



LAB TASK

DEVOPS FOR CLOUD COMPUTING

SUBMITTED BY:

MUSTAFA AMANULLAH - SP22-BSE-004

SUBMITTED TO:

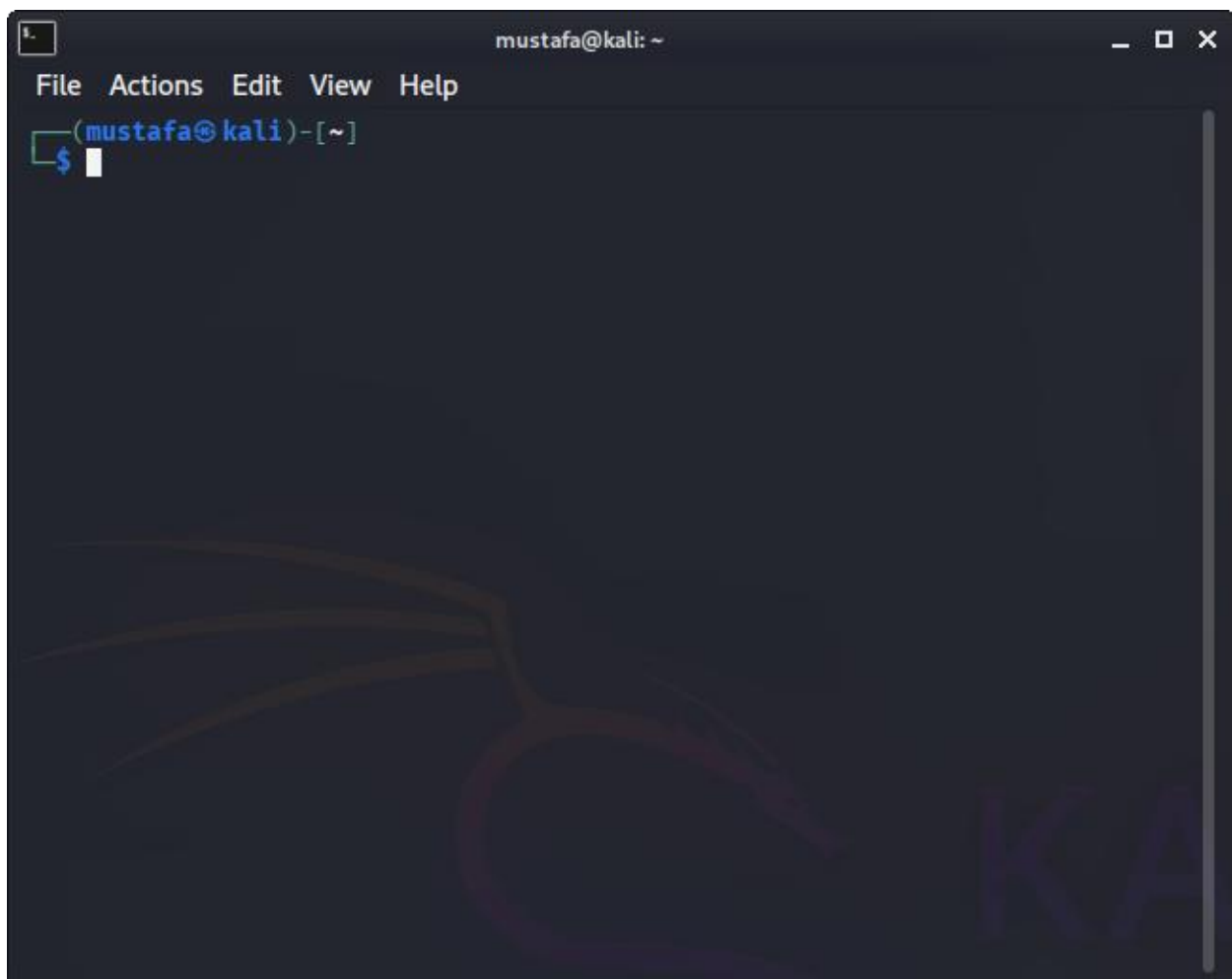
MUHAMMAD IBRAHIM

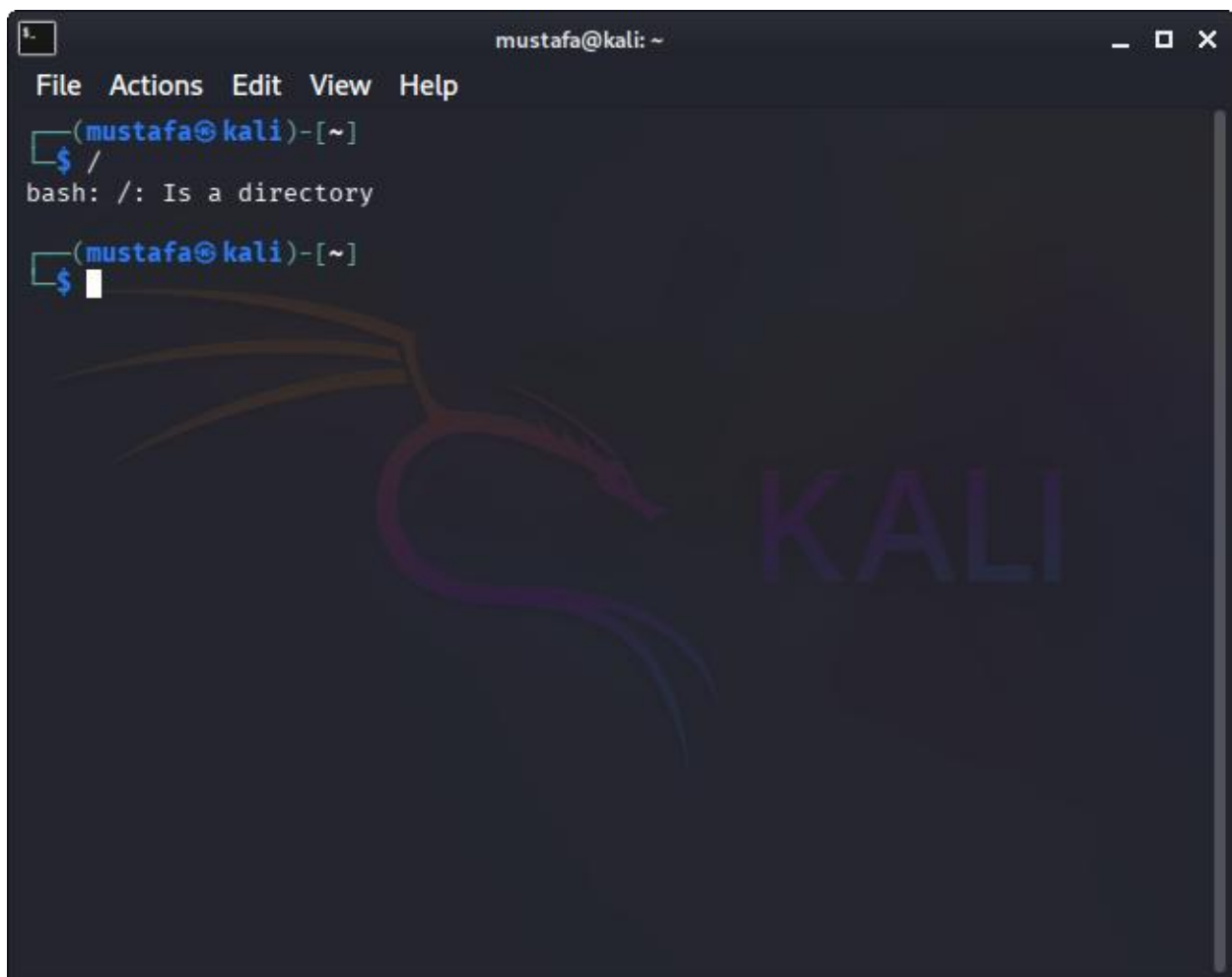
CLASS:

