

Title: Bash Shell Basics

SUBMITTED BY: ANUJ GUPTA

20BKT0073

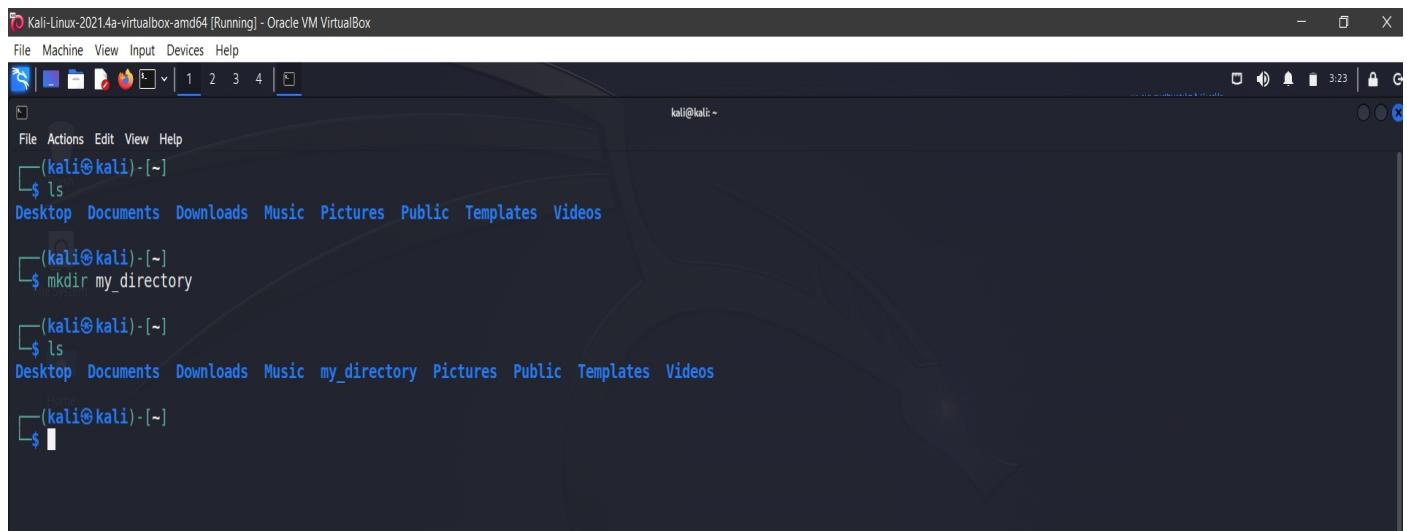
**VIT VELLORE (CSE WITH SPECIALIZATION IN
BLOCKCHAIN TECHNOLOGY)**

GDRIVE LINK:

<https://drive.google.com/file/d/16xGQTohmxDqMiws4fqQgDp9GB4HvvlU-/view?usp=sharing>

Task 1: File and Directory Manipulation

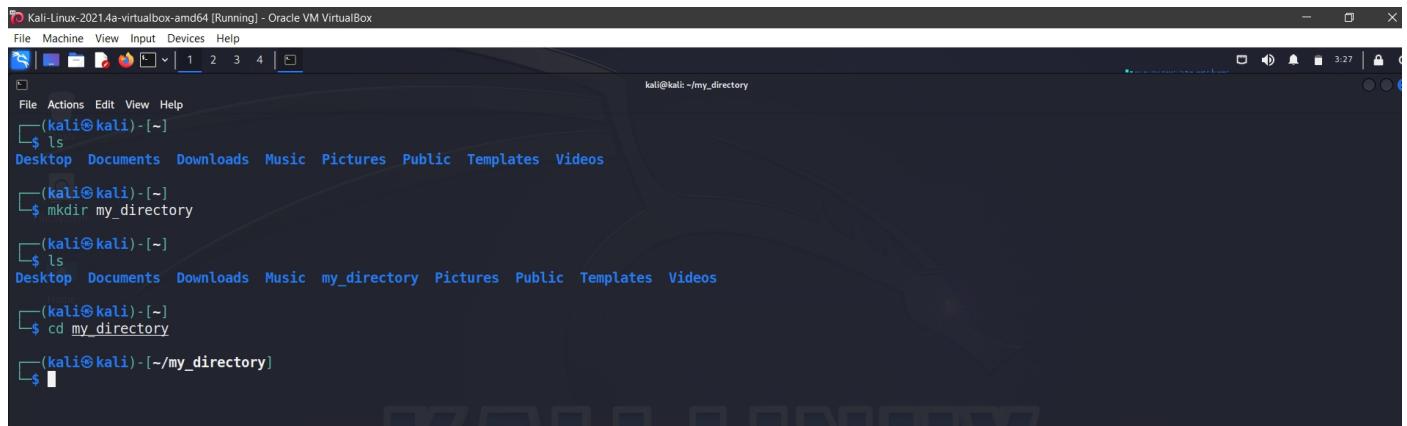
1. Create a directory called "my_directory".



```
Kali-Linux-2021.4a-virtualbox-amd64 [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
File Actions Edit View Help
(kali㉿kali)-[~]
$ ls
Desktop Documents Downloads Music Pictures Public Templates Videos
(kali㉿kali)-[~]
$ mkdir my_directory
(kali㉿kali)-[~]
$ ls
Desktop Documents Downloads Music my_directory Pictures Public Templates Videos
(kali㉿kali)-[~]
$
```

