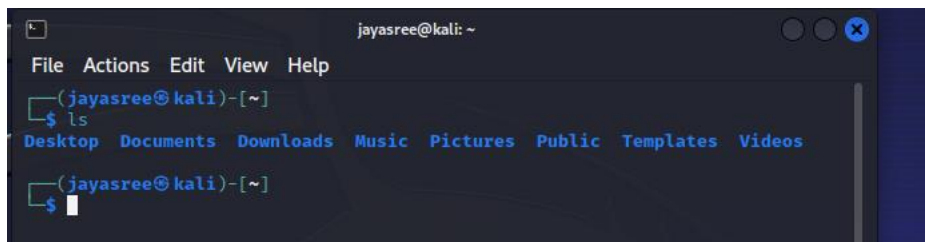
Title: Linux Command List Assessment

Name: Jayasree N

Register number: 20MIS0370

File and Directory Operations:

ls: List files and directories



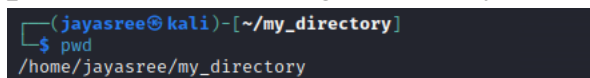
```
jayasree@kali: ~  
File Actions Edit View Help  
(jayasree@kali)~  
$ ls  
Desktop Documents Downloads Music Pictures Public Templates Videos  
(jayasree@kali)~  
$
```

cd: Change directory



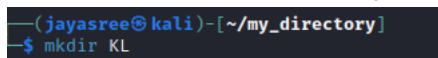
```
(jayasree@kali)~  
$ cd my_directory
```

pwd: Print working directory



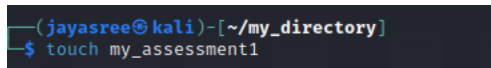
```
(jayasree@kali)~/my_directory  
$ pwd  
/home/jayasree/my_directory
```

mkdir: Make directory



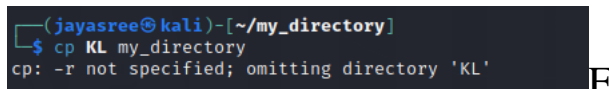
```
(jayasree@kali)~/my_directory  
$ mkdir KL
```

touch: Create an empty file



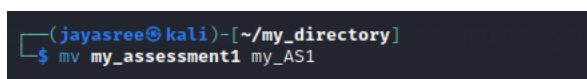
```
(jayasree@kali)~/my_directory  
$ touch my_assessment1
```

cp: Copy files and directories



```
(jayasree@kali)~/my_directory  
$ cp KL my_directory  
cp: -r not specified; omitting directory 'KL'
```

mv: Move or rename files and directories



```
(jayasree@kali)~/my_directory  
$ mv my_assessment1 my_AS1
```

rm: Remove files and directories

```
(jayasree@kali)-[~/my_directory]
$ rm my_AS1
```

find: Search for files and directories

```
(jayasree@kali)-[~/my_directory]
$ find my_AS1
find: 'my_AS1': No such file or directory
```

```
jayasree@kali: ~
File Actions Edit View Help
(jayasree@kali)-[~]
$ find
./
./bashrc.original
./vboxclient-display-svgx-x11.pid
./xsession-errors
./face.icon
./config
./config/qterminal.org
./config/qterminal.org/qterminal.ini
./config/nautilus
./config/nautilus/scripts-accls
./config/xfce4
./config/xfce4/xfwm4
./config/xfce4/xfconf
./config/xfce4/xfconf/xfce-perchannel-xml
./config/xfce4/xfconf/xfce-perchannel-xml/xfce4-panel.xml
./config/xfce4/xfconf/xfce-perchannel-xml/xfce4-desktop.xml
./config/xfce4/xfconf/xfce-perchannel-xml/xfce4-power-manager.xml
./config/xfce4/xfconf/xfce-perchannel-xml/xfwm4.xml
./config/xfce4/xfconf/xfce-perchannel-xml/xfce4-keyboard-shortcuts.xml
./config/xfce4/xfconf/xfce-perchannel-xml/thunar.xml
./config/xfce4/xfconf/xfce-perchannel-xml/displays.xml
./config/xfce4/xfconf/xfce-perchannel-xml/xfce4-notifyd.xml
./config/xfce4/desktop
```