BSE-8A


LAB TASK

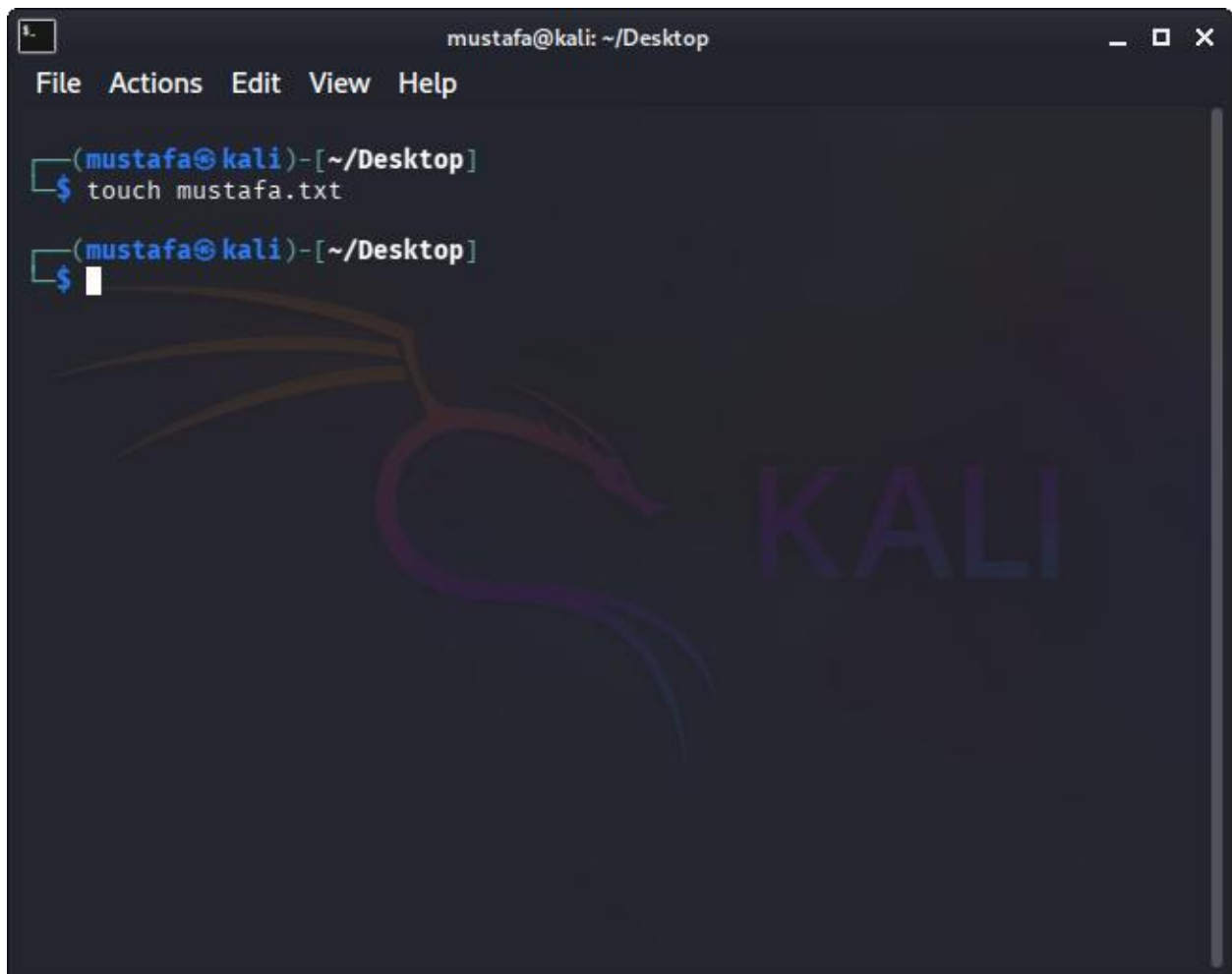
LINUX COMMANDS

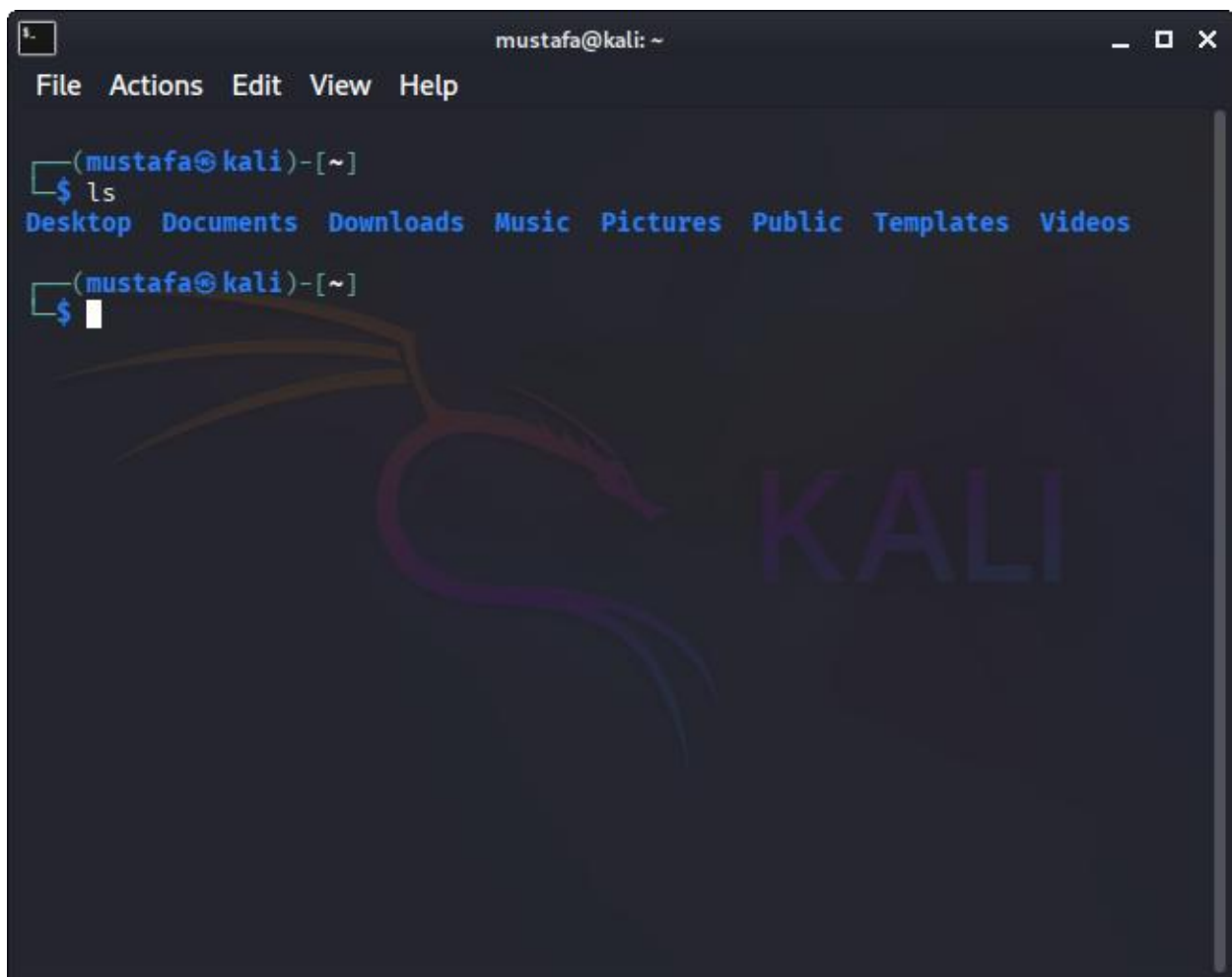




```
mustafa@kali: ~  
File Actions Edit View Help  
(mustafa@kali)-[~]  
$ /  
bash: /: Is a directory  
  
(mustafa@kali)-[~]  
$ /home  
bash: /home: Is a directory  
  
(mustafa@kali)-[~]  
$
```







```
mustafa@kali: ~/Desktop
File Actions Edit View Help

(mustafa@kali)-[~]
$ ls
Desktop Documents Downloads Music Pictures Public Templates Videos

(mustafa@kali)-[~]
$ cd home
bash: cd: home: No such file or directory

(mustafa@kali)-[~]
$ cd Desktop

(mustafa@kali)-[~/Desktop]
$
```



```
mustafa@kali: ~/Desktop
File Actions Edit View Help

(mustafa@kali)-[~]
$ ls
Desktop Documents Downloads Music Pictures Public Templates Videos

(mustafa@kali)-[~]
$ cd home
bash: cd: home: No such file or directory

(mustafa@kali)-[~]
$ cd Desktop

(mustafa@kali)-[~/Desktop]
$ mkdir sp22-bse-004

(mustafa@kali)-[~/Desktop]
$
```

```
mustafa@kali: ~  
File Actions Edit View Help  
(mustafa@kali)-[~]  
$ /  
bash: /: Is a directory  
  
(mustafa@kali)-[~]  
$ /home  
bash: /home: Is a directory  
  
(mustafa@kali)-[~]  
$ pwd  
/home/kali  
  
(mustafa@kali)-[~]  
$
```

```
mustafa@kali: ~/Desktop
File Actions Edit View Help

(mustafa@kali)-[~/Desktop]
$ touch mustafa.txt

(mustafa@kali)-[~/Desktop]
$ "my name is mustafa" > mustafa.txt
my name is mustafa: command not found

(mustafa@kali)-[~/Desktop]
$ echo "my name is mustafa" > mustafa.txt


(mustafa@kali)-[~/Desktop]
$
```

```
mustafa@kali: ~/Desktop
File Actions Edit View Help

(mustafa@kali)-[~/Desktop]
$ gzip sp22-bse-004
gzip: sp22-bse-004 is a directory -- ignored

(mustafa@kali)-[~/Desktop]
$ gzip newname_mustafa.txt

(mustafa@kali)-[~/Desktop]
$
```



```
mustafa@kali: ~/Desktop
File Actions Edit View Help