Explanation: Used ls command to show all the directories then create “my_directory” using mkdir command and displayed using ls

2. Navigate into the "my_directory".



```
Kali-Linux-2021.4a-virtualbox-amd64 [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
File Actions Edit View Help
(kali㉿kali)-[~]
$ ls
Desktop Documents Downloads Music Pictures Public Templates Videos
(kali㉿kali)-[~]
$ mkdir my_directory
(kali㉿kali)-[~]
$ ls
Desktop Documents Downloads Music my_directory Pictures Public Templates Videos
(kali㉿kali)-[~]
$ cd my_directory
(kali㉿kali)-[~/my_directory]
$
```

Explanation: we used cd command to navigate into “my_directory”.

3. Create an empty file called "my_file.txt".

```

└─(kali㉿kali)-[~]
$ cd my_directory

└─(kali㉿kali)-[~/my_directory]
$ ls

└─(kali㉿kali)-[~/my_directory]
$ touch my_file.txt

```

Explanation: Changed directory to “my_directory” used ls command to show that the directory is empty and created a new txt file named “my_file.txt” using touch command

4. List all the files and directories in the current directory.

```

└─(kali㉿kali)-[~/my_directory]
$ touch my_file.txt

└─(kali㉿kali)-[~/my_directory]
$ ls
my_file.txt

└─(kali㉿kali)-[~/my_directory]
$ 

```

Explanation: since we created a empty directory and add only my_file.txt the only content in current directory is my_file.txt

5. Rename "my_file.txt" to "new_file.txt".

```

└─(kali㉿kali)-[~/my_directory]
$ ls
my_file.txt

└─(kali㉿kali)-[~/my_directory]
$ mv my_file.txt new_file.txt

└─(kali㉿kali)-[~/my_directory]
$ ls
new_file.txt

```

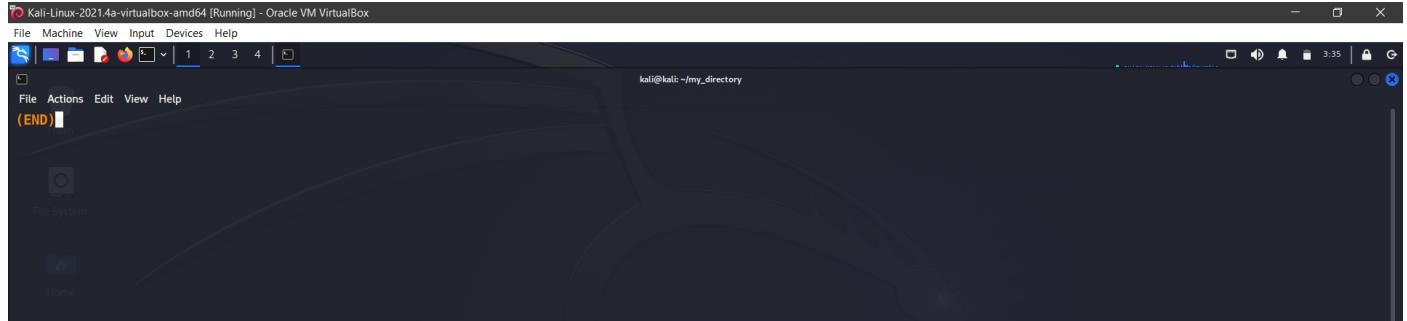
Explanation: renamed my_file.txt to new_file.txt using mv command and displayed using ls