File Viewing and Editing:

cat: Concatenate and display file content

```
(jayasree@kali)-[~]
$ cat random_file.txt
heloo world
this is Jayasree N
my register number is 20MIS0370
i am studying in vit university vellore
i am pursuing my 4th year
im doing my integrated mtech in software engineering
i am a enthusiastic person
i am currently doing my assessment
i alos registered in cyber security course
smartbridge is helping me teaching the cyber security and ethucal hacking
this course is very interesting
i feel like lerning more and more
```

less: View file content with pagination

```
jayasree@kali: ~
File Actions Edit View Help
jayasree@kali: ~ x jayasree@kali: ~ x
heloo world
this is Jayasree N
my register number is 20MIS0370
i am studying in vit university vellore
i am pursuing my 4th year
im doing my integrated mtech in software engineering
i am a enthusiastic person
i am currently doing my assessment
i alos registered in cyber security course
smartbridge is helping me teaching the cyber security and ethucal hacking
this course is very interesting
i feel like lerning more and more
random_file.txt (END)
```

```
(jayasree@kali)-[~]
$ head random_file.txt
hello world
this is Jayasree N
my register number is 20MIS0370
i am studying in vit university vellore
i am pursuing my 4th year
im doing my integrated mtech in software engineering
i am a enthusistic person
i am currently doing my assessment
i alos registered in cyber security course
smartbridge is helping me teaching the cyber security and ethucal hacking
```

```
(jayasree@kali)-[~]
$ tail random_file.txt
my register number is 20MIS0370
i am studying in vit university vellore
i am pursuing my 4th year
im doing my integrated mtech in software engineering
i am a enthusiastic person
i am currently doing my assessment
i alos registered in cyber security course
smartbridge is helping me teaching the cyber security and ethucal hacking
this course is very interesting
i feel like lerning more and more
```

```

File Actions Edit View Help
jaysree@kali: ~ × jaysree@kali: ~ ×
GNU nano 7.2 random_file.txt
Hello world
This is Jaysree N
My register number is 20MIS0370
I am studying in vit university vellore
I am pursuing my 4th year
I am doing my integrated mtech in software engineering
I am a enthusiastic person
I am currently doing my assessment
I also registered in cyber security course
Martridge is helping me teaching the cyber security and ethual hacking
this course is very interesting
I feel like learning more and more
I want to become a good ethual hacker

```

G Help X Exit R Write Out R Read File W Where Is W Replace C Cut P Paste T Execute J Justify

```

Hello world
this is Jayasree N
my register number is 20MIS00370
i am studying in vit university vellore
i am pursuing my 4th year
im doing my integrated mtech in software engineering
i am a enthusiastic person
i am currently doing my assessment
i also registered in cyber security course
smartbridge is helping me teaching the cyber security and ethical hacking
this course is very interesting
i feel like learning more and more
i want to become a good ethical hacker

"random_file.txt" 13L, 466B
1,1
ALU

```

chmod: Change file permissions

```
(jayasree@kali)~  
$ chmod 755 random_file.txt
```

chown: Change file owner

```
(jayasree@kali)~  
$ chown jayasree random_file.txt
```

chgrp: Change file group

```
(jayasree@kali)~  
$ chgrp staff random_file.txt
```

File Compression and Archiving:

tar: Archive files

```
(jayasree@kali)~  
$ touch file1.txt  
  
(jayasree@kali)~  
$ touch file2.txt  
  
(jayasree@kali)~  
$ touch my_directory  
  
(jayasree@kali)~  
$ touch archive.zip  
  
(jayasree@kali)~  
$ tar -cvf archive.tar file1.txt file2.txt my_directory  
file1.txt  
file2.txt  
my_directory/  
my_directory/my_assessment1  
my_directory/KL/  
my_directory/new_file.txt
```

gzip: Compress files

```
(jayasree@kali)~  
$ gzip file1.txt  
  
(jayasree@kali)~  
$ gzip file2.txt  
  
(jayasree@kali)~  
$ tar -czvf archive.tar.gz my_directory  
my_directory/  
my_directory/my_assessment1  
my_directory/KL/  
my_directory/new_file.txt
```

unzip: Extract files from a ZIP archive

```
(jayasree@kali)~  
$ unzip archive.zip
```

Process Management:

ps: List running processes

```
(jayasree@kali)-[~]  
$ ps  
  PID TTY          TIME CMD  
351629 pts/0    00:00:00 zsh  
351766 pts/0    00:00:00 ps
```