(mustafa@kali)-[~/Desktop]
$ touch mustafa.txt

(mustafa@kali)-[~/Desktop]
$ "my name is mustafa" > mustafa.txt
my name is mustafa: command not found


(mustafa@kali)-[~/Desktop]
$ echo "my name is mustafa" > mustafa.txt

(mustafa@kali)-[~/Desktop]
$ cat mustafa.txt
my name is mustafa

(mustafa@kali)-[~/Desktop]
$ cp mustafa.txt copy_mustafa.txt

(mustafa@kali)-[~/Desktop]
$
```


```
mustafa@kali: ~/Desktop
File Actions Edit View Help
(mustafa@kali)-[~/Desktop]
$ mv mustafa.txt newname_mustafa.txt
(mustafa@kali)-[~/Desktop]
$
```

The Kali Linux logo, featuring a stylized dragon head in purple and blue, with the word "KALI" in a large, blue, sans-serif font to its right.

```
mustafa@kali: ~/Desktop
File Actions Edit View Help

(mustafa@kali)-[~/Desktop]
$ ps
  PID TTY          TIME CMD
  8596 pts/0    00:00:00 bash
 16680 pts/0    00:00:00 ps

(mustafa@kali)-[~/Desktop]
$
```



```
mustafa@kali: ~/Desktop
File Actions Edit View Help

(mustafa@kali)-[~/Desktop]
$ top

top - 13:33:00 up 29 min, 2 users, load average: 0.16, 0.18, 0.22
Tasks: 202 total, 1 running, 201 sleeping, 0 stopped, 0 zombie
%Cpu(s): 1.6 us, 1.4 sy, 0.0 ni, 96.9 id, 0.0 wa, 0.0 hi, 0.0 si, 0.0
MiB Mem : 1973.7 total, 659.6 free, 937.8 used, 539.8 buff/cache
MiB Swap: 953.7 total, 953.7 free, 0.0 used. 1035.9 avail Mem

  PID USER      PR  NI   VIRT   RES   SHR S  %CPU  %MEM    TIME+

```



```
mustafa@kali: ~/Desktop
File Actions Edit View Help

(mustafa@kali)-[~/Desktop]
$ sed -n '2p' newname_mustafa.txt
This is second line

(mustafa@kali)-[~/Desktop]
$ sed -n '1p' newname_mustafa.txt
my name is mustafa

(mustafa@kali)-[~/Desktop]
$ nano newname_mustafa.txt

(mustafa@kali)-[~/Desktop]
$ cat newname_mustafa.txt
my name is mustafa
This is second line
i am a student of software engineering

(mustafa@kali)-[~/Desktop]
$ ~
```