6. Display the content of "new_file.txt" using a pager tool of your choice.

```

└─(kali㉿kali)-[~/my_directory]
$ cat new_file.txt | less

```



Explanation: This command will display the content of the file "new_file.txt" using the less pager tool. We can scroll through the content using the arrow keys and press "q" to exit.
Since the file was empty nothing was displayed

7. Append the text "Hello, World!" to "new_file.txt".

To append the text "Hello, World!" to "new_file.txt", you can use the following command:

```
(kali㉿kali)-[~/my_directory]
$ echo "Hello, World" >> new_file.txt

(kali㉿kali)-[~/my_directory]
$ cat new_file.txt
Hello, World
```

Explanation: we used echo to enter the text in the file and cat to display the content

8. Create a new directory called "backup" within "my_directory".

```
(kali㉿kali)-[~/my_directory]
$ pwd
/home/kali/my_directory

(kali㉿kali)-[~/my_directory]
$ mkdir backup

(kali㉿kali)-[~/my_directory]
$ ls
backup new_file.txt
```

Explanation: used pwd to check current directory then created backup with in "my_directory" using mkdir

9. Move "new_file.txt" to the "backup" directory.

```
(kali㉿kali)-[~/my_directory]
$ mkdir backup

(kali㉿kali)-[~/my_directory]
$ ls
backup new_file.txt

(kali㉿kali)-[~/my_directory]
$ mv new_file.txt backup/

(kali㉿kali)-[~/my_directory]
$ ls
backup

(kali㉿kali)-[~/my_directory]
$ cd backup

(kali㉿kali)-[~/my_directory/backup]
$ ls
new_file.txt

(kali㉿kali)-[~/my_directory/backup]
```

Explanation: used mv to move new_file.txt to backup and ls command to crosscheck

10. Verify that "new_file.txt" is now located in the "backup" directory.

11.

```
(kali㉿kali)-[~/my_directory]
└─$ mkdir backup
(kali㉿kali)-[~/my_directory]
└─$ ls
backup new_file.txt
(kali㉿kali)-[~/my_directory]
└─$ mv new_file.txt backup/
(kali㉿kali)-[~/my_directory]
└─$ ls
backup
(kali㉿kali)-[~/my_directory]
└─$ cd backup
(kali㉿kali)-[~/my_directory/backup]
└─$ ls
new_file.txt
(kali㉿kali)-[~/my_directory/backup]
```

Explanation: used ls command first in “my_directory” and then in “backup” to check its moved

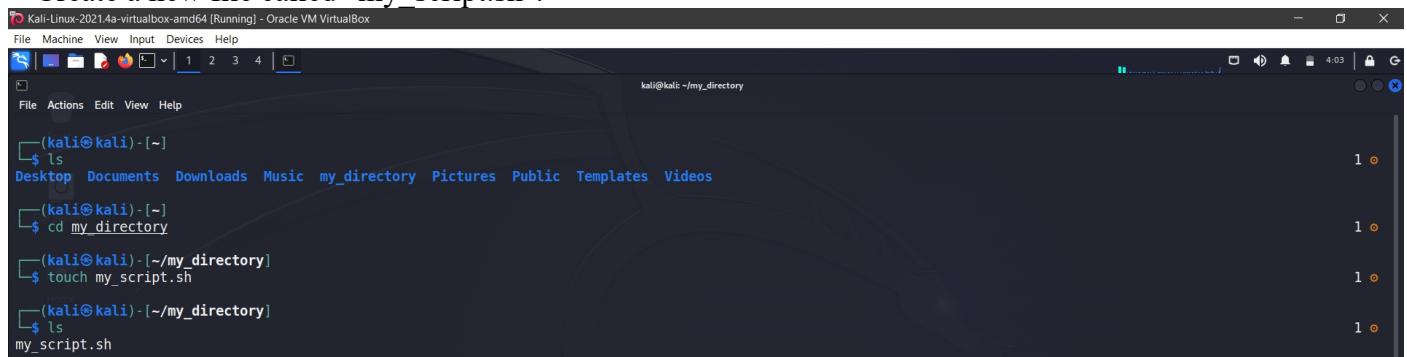
12. Delete the "backup" directory and all its contents.

```
(kali㉿kali)-[~]
└─$ rm -r my_directory/backup
(kali㉿kali)-[~]
└─$ ls
Desktop Documents Downloads Music my_directory Pictures Public Templates Videos
(kali㉿kali)-[~]
└─$ cd my_directory
(kali㉿kali)-[~/my_directory]
└─$ ls
(kali㉿kali)-[~/my_directory]
└─$
```