top: Display real-time system information and processes

```
jayasree@kali: ~  
File Actions Edit View Help  
top - 02:56:12 up 11:58, 1 user, load average: 0.15, 0.08, 0.08  
Tasks: 155 total, 1 running, 154 sleeping, 0 stopped, 0 zombie  
%Cpu(s): 1.0 us, 1.0 sy, 0.0 ni, 97.9 id, 0.0 wa, 0.0 hi, 0.1 si, 0.0  
MiB Mem : 2759.2 total, 993.2 free, 974.0 used, 999.5 buff/cache  
MiB Swap: 975.0 total, 975.0 free, 0.0 used, 1785.2 avail Mem  


| PID    | USER     | PR | NI  | VIRT   | RES    | SHR   | S | %CPU | %MEM | TIME+   |
|--------|----------|----|-----|--------|--------|-------|---|------|------|---------|
| 529    | root     | 20 | 0   | 566700 | 243784 | 72552 | S | 2.0  | 8.6  | 6:08.27 |
| 829    | jayasree | 20 | 0   | 217956 | 2464   | 2116  | S | 1.0  | 0.1  | 6:56.58 |
| 1023   | jayasree | 20 | 0   | 207096 | 40136  | 19188 | S | 0.7  | 1.4  | 3:21.20 |
| 351626 | jayasree | 20 | 0   | 440020 | 102896 | 83760 | S | 0.7  | 3.6  | 0:00.26 |
| 511    | root     | 20 | 0   | 423948 | 2892   | 2512  | S | 0.3  | 0.1  | 0:22.42 |
| 899    | jayasree | 20 | 0   | 398524 | 47728  | 33440 | S | 0.3  | 1.7  | 2:55.76 |
| 928    | jayasree | 20 | 0   | 477760 | 50548  | 35540 | S | 0.3  | 1.8  | 0:14.78 |
| 941    | jayasree | 20 | 0   | 516852 | 114648 | 50616 | S | 0.3  | 4.1  | 0:20.51 |
| 1028   | jayasree | 20 | 0   | 350312 | 30616  | 20644 | S | 0.3  | 1.1  | 2:41.05 |
| 1130   | jayasree | 20 | 0   | 312392 | 9968   | 6856  | S | 0.3  | 0.4  | 0:09.80 |
| 325571 | root     | 20 | 0   | 0      | 0      | 0     | I | 0.3  | 0.0  | 0:04.84 |
| 1      | root     | 20 | 0   | 167720 | 12192  | 8984  | S | 0.0  | 0.4  | 0:03.02 |
| 2      | root     | 20 | 0   | 0      | 0      | 0     | S | 0.0  | 0.0  | 0:00.10 |
| 3      | root     | 0  | -20 | 0      | 0      | 0     | I | 0.0  | 0.0  | 0:00.00 |
| 4      | root     | 0  | -20 | 0      | 0      | 0     | I | 0.0  | 0.0  | 0:00.00 |
| 5      | root     | 0  | -20 | 0      | 0      | 0     | I | 0.0  | 0.0  | 0:00.00 |
| 6      | root     | 0  | -20 | 0      | 0      | 0     | I | 0.0  | 0.0  | 0:00.00 |
| 10     | root     | 0  | -20 | 0      | 0      | 0     | I | 0.0  | 0.0  | 0:00.00 |
| 11     | root     | 20 | 0   | 0      | 0      | 0     | I | 0.0  | 0.0  | 0:00.00 |
| 12     | root     | 20 | 0   | 0      | 0      | 0     | I | 0.0  | 0.0  | 0:00.00 |


```

kill: Terminate processes

```
(jayasree@kali)-[~]  
$ kill 829
```

bg: Run processes in the background

```
(jayasree@kali)-[~]  
$ bg 829
```

fg: Bring background processes to the foreground

```
(jayasree@kali)-[~]  
$ fg 829
```

System Information:

uname: Print system information

```
(jayasree@kali)-[~]  
$ uname  
Linux  
  
(jayasree@kali)-[~]  
$
```

df: Display disk space usage

```
(jayasree@kali)-[~]
$ df
Filesystem      1K-blocks    Used Available Use% Mounted on
udev             1372156         0   1372156   0% /dev
tmpfs             282544         940    281604   1% /run
/dev/sda1        62762724 12720892  46821252  22% /
tmpfs            1412712         0   1412712   0% /dev/shm
tmpfs              5120         0        5120   0% /run/lock
tmpfs            282540         80    282460   1% /run/user/1000

(jayasree@kali)-[~]
$
```

free: Display memory usage

```
(jayasree@kali)-[~]
$ free
              total        used        free       shared    buff/cache   availa
ble
Mem:         2825424      828624     1490424         11584         672756         1996
800
Swap:          998396           0         998396

(jayasree@kali)-[~]
$
```

uptime: Show system uptime

```
(jayasree@kali)-[~]
$ uptime
06:39:05 up 23 min,  1 user,  load average: 0.02, 0.06, 0.08

(jayasree@kali)-[~]
$
```

who: Display logged-in users

```
(jayasree@kali)-[~]
$ who
jayasree tty7          2023-05-22 06:15 (:0)

(jayasree@kali)-[~]
$
```

w: Display logged-in users and their activities

```
(jayasree@kali)-[~]
$ w
06:39:40 up 24 min,  1 user,  load average: 0.01, 0.05, 0.08
USER      TTY      FROM          LOGIN@   IDLE   JCPU   PCPU WHAT
jayasree  tty7          :0                06:15   24:14  25.34s  0.39s xfce4-sessio

(jayasree@kali)-[~]
$
```