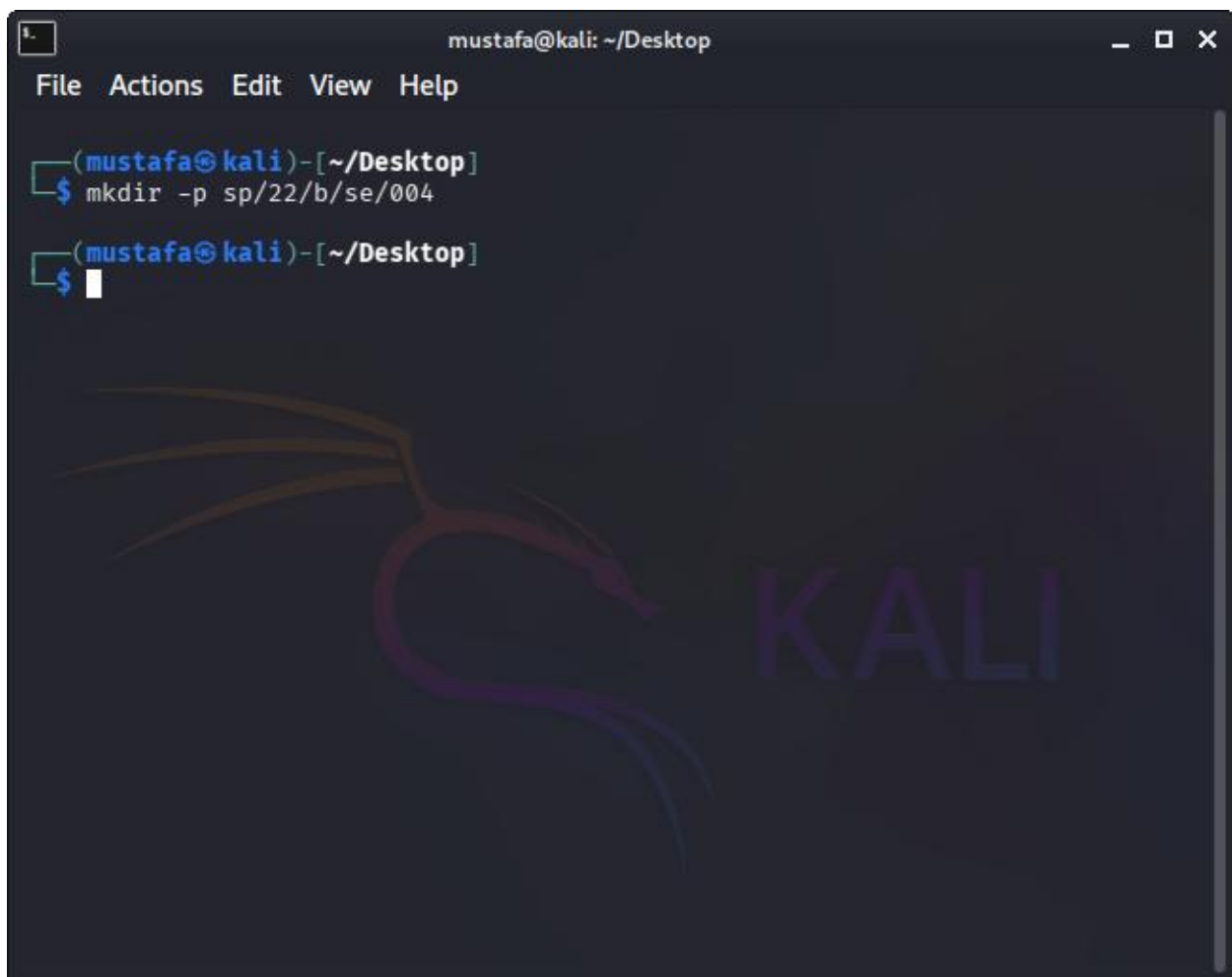
```
mustafa@kali: ~/Desktop
File Actions Edit View Help

(mustafa@kali)-[~/Desktop]
$ gzip sp22-bse-004
gzip: sp22-bse-004 is a directory -- ignored

(mustafa@kali)-[~/Desktop]
$ gzip newname_mustafa.txt

(mustafa@kali)-[~/Desktop]
$ gunzip newname_mustafa.txt

(mustafa@kali)-[~/Desktop]
$
```



```
mustafa@kali: ~/Desktop
File Actions Edit View Help

(mustafa@kali)-[~/Desktop]
$ mkdir -p sp/22/b/se/004

(mustafa@kali)-[~/Desktop]
$ ls -l
total 16
-rw-r--r-- 1 mustafa kali 19 Sep 14 13:30 copy_mustafa.txt
-rw-r--r-- 1 mustafa kali 19 Sep 14 13:29 newname_mustafa.txt
drwxr-xr-x 3 mustafa kali 4096 Sep 14 13:36 sp
drwxr-xr-x 2 mustafa kali 4096 Sep 14 13:27 sp22-bse-004

(mustafa@kali)-[~/Desktop]
$
```

```
mustafa@kali: ~/Desktop
File Actions Edit View Help

(mustafa@kali)-[~/Desktop]
$ mkdir -p sp/22/b/se/004

(mustafa@kali)-[~/Desktop]
$ ls -l
total 16
-rw-r--r-- 1 mustafa kali 19 Sep 14 13:30 copy_mustafa.txt
-rw-r--r-- 1 mustafa kali 19 Sep 14 13:29 newname_mustafa.txt
drwxr-xr-x 3 mustafa kali 4096 Sep 14 13:36 sp
drwxr-xr-x 2 mustafa kali 4096 Sep 14 13:27 sp22-bse-004

(mustafa@kali)-[~/Desktop]
$ ls -a
.  ..  copy_mustafa.txt  newname_mustafa.txt  sp  sp22-bse-004

(mustafa@kali)-[~/Desktop]
$
```

```
mustafa@kali: ~/Desktop
File Actions Edit View Help

(mustafa@kali)-[~/Desktop]
$ mkdir -p sp/22/b/se/004

(mustafa@kali)-[~/Desktop]
$ ls -l
total 16
-rw-r--r-- 1 mustafa kali 19 Sep 14 13:30 copy_mustafa.txt
-rw-r--r-- 1 mustafa kali 19 Sep 14 13:29 newname_mustafa.txt
drwxr-xr-x 3 mustafa kali 4096 Sep 14 13:36 sp
drwxr-xr-x 2 mustafa kali 4096 Sep 14 13:27 sp22-bse-004

(mustafa@kali)-[~/Desktop]
$ ls -a
. .. copy_mustafa.txt newname_mustafa.txt sp sp22-bse-004

(mustafa@kali)-[~/Desktop]
$ echo "This is second line" >> newname_mustafa.txt

(mustafa@kali)-[~/Desktop]
$
```

```
mustafa@kali: ~/Desktop
File Actions Edit View Help

(mustafa@kali)-[~/Desktop]
$ mkdir -p sp/22/b/se/004

(mustafa@kali)-[~/Desktop]
$ ls -l
total 16
-rw-r--r-- 1 mustafa kali 19 Sep 14 13:30 copy_mustafa.txt
-rw-r--r-- 1 mustafa kali 19 Sep 14 13:29 newname_mustafa.txt
drwxr-xr-x 3 mustafa kali 4096 Sep 14 13:36 sp
drwxr-xr-x 2 mustafa kali 4096 Sep 14 13:27 sp22-bse-004


(mustafa@kali)-[~/Desktop]
$ ls -a
. .. copy_mustafa.txt newname_mustafa.txt sp sp22-bse-004

(mustafa@kali)-[~/Desktop]
$ echo "This is second line" >> newname_mustafa.txt

(mustafa@kali)-[~/Desktop]
$ cat newname_mustafa.txt
my name is mustafa
This is second line

(mustafa@kali)-[~/Desktop]
$
```

```
mustafa@kali: ~/Desktop
File Actions Edit View Help
(mustafa@kali)-[~/Desktop]
$ sed -n '2p' newname_mustafa.txt
This is second line
(mustafa@kali)-[~/Desktop]
$
```