Explanation: we came back to home then used the command to delete backup and used cd to navigate and ls to confirm file was deleted

Task 2: Permissions and Scripting

- Create a new file called "my_script.sh".



The screenshot shows a Kali Linux desktop environment. In the foreground, a terminal window is open with the following commands and output:

```
(kali㉿kali)-[~]
└─$ ls
Desktop Documents Downloads Music my_directory Pictures Public Templates Videos
(kali㉿kali)-[~]
└─$ cd my_directory
(kali㉿kali)-[~/my_directory]
└─$ touch my_script.sh
(kali㉿kali)-[~/my_directory]
└─$ ls
my_script.sh
```

In the background, a file manager window is visible, showing the contents of the 'my_directory' folder, which includes 'Desktop', 'Documents', 'Downloads', 'Music', 'Pictures', 'Public', 'Templates', and 'Videos'.

- Edit "my_script.sh" using a text editor of your choice and add the following lines:

bash

```
#!/bin/bash
```

```
echo "Welcome to my script!"
```

```
echo "Today's date is $(date)." "
```

Save and exit the file.

The screenshot shows a Kali Linux desktop environment. At the top, there is a terminal window titled '(kali㉿kali)-[~/my_directory]' with the command '\$ ls' and the output 'my_script.sh'. Below it is another terminal window with the command '\$ nano my_script.sh' and the script content:

```
#!/bin/bash
echo "Welcome to my script!"
echo "Today's date is $(date)." "
```

Below the terminals is a nano editor window titled 'my_script.sh *' containing the same script code. The desktop background features the Kali Linux logo with the tagline 'the quieter you become, the more you are able to hear'. The bottom of the screen shows the Kali Linux desktop interface with various icons and system status indicators.

Used nano to edit the file and save

- Make "my_script.sh" executable.

Used chmod-x my_script.sh to make it executable

The screenshot shows a terminal window with the command '\$ chmod +x my_script.sh' being typed. The output shows the command was successful.

- Run "my_script.sh" and verify that the output matches the expected result.

The screenshot shows a terminal window with the command '\$./my_script.sh' being run. The output displays the welcome message and the current date and time.

```
Welcome to my script!
Today's date is Sun May 28 04:05:36 AM EDT 2023.
```

Type ./my_script.sh to run the command

Task 3: Command Execution and Pipelines

- List all the processes running on your system using the "ps" command.