Networking:

ifconfig: Configure network interfaces

```
(jayasree@kali)-[~]
$ ifconfig
ipmiutil config ver 3.18
Cannot map memory.
Cannot open an IPMI driver: /dev/imb, /dev/ipmi0, /dev/ipmi/0,
or direct driverless.
ipmiutil config, cannot open IPMI driver
```

ping: Send ICMP echo requests to a network host

```
(jayasree@kali)-[~]  
$ ping C8E26522E5BB
```

ssh: Securely connect to a remote system

```
(jayasree@kali)-[~]  
$ ssh jayasree C8E26522E5BB
```

scp: Securely copy files between systems

--- scp <source_file> <user>@<host_id>:<destination_path>

wget: Download files from the web

--- wget <URL>

System Administration:

sudo: Execute commands with superuser privileges

```
(jayasree@kali)-[~]  
$ sudo su  
[sudo] password for jayasree:  
(root@kali)-[/home/jayasree]
```

apt-get: Package management for Debian-based distributions

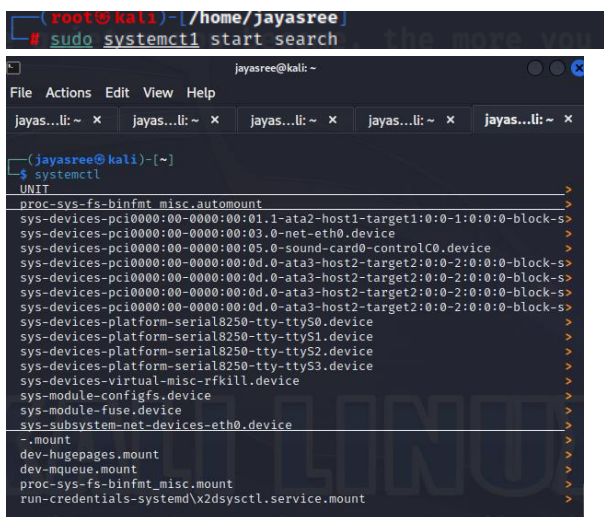
```
(root@kali)-[/home/jayasree]  
# sudo apt-get remove my_directory  
Reading package lists ... Done  
Building dependency tree ... Done  
Reading state information ... Done
```

yum: Package management for Red Hat-based distributions

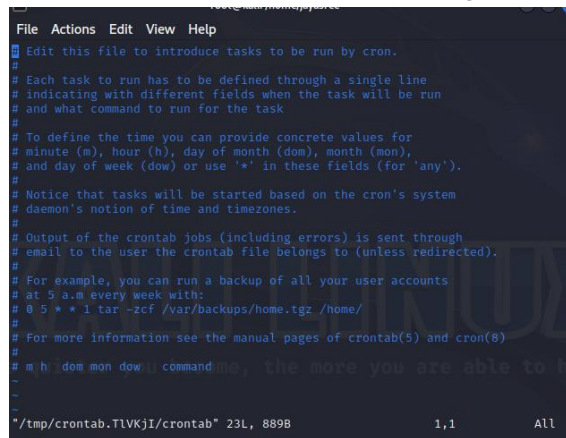
```
(jayasree@kali)-[~]  
$ yum remove my_assessment1  
Command 'yum' not found, did you mean:
```

systemctl: Manage system services

```
(root@kali)-[/home/jayasree]  
# sudo systemctl start search
```

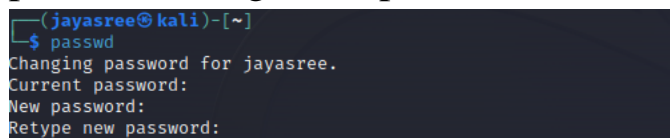


crontab: Schedule recurring tasks



```
File Actions Edit View Help
# Edit this file to introduce tasks to be run by cron.
#
# Each task to run has to be defined through a single line
# indicating with different fields when the task will be run
# and what command to run for the task
#
# To define the time you can provide concrete values for
# minute (m), hour (h), day of month (dom), month (mon),
# and day of week (dow) or use '*' in these fields (for 'any').
#
# Notice that tasks will be started based on the cron's system
# daemon's notion of time and timezones.
#
# Output of the crontab jobs (including errors) is sent through
# email to the user the crontab file belongs to (unless redirected).
#
# For example, you can run a backup of all your user accounts
# at 5 a.m every week with:
# 0 5 * * 1 tar -zcf /var/backups/home.tgz /home/
#
# For more information see the manual pages of crontab(5) and cron(8)
#
# m h dom mon dow   command
~
~
~/tmp/crontab.TlVKjI/crontab" 23L, 889B      1,1      All
```

passwd: Change user password



```
(jayasree@kali)-[~]
$ passwd
Changing password for jayasree.
Current password:
New password:
Retype new password:
```