The Kali Linux logo is visible in the background of the terminal window. It features a stylized dragon head in profile, facing right, with the word "KALI" in a bold, sans-serif font to its right.


```
mustafa@kali: ~/Desktop
File Actions Edit View Help

(mustafa@kali)-[~/Desktop]
$ sed -n '2p' newname_mustafa.txt
This is second line

(mustafa@kali)-[~/Desktop]
$ sed -n '1p' newname_mustafa.txt
my name is mustafa


(mustafa@kali)-[~/Desktop]
$
```

```
mustafa@kali: ~/Desktop
File Actions Edit View Help
GNU nano 8.4 newname_mustafa.txt
my name is mustafa
This is second line
i am a student of software engineering

[ Wrote 3 lines ]
^G Help      ^O Write Out ^F Where Is  ^K Cut       ^T Execute
^X Exit      ^R Read File ^\ Replace   ^U Paste     ^J Justify
```

```
mustafa@kali: ~  
File Actions Edit View Help  
  
(mustafa@kali)-[~]  
$ hostname -l  
hostname: invalid option -- 'l'  
Usage: hostname [-b] {hostname|-F file}          set host name (from file)  
           hostname [-a|-A|-d|-f|-i|-I|-s|-y]      display formatted name  
           hostname                                display host name  
  
           {yp,nis,}domainname {nisdomain|-F file} set NIS domain name (from fil  
e)           {yp,nis,}domainname                  display NIS domain name  
  
           dnsdomainname                          display dns domain name  
  
           hostname -V|--version|-h|--help        print info and exit  
  
Program name:  
           {yp,nis,}domainname=hostname -y  
           dnsdomainname=hostname -d  
  
Program options:  
           -a, --alias                alias names  
           -A, --all-fqdns            all long host names (FQDNs)  
           -b, --boot                 set default hostname if none available  
           -d, --domain               DNS domain name  
           -f, --fqdn, --long         long host name (FQDN)
```

```
mustafa@kali: ~  
File Actions Edit View Help  
  
(mustafa@kali)-[~]  
$ ip route show  
default via 10.0.2.2 dev eth0 proto dhcp src 10.0.2.15 metric 100  
10.0.2.0/24 dev eth0 proto kernel scope link src 10.0.2.15 metric 100  
  
(mustafa@kali)-[~]  
$
```



```
mustafa@kali: ~  
File Actions Edit View Help  
  
(mustafa@kali)-[~]  
$ ip route show  
default via 10.0.2.2 dev eth0 proto dhcp src 10.0.2.15 metric 100  
10.0.2.0/24 dev eth0 proto kernel scope link src 10.0.2.15 metric 100  
  
(mustafa@kali)-[~]  
$ route -n  
Kernel IP routing table  
Destination      Gateway         Genmask         Flags Metric Ref    Use Iface  
0.0.0.0          10.0.2.2       0.0.0.0         UG    100    0      0 eth0  
10.0.2.0         0.0.0.0        255.255.255.0   U     100    0      0 eth0  
  
(mustafa@kali)-[~]  
$
```

```
mustafa@kali: ~  
File Actions Edit View Help  
  
(mustafa@kali)-[~]  
$ ip route show  
default via 10.0.2.2 dev eth0 proto dhcp src 10.0.2.15 metric 100  
10.0.2.0/24 dev eth0 proto kernel scope link src 10.0.2.15 metric 100  
  
(mustafa@kali)-[~]  
$ route -n  
Kernel IP routing table  
Destination      Gateway         Genmask         Flags Metric Ref    Use Iface  
0.0.0.0          10.0.2.2       0.0.0.0         UG    100    0      0 eth0  
10.0.2.0         0.0.0.0        255.255.255.0   U     100    0      0 eth0  
  
(mustafa@kali)-[~]  
$ cat /etc/resolv.conf  
# Generated by NetworkManager  
nameserver 192.168.1.1  
  
(mustafa@kali)-[~]  
$
```

```
mustafa@kali: ~  
File Actions Edit View Help  
  
(mustafa@kali)-[~]  
$ ip route show  
default via 10.0.2.2 dev eth0 proto dhcp src 10.0.2.15 metric 100  
10.0.2.0/24 dev eth0 proto kernel scope link src 10.0.2.15 metric 100  
  
(mustafa@kali)-[~]  
$ route -n  
Kernel IP routing table  
Destination      Gateway         Genmask         Flags Metric Ref    Use Iface  
0.0.0.0          10.0.2.2       0.0.0.0         UG    100    0      0 eth0  
10.0.2.0        0.0.0.0       255.255.255.0   U     100    0      0 eth0  
  
(mustafa@kali)-[~]  
$ cat /etc/resolv.conf  
# Generated by NetworkManager  
nameserver 192.168.1.1  
  
(mustafa@kali)-[~]  
$ hostname  
kali  
  
(mustafa@kali)-[~]  
$
```

```
mustafa@kali: ~  
File Actions Edit View Help  
  
(mustafa@kali)-[~]  
$ ss tuln  
Error: an inet prefix is expected rather than "tuln".  
Cannot parse dst/src address.  
  
(mustafa@kali)-[~]  
$ ss -tuln  
Netid State Recv-Q Send-Q Local Address:Port Peer Address:Port  
  
(mustafa@kali)-[~]  
$
```



```
mustafa@kali: ~/Desktop
File Actions Edit View Help

(mustafa@kali)-[~/Desktop]
$ sed -n '2p' newname_mustafa.txt
This is second line

(mustafa@kali)-[~/Desktop]
$ sed -n '1p' newname_mustafa.txt
my name is mustafa

(mustafa@kali)-[~/Desktop]
$ nano newname_mustafa.txt

(mustafa@kali)-[~/Desktop]
$ cat newname_mustafa.txt
my name is mustafa
This is second line
i am a student of software engineering

(mustafa@kali)-[~/Desktop]
$ rm -r sp


(mustafa@kali)-[~/Desktop]
$
```

```
mustafa@kali: ~/Desktop
File Actions Edit View Help

(mustafa@kali)-[~/Desktop]
$ vim newname_mustafa.txt

[2]+  Stopped                  vim newname_mustafa.txt

(mustafa@kali)-[~/Desktop]
$
```