We use ps aux command to list all the process on the system

20BKT0073

ANUJ GUPTA

VIT VELLORE CSE WITH BLOCKCHAIN

Kali-Linux-2021.4a-virtualbox-amd64 [Running] - Oracle VM VirtualBox

```
File Machine View Input Devices Help
File Actions Edit View Help
( kali㉿kali ) - [ ~ ]
$ ps aux
USER      PID %CPU %MEM    VSZ RSS TTY STAT START   TIME COMMAND
root      1 0.0 0.6 167800 12352 ? Ss 03:17 0:01 /sbin/init splash
root      2 0.0 0.0     0 0 ? S 03:17 0:00 [kthread]
root      3 0.0 0.0     0 0 ? I< 03:17 0:00 [rcu_gp]
root      4 0.0 0.0     0 0 ? I< 03:17 0:00 [rcu_par_gp]
root      5 0.0 0.0     0 0 ? I< 03:17 0:00 [slub flushwq]
root      6 0.0 0.0     0 0 ? I< 03:17 0:00 [netns]
root     10 0.0 0.0     0 0 ? I< 03:17 0:00 [mm_percpu_wq]
root     11 0.0 0.0     0 0 ? I 03:17 0:00 [rcu_tasks_kthread]
root     12 0.0 0.0     0 0 ? I 03:17 0:00 [rcu_tasks_rude_kthread]
root     13 0.0 0.0     0 0 ? I 03:17 0:00 [rcu_tasks_trace_kthread]
root     14 0.0 0.0     0 0 ? S 03:17 0:00 [ksoftirqd/0]
root     15 0.0 0.0     0 0 ? I 03:17 0:00 [rcu_preempt]
root     16 0.0 0.0     0 0 ? S 03:17 0:00 [migration/0]
root     18 0.0 0.0     0 0 ? S 03:17 0:00 [cpuhp/0]
root     19 0.0 0.0     0 0 ? S 03:17 0:00 [cpuhp/1]
root     20 0.0 0.0     0 0 ? S 03:17 0:00 [migration/1]
root     21 0.0 0.0     0 0 ? S 03:17 0:00 [ksoftirqd/1]
root     23 0.0 0.0     0 0 ? I< 03:17 0:00 [kworker/1:0-H-events_highpri]
root     26 0.0 0.0     0 0 ? S 03:17 0:00 [kdevtmpfs]
root     27 0.0 0.0     0 0 ? I< 03:17 0:00 [inet frag wq]
root     28 0.0 0.0     0 0 ? S 03:17 0:00 [kauditd]
root     29 0.0 0.0     0 0 ? S 03:17 0:00 [khungtaskd]
root     30 0.0 0.0     0 0 ? S 03:17 0:00 [oom_reaper]
root     32 0.0 0.0     0 0 ? I< 03:17 0:00 [writeback]
root     33 0.0 0.0     0 0 ? S 03:17 0:00 [kcompactd0]
root     34 0.0 0.0     0 0 ? SN 03:17 0:00 [ksmd]
root     35 0.0 0.0     0 0 ? SN 03:17 0:00 [khugepaged]
root     36 0.0 0.0     0 0 ? I< 03:17 0:00 [kintegrityd]
root     37 0.0 0.0     0 0 ? I< 03:17 0:00 [kblockd]
root     38 0.0 0.0     0 0 ? I< 03:17 0:00 [blkcg_punt_bio]
root     39 0.0 0.0     0 0 ? I< 03:17 0:00 [tpm_dev_wq]
root     40 0.0 0.0     0 0 ? I< 03:17 0:00 [edac-poller]
```

Kali-Linux-2021.4a-virtualbox-amd64 [Running] - Oracle VM VirtualBox

```
File Machine View Input Devices Help
File Actions Edit View Help
message+ 499 0.0 0.2 10548 5876 ? Ss 03:17 0:00 /usr/bin/dbus-daemon --system --address=systemd: --nofork --nopidfile --systemd-activation --syslog-only
polkitd 501 0.0 0.4 383672 9552 ? Ssl 03:17 0:00 /usr/lib/polkit-1/polkitd --no-debug
root 502 0.0 0.3 221772 6044 ? Ssl 03:17 0:00 /usr/sbin/rsyslogd -n -iNONE
root 503 0.0 0.3 25360 8032 ? Ss 03:17 0:00 /lib/systemd/systemd-logind
root 519 0.0 1.1 332076 23692 ? Ssl 03:17 0:00 /usr/sbin/NetworkManager --no-daemon
root 533 0.0 0.6 390984 12340 ? Ssl 03:17 0:00 /usr/sbin/ModemManager
root 568 0.0 0.1 292888 2916 ? Sl 03:17 0:00 /usr/sbin/VBoxService
root 579 0.0 0.3 382572 7580 ? SSl 03:17 0:00 /usr/sbin/lightdm
root 601 1.2 7.5 432284 152180 tty7 SSl+ 03:17 0:37 /usr/lib/xorg/Xorg :0 -seat seat0 -auth /var/run/lightdm/root/:0 -nolisten tcp vt7 -novtswitch
root 602 0.0 0.0 5872 1036 ttty1 Ss+ 03:17 0:00 /sbin/agetty -o -p -- \u00a9 -noclear - linux
rtkit 756 0.0 0.0 22696 1480 ? SNSl 03:17 0:00 /usr/libexec/rtkit-daemon
root 816 0.0 0.4 236224 8336 ? Sl 03:17 0:00 lightdm --session-child 15 26
kali 822 0.0 0.5 19196 11020 ? Ss 03:17 0:00 /lib/systemd/systemd --user
kali 823 0.0 0.1 103344 3260 ? S 03:17 0:00 (sd-pam)
kali 838 0.0 0.3 39868 7772 ? S<Sl 03:17 0:00 /usr/bin/pipewire
kali 839 0.0 0.3 20268 7296 ? Ssl 03:17 0:00 /usr/bin/pipewire-media-session
kali 841 0.0 1.5 655132 31704 ? S<sl 03:17 0:00 /usr/bin/pulseaudio --daemonize=no --log-target=journal
kali 842 0.0 0.5 313596 11736 ? SLSl 03:17 0:00 /usr/bin/gnome-keyring-daemon --foreground --components=pkcs11_secrets --control-directory=/run/user/100
kali 843 0.0 0.2 9788 5584 ? Ss 03:17 0:00 /usr/bin/dbus-daemon --session --address=systemd: --nofork --nopidfile --systemd-activation --syslog-onl
kali 854 0.0 1.4 340704 29020 ? Ssl 03:17 0:00 xfce4-session
kali 910 0.0 0.0 19152 348 ? S 03:17 0:00 /usr/bin/VBoxClient --clipboard
kali 912 0.0 0.2 217340 4032 ? Sl 03:17 0:00 /usr/bin/VBoxClient --clipboard
kali 925 0.0 0.0 19152 348 ? S 03:17 0:00 /usr/bin/VBoxClient --seamless
kali 926 0.0 0.0 217440 2552 ? Sl 03:17 0:01 /usr/bin/VBoxClient --seamless
kali 933 0.0 0.0 19152 344 ? S 03:17 0:00 /usr/bin/VBoxClient --draganddrop
kali 935 0.1 0.1 217956 2396 ? Sl 03:17 0:03 /usr/bin/VBoxClient --draganddrop
kali 946 0.0 0.0 7998 849 ? Ss 03:17 0:00 /usr/bin/ssh-agent x-session-manager
kali 956 0.0 0.4 384856 9640 ? Ssl 03:17 0:00 /usr/libexec/at-spi-bus-launcher
kali 963 0.0 0.2 9248 4748 ? S 03:17 0:00 /usr/bin/dbus-daemon --config-file=/usr/share/default/at-spi2/accessibility.conf --nofork --print-addre
kali 975 0.0 0.4 238128 9284 ? Sl 03:17 0:00 /usr/libexec/at-spi2-registryd --use-gnome-session
kali 986 0.0 0.2 81256 5636 ? SLS 03:17 0:00 /usr/bin/gpg-agent --supervised
kali 988 0.3 5.3 949004 167996 ? Sl 03:17 0:09 xfwm4
kali 992 0.0 0.4 311296 9644 ? Ssl 03:17 0:00 /usr/libexec/gvfsd
kali 998 0.0 0.3 454164 7908 ? Sl 03:17 0:00 /usr/libexec/gvfsd-fuse /run/user/1000/gvfs -f
kali 1011 0.0 0.0 19152 348 ? S 03:17 0:00 /usr/bin/VBoxClient --vmsvga
kali 1012 0.0 0.1 217544 3552 ? Sl 03:17 0:00 /usr/bin/VBoxClient --vmsvga
```