The Kali Linux logo, featuring a stylized dragon head in purple and blue, with the word "KALI" in a large, blue, sans-serif font to its right.

```
mustafa@kali: ~/Desktop
File Actions Edit View Help

(mustafa@kali)-[~/Desktop]
$ vim newname_mustafa.txt

[2]+  Stopped                  vim newname_mustafa.txt

(mustafa@kali)-[~/Desktop]
$ nano script.sh
```

The Kali Linux logo, featuring a stylized dragon head in purple and blue, with the word "KALI" in a bold, blue, sans-serif font to its right.

1

mustafa@kali: ~/Desktop

File Actions Edit View Help


GNU nano 8.4script.sh

#!/bin/bash

echo "What is your name?"

read name

echo "Hello, \$name!"

KALI

[Wrote 6 lines]

^G Help

^X Exit

^O Write Out

^R Read File

^F Where Is

^_ Replace

^K Cut

^U Paste

^T Execute

^J Justify

```
mustafa@kali: ~/Desktop
File Actions Edit View Help

(mustafa@kali)-[~/Desktop]
$ vim newname_mustafa.txt

[2]+  Stopped                  vim newname_mustafa.txt

(mustafa@kali)-[~/Desktop]
$ nano script.sh

(mustafa@kali)-[~/Desktop]
$ chmod +x script.sh

(mustafa@kali)-[~/Desktop]
$ ./script.sh
```

```
mustafa@kali: ~/Desktop
File Actions Edit View Help

(mustafa@kali)-[~/Desktop]
$ chmod +x script.sh

(mustafa@kali)-[~/Desktop]
$ ./script.sh
what is your name?
mustafa
hello, $name!

(mustafa@kali)-[~/Desktop]
$ nano script.sh

(mustafa@kali)-[~/Desktop]
$ chmod +x script.sh

(mustafa@kali)-[~/Desktop]
$ ./script.sh
What is your name?
mustafa
Hello, mustafa!

(mustafa@kali)-[~/Desktop]
$
```

```
mustafa@kali: ~/Desktop
File Actions Edit View Help

(mustafa@kali)-[~/Desktop]
$ sudo adduser tempuser
[sudo] password for mustafa:
New password:
Retype new password:
passwd: password updated successfully
Changing the user information for tempuser
Enter the new value, or press ENTER for the default
    Full Name []: temporary
    Room Number []: 123
    Work Phone []: +92
    Home Phone []: +92
    Other []: +92
Is the information correct? [Y/n] y

(mustafa@kali)-[~/Desktop]
$
```

```
mustafa@kali: ~/Desktop
File Actions Edit View Help

(mustafa@kali)-[~/Desktop]
$ sudo adduser tempuser
[sudo] password for mustafa:
New password:
Retype new password:
passwd: password updated successfully
Changing the user information for tempuser
Enter the new value, or press ENTER for the default
    Full Name []: temporary
    Room Number []: 123
    Work Phone []: +92
    Home Phone []: +92
    Other []: +92
Is the information correct? [Y/n] y

(mustafa@kali)-[~/Desktop]
$ sudo deluser tempuser

(mustafa@kali)-[~/Desktop]
$ sudo deluser --remove-home tempuser
fatal: The user `tempuser' does not exist.

(mustafa@kali)-[~/Desktop]
$
```



```
mustafa@kali: ~/Desktop
File Actions Edit View Help

(mustafa@kali)-[~/Desktop]
$ sudo useradd -m devopsUSER

(mustafa@kali)-[~/Desktop]
$ sudo passwd devopsUSER
New password:
Retype new password:
passwd: password updated successfully

(mustafa@kali)-[~/Desktop]
$ sudo usermod -aG devops devopsuser
usermod: group 'devops' does not exist


(mustafa@kali)-[~/Desktop]
$ sudo groupadd devops

(mustafa@kali)-[~/Desktop]
$ sudo usermod -aG devops devopsuser
usermod: user 'devopsuser' does not exist

(mustafa@kali)-[~/Desktop]
$ sudo usermod -aG devops devopsUSER

(mustafa@kali)-[~/Desktop]
$
```


```
mustafa@kali: ~/Desktop
File Actions Edit View Help
(mustafa@kali)-[~/Desktop]
$ sudo usermod -l user devopsUSER
(mustafa@kali)-[~/Desktop]
$
```

The Kali Linux logo, featuring a stylized dragon head in purple and blue, with the word "KALI" in a large, blue, sans-serif font to its right.


```
root@kali: /home/kali
File Actions Edit View Help
zsh: permission denied: /etc/passwd

(root@kali)-[/home/kali]
# cat /etc/passwd
root:x:0:0:root:/root:/usr/bin/zsh
daemon:x:1:1:daemon:/usr/sbin:/usr/sbin/nologin
bin:x:2:2:bin:/bin:/usr/sbin/nologin
sys:x:3:3:sys:/dev:/usr/sbin/nologin
sync:x:4:65534:sync:/bin:/bin/sync
games:x:5:60:games:/usr/games:/usr/sbin/nologin
man:x:6:12:man:/var/cache/man:/usr/sbin/nologin
lp:x:7:7:lp:/var/spool/lpd:/usr/sbin/nologin
mail:x:8:8:mail:/var/mail:/usr/sbin/nologin
news:x:9:9:news:/var/spool/news:/usr/sbin/nologin
uucp:x:10:10:uucp:/var/spool/uucp:/usr/sbin/nologin
proxy:x:13:13:proxy:/bin:/usr/sbin/nologin
www-data:x:33:33:www-data:/var/www:/usr/sbin/nologin
backup:x:34:34:backup:/var/backups:/usr/sbin/nologin
list:x:38:38:Mailing List Manager:/var/list:/usr/sbin/nologin
irc:x:39:39:ircd:/run/ircd:/usr/sbin/nologin
_apt:x:42:65534::/nonexistent:/usr/sbin/nologin
nobody:x:65534:65534:nobody:/nonexistent:/usr/sbin/nologin
systemd-network:x:998:998:systemd Network Management:/:/usr/sbin/nologin
dhcpcd:x:100:65534:DHCP Client Daemon:/usr/lib/dhcpcd:/bin/false
systemd-timesync:x:992:992:systemd Time Synchronization:/:/usr/sbin/nologin
messagebus:x:991:991:System Message Bus:/nonexistent:/usr/sbin/nologin
tss:x:101:104:TPM software stack:/var/lib/tpm:/bin/false
strongswan:x:102:65534::/var/lib/strongswan:/usr/sbin/nologin
```

```
mustafa@kali: ~  
File Actions Edit View Help  
(mustafa@kali)-[~]  
$ sudo gpasswd -d user devops  
[sudo] password for mustafa:  
Removing user user from group devops  
(mustafa@kali)-[~]  
$
```



```
mustafa@kali: ~  
File Actions Edit View Help  
(mustafa@kali)-[~]  
$ sudo gpasswd -d user devops  
[sudo] password for mustafa:  
Removing user user from group devops  
  
(mustafa@kali)-[~]  
$ sudo groupdel devops  
  
(mustafa@kali)-[~]  
$
```

The Kali Linux logo, featuring a stylized dragon head in purple and blue, with the word "KALI" in a large, blue, sans-serif font to its right.