20BKT0073

ANUJ GUPTA

VIT VELLORE CSE WITH BLOCKCHAIN

| | User | PPID | Process ID | Priority | State | Start Time | Command |
|--------|------|-------|------------|----------|--------|------------|---------|
| kali | | 1056 | 0.0 | 1.3 | 413452 | 26440 | ? |
| kali | | 1057 | 0.1 | 1.4 | 357752 | 29756 | ? |
| kali | | 1058 | 0.0 | 2.2 | 741264 | 45644 | ? |
| kali | | 1059 | 0.0 | 2.0 | 472392 | 42184 | ? |
| kali | | 1060 | 0.0 | 2.2 | 472568 | 44568 | ? |
| kali | | 1061 | 0.0 | 1.9 | 398676 | 40056 | ? |
| kali | | 1098 | 0.0 | 1.0 | 334740 | 20576 | ? |
| kali | | 1138 | 0.0 | 1.3 | 504948 | 27128 | ? |
| kali | | 1145 | 0.0 | 1.3 | 265932 | 26264 | ? |
| kali | | 1146 | 0.0 | 0.3 | 307712 | 7264 | ? |
| kali | | 1148 | 0.0 | 0.8 | 259880 | 17772 | ? |
| kali | | 1149 | 0.0 | 2.6 | 447684 | 53140 | ? |
| kali | | 1154 | 0.0 | 2.4 | 632184 | 48520 | ? |
| kali | | 1170 | 0.0 | 0.5 | 924068 | 10736 | ? |
| kali | | 1184 | 0.0 | 0.2 | 14648 | 4068 | ? |
| kali | | 1188 | 0.0 | 0.2 | 230116 | 5436 | ? |
| colord | | 1196 | 0.0 | 0.7 | 316026 | 15136 | ? |
| kali | | 1297 | 0.0 | 0.3 | 48552 | 7348 | ? |
| kali | | 1309 | 0.0 | 0.6 | 425184 | 13464 | ? |
| root | | 1313 | 0.0 | 0.6 | 468452 | 12848 | ? |
| kali | | 1328 | 0.0 | 0.3 | 308080 | 7700 | ? |
| kali | | 1333 | 0.0 | 0.3 | 307128 | 7424 | ? |
| kali | | 1338 | 0.0 | 0.5 | 386200 | 10688 | ? |
| kali | | 1344 | 0.0 | 0.3 | 307188 | 7168 | ? |
| kali | | 1354 | 0.0 | 0.6 | 385708 | 13056 | ? |
| kali | | 1360 | 0.0 | 0.4 | 233636 | 8248 | ? |
| root | | 5079 | 0.0 | 0.0 | 0 | 0 | I |
| root | | 8825 | 0.0 | 0.0 | 0 | 0 | I |
| kali | | 11080 | 0.0 | 0.8 | 473896 | 17656 | ? |
| kali | | 11088 | 0.0 | 0.4 | 531428 | 9244 | ? |
| kali | | 11089 | 0.2 | 5.0 | 426556 | 101708 | ? |
| kali | | 11093 | 0.0 | 0.3 | 310364 | 7560 | ? |
| root | | 11101 | 0.0 | 0.0 | 2480 | 940 | ? |
| kali | | 11105 | 0.0 | 1.1 | 409312 | 22816 | ? |
| kali | | 11119 | 0.1 | 0.3 | 18232 | 6516 | pts/1 |
| kali | | 13279 | 0.0 | 0.0 | 5840 | 1172 | pts/1 |

```
Kali-Linux-2021.4a-virtualbox-amd64 [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
[ 1 2 3 4 ] [ ]
kali@kali: ~
File Actions Edit View Help
kali 1146 0.0 0.3 307712 7264 ? S+ 03:18 0:00 /usr/libexec/geoclue-2.0/demos/agent
kali 1148 0.0 0.8 259880 17772 ? S+ 03:18 0:00 /usr/lib/policykit-1-gnome/polkit-gnome-authentication-agent-1
kali 1149 0.0 2.6 447684 53140 ? S+ 03:18 0:00 /usr/bin/python3 /usr/bin/blueuman-applet
kali 1154 0.0 2.4 632184 48520 ? S+ 03:18 0:00 nm-applet
kali 1170 0.0 0.5 924068 10736 ? S+ 03:18 0:00 xiccd
kali 1184 0.0 0.2 14648 4668 ? S+ 03:18 0:00 xcape -e Super_L Control_L Escape
kali 1188 0.0 0.2 22048 5676 ? S+ 03:18 0:00 /usr/libexec/gconf-service