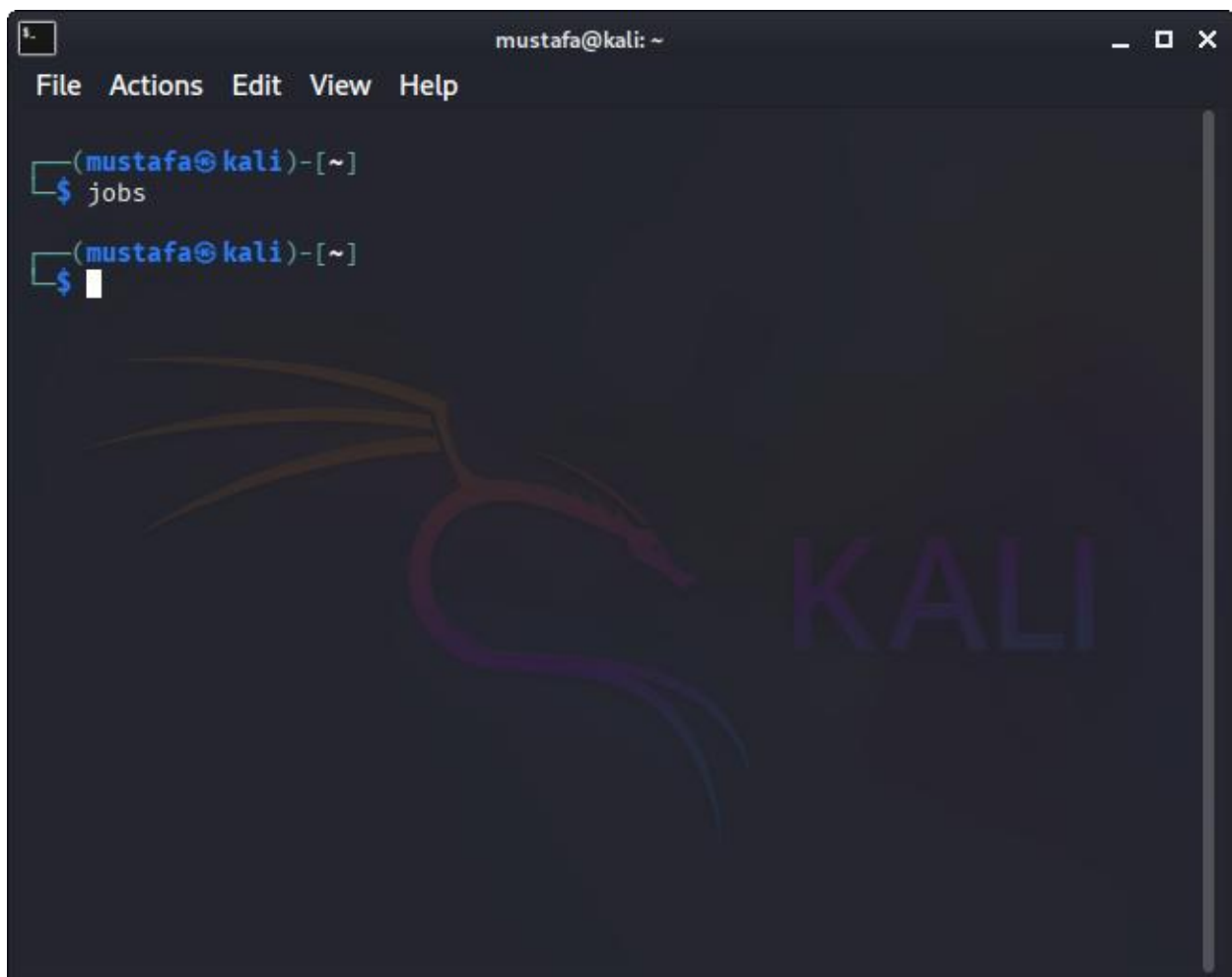
```
mustafa@kali: ~  
File Actions Edit View Help  
(mustafa@kali)-[~]  
$ sudo gpasswd -d user devops  
[sudo] password for mustafa:  
Removing user user from group devops  
  
(mustafa@kali)-[~]  
$ sudo groupdel devops  
  
(mustafa@kali)-[~]  
$ echo $HOME  
/home/kali  
  
(mustafa@kali)-[~]  
$
```

```
mustafa@kali: ~  
File Actions Edit View Help  
(mustafa@kali)-[~]  
$ sudo gpasswd -d user devops  
[sudo] password for mustafa:  
Removing user user from group devops  
  
(mustafa@kali)-[~]  
$ sudo groupdel devops  
  
(mustafa@kali)-[~]  
$ echo $HOME  
/home/kali  
  
(mustafa@kali)-[~]  
$ sudo usermod -L user  
  
(mustafa@kali)-[~]  
$
```

```
mustafa@kali: ~  
File Actions Edit View Help  
(mustafa@kali)-[~]  
$ sudo gpasswd -d user devops  
[sudo] password for mustafa:  
Removing user user from group devops  
  
(mustafa@kali)-[~]  
$ sudo groupdel devops  
  
(mustafa@kali)-[~]  
$ echo $HOME  
/home/kali  
  
(mustafa@kali)-[~]  
$ sudo usermod -L user  
  
(mustafa@kali)-[~]  
$ sudo usermod -U user  
  
(mustafa@kali)-[~]  
$
```



```
mustafa@kali: ~  
File Actions Edit View Help  
(mustafa@kali)-[~]  
$ ps aux  
USER      PID %CPU %MEM    VSZ   RSS TTY      STAT START   TIME COMMAND  
root         1  0.0  0.7 23892 14852 ?        Ss   13:03   0:01 /sbin/init  
root         2  0.0  0.0      0      0 ?        S    13:03   0:00 [kthreadd]  
root         3  0.0  0.0      0      0 ?        S    13:03   0:00 [pool_work  
root         4  0.0  0.0      0      0 ?        I<   13:03   0:00 [kworker/R  
root         5  0.0  0.0      0      0 ?        I<   13:03   0:00 [kworker/R  
root         6  0.0  0.0      0      0 ?        I<   13:03   0:00 [kworker/R  
root         7  0.0  0.0      0      0 ?        I<   13:03   0:00 [kworker/R  
root         8  0.0  0.0      0      0 ?        I<   13:03   0:00 [kworker/R  
root        12  0.0  0.0      0      0 ?        I    13:03   0:00 [kworker/u  
root        13  0.0  0.0      0      0 ?        I<   13:03   0:00 [kworker/R  
root        14  0.0  0.0      0      0 ?        I    13:03   0:00 [rcu_tasks  
root        15  0.0  0.0      0      0 ?        I    13:03   0:00 [rcu_tasks  
root        16  0.0  0.0      0      0 ?        I    13:03   0:00 [rcu_tasks  
root        17  0.0  0.0      0      0 ?        S    13:03   0:00 [ksoftirqd  
root        18  0.0  0.0      0      0 ?        I    13:03   0:02 [rcu_preem  
root        19  0.0  0.0      0      0 ?        S    13:03   0:00 [rcu_exp_p  
root        20  0.0  0.0      0      0 ?        S    13:03   0:00 [rcu_exp_g  
root        21  0.0  0.0      0      0 ?        S    13:03   0:00 [migration  
root        22  0.0  0.0      0      0 ?        S    13:03   0:00 [idle_inje  
root        23  0.0  0.0      0      0 ?        S    13:03   0:00 [cpuhp/0]  
root        24  0.0  0.0      0      0 ?        S    13:03   0:00 [cpuhp/1]  
root        25  0.0  0.0      0      0 ?        S    13:03   0:00 [idle_inje  
root        26  0.0  0.0      0      0 ?        S    13:03   0:00 [migration  
root        27  0.0  0.0      0      0 ?        S    13:03   0:01 [ksoftirqd
```



```
mustafa@kali: ~  
File Actions Edit View Help  
  
(mustafa@kali)-[~]  
$ ps aux --sort=-%mem | head  
USER      PID %CPU %MEM    VSZ   RSS TTY      STAT START   TIME COMMAND  
root      2276  2.9  6.7 413028 135988 tty7      Ssl+  13:05   1:56 /usr/lib/x  