kali 1190 0.0 0.2 22048 5676 ? S+ 03:18 0:00 /usr/libexec/colorl
kali 1196 0.0 0.7 316020 15136 ? S+ 03:18 0:00 /usr/libexec/gvfs-udisks2-volume-monitor
kali 1297 0.0 0.3 48552 7348 ? S+ 03:18 0:00 /usr/libexec/bluetooth/bobx
kali 1309 0.0 0.6 425184 13464 ? S+ 03:18 0:00 /usr/libexec/gvifs-udisks2-volume-monitor
root 1313 0.0 0.6 468452 12848 ? S+ 03:18 0:00 /usr/libexec/udisks2/udisksd
kali 1328 0.0 0.3 308080 7700 ? S+ 03:18 0:00 /usr/libexec/gvifs-ghphoto2-volume-monitor
kali 1330 0.0 0.3 307128 7424 ? S+ 03:18 0:00 /usr/libexec/gvfs-mtp-volume-monitor
kali 1338 0.0 0.5 386200 10688 ? S+ 03:18 0:00 /usr/libexec/gvfs-afc-volume-monitor
kali 1344 0.0 0.3 307188 7168 ? S+ 03:18 0:00 /usr/libexec/gvfs-goa-volume-monitor
kali 1346 0.0 0.9 385768 13656 ? S+ 03:18 0:00 /usr/libexec/gvfs-trash :spawner :1.19 /org/gtk/gvfs/exec_spaw...
root 5079 0.0 0.0 0 0 ? I 03:25 0:00 [kworker/u4:0-events_unbound]
root 8825 0.0 0.0 0 0 ? I 03:33 0:00 [kworker/0:0-events]
kali 11080 0.0 0.8 473896 17656 ? S+ 03:38 0:00 /usr/libexec/xdg-desktop-portal
kali 11088 0.0 0.4 534128 9244 ? S+ 03:38 0:00 /usr/libexec/xdg-document-portal
kali 11089 0.2 5.0 426556 101708 ? S+ 03:38 0:04 /usr/bin/qterminal
kali 11093 0.0 0.3 310364 7560 ? S+ 03:38 0:00 /usr/libexec/gtk-permission-store
root 11101 0.0 0.0 2480 940 ? S+ 03:38 0:00 fusermount3 -o rw,nosuid,nodev,fsname=portal,auto_unmount,subtype=portal -- /run/user/1000/doc
kali 1105 0.0 1.0 409312 22816 ? S+ 03:38 0:00 /usr/libexec/xdg-desktop-portal-gtk
kali 1115 0.0 0.3 18232 6516 pts/1 S+ 03:38 0:00 /bin/zsh
kali 13270 0.0 0.0 5848 1172 pts/1 S+ 03:51 0:00 less
root 22112 0.0 0.0 0 0 ? I 03:59 0:00 [kworker/1:1-events]
root 22117 0.0 0.0 0 0 ? I 03:59 0:00 [kworker/1:1-cgroup_destroy]
root 22223 0.0 0.0 0 0 ? I 03:59 0:00 [kworker/0:1-ata_sff]
root 24900 0.0 0.0 0 0 ? I 04:04 0:00 [kworker/0:2-ata_sff]
kali 26428 0.0 0.3 306936 8012 ? S+ 04:08 0:00 /usr/lib/x86_64-linux-gnu/xfce4/xfconf/xfconfd
kali 26441 50.0 0.2 11212 4820 pts/1 R+ 04:08 0:00 ps aux

(kali㉿kali)-[~]
$
```

- Use the "grep" command to filter the processes list and display only the processes with "bash" in their name.

To filter the processes list and display only the processes with "bash" in their name, we can use the "grep" command:

```
ps aux | grep bash
```

```
(kali㉿kali)-[~]
$ ps aux | grep bash

kali      28024  0.0  0.1  6332  2152 pts/1    S+   04:11   0:00 grep --color=auto bash

(kali㉿kali)-[~]
$
```

- Use the "wc" command to count the number of lines in the filtered output.

```
(kali㉿kali)-[~]
$ ps aux | grep bash | wc -l
1
(kali㉿kali)-[~]
```

SUBMITTED BY: ANUJ GUPTA

20BKT0073

**VIT VELLORE (CSE WITH SPECIALIZATION IN
BLOCKCHAIN TECHNOLOGY)**