org/Xorg :0 -seat seat0 -auth /var/run/lightdm/root/:0 -nolisten tcp vt7 -nov  
tswitch  
mustafa   2589  0.7  6.2 886356 125444 ?        Sl     13:05   0:28 xfwm4  
mustafa   2645  0.1  4.9 610920 99156 ?        Sl     13:05   0:07 xfdesktop  
mustafa   2656  0.0  2.9 529164 59560 ?        Sl     13:05   0:00 /usr/bin/p  
ython3 /usr/bin/blueman-applet  
mustafa   34835 0.7  2.8 571632 56752 ?        Sl     14:07   0:01 /usr/bin/q  
terminal  
mustafa   2639  0.2  2.5 661212 51816 ?        Sl     13:05   0:08 Thunar --d  
aemon  
mustafa   2734  0.4  2.4 223184 48624 ?        Sl     13:05   0:19 /usr/lib/x  
86_64-linux-gnu/xfce4/panel/wrapper-2.0 /usr/lib/x86_64-linux-gnu/xfce4/panel  
/plugins/libcpugraph.so 13 27262984 cpugraph CPU Graph Graphical representati  
on of the CPU load  
mustafa   2649  0.0  2.2 505316 45656 ?        Sl     13:05   0:03 /usr/lib/x  
86_64-linux-gnu/xfce4/panel/wrapper-2.0 /usr/lib/x86_64-linux-gnu/xfce4/panel  
/plugins/libwhiskermenu.so 1 27262983 whiskermenu Whisker Menu Show a menu to  
easily access installed applications  
mustafa   2634  0.2  2.2 441116 44912 ?        Sl     13:05   0:11 xfce4-pane  
l  
  
(mustafa@kali)-[~]  
$
```

```
mustafa@kali: ~  
File Actions Edit View Help  
(mustafa@kali)-[~]  
$ ps aux --sort=-%cpu | head  
USER      PID %CPU %MEM    VSZ   RSS TTY      STAT START   TIME COMMAND  
root      2276  2.9  6.7 413028 135960 tty7      Ssl+ 13:05   1:57 /usr/lib/x  
org/Xorg :0 -seat seat0 -auth /var/run/lightdm/root/:0 -nolisten tcp vt7 -nov  
tswitch  
mustafa   2589  0.7  6.2 886356 125444 ?        Sl    13:05   0:29 xfwm4  
mustafa   34835  0.7  2.8 571632 56752 ?        Sl    14:07   0:01 /usr/bin/q  
terminal  
mustafa   2532  0.6  0.1 281468 2996 ?        Sl    13:05   0:25 /usr/bin/V  
BoxClient --draganddrop  
root      36955  0.6  0.4 18112 8256 ?        Ss    14:11   0:00 /usr/lib/s  
ystemd/systemd-hostnamed  
mustafa   2734  0.4  2.4 223184 48624 ?        Sl    13:05   0:19 /usr/lib/x  
86_64-linux-gnu/xfce4/panel/wrapper-2.0 /usr/lib/x86_64-linux-gnu/xfce4/panel  
/plugins/libcpugraph.so 13 27262984 cpugraph CPU Graph Graphical representati  
on of the CPU load  
mustafa   2736  0.3  1.4 275036 29332 ?        Sl    13:05   0:13 /usr/lib/x  
86_64-linux-gnu/xfce4/panel/wrapper-2.0 /usr/lib/x86_64-linux-gnu/xfce4/panel  
/plugins/libgenmon.so 15 27262986 genmon Generic Monitor Show output of a com  
mand.  
mustafa   2634  0.2  2.2 441116 44912 ?        Sl    13:05   0:11 xfce4-pane  
l  
mustafa   2639  0.2  2.5 661212 51816 ?        Sl    13:05   0:08 Thunar --d  
aemon  
(mustafa@kali)-[~]  
$
```

```
mustafa@kali: ~  
File Actions Edit View Help  
  
(mustafa@kali)-[~]  
$ sudo apt update  
Get:1 http://kali.download/kali kali-rolling InRelease [41.5 kB]  
Get:2 http://kali.download/kali kali-rolling/main amd64 Packages [21.2 MB]  
Get:3 http://kali.download/kali kali-rolling/main amd64 Contents (deb) [51.8 MB]  
Get:4 http://kali.download/kali kali-rolling/contrib amd64 Packages [120 kB]  
Get:5 http://kali.download/kali kali-rolling/contrib amd64 Contents (deb) [32 6 kB]  
Get:6 http://kali.download/kali kali-rolling/non-free amd64 Packages [200 kB]  
Get:7 http://kali.download/kali kali-rolling/non-free amd64 Contents (deb) [9 11 kB]  
Fetched 74.6 MB in 30s (2,467 kB/s)  
979 packages can be upgraded. Run 'apt list --upgradable' to see them.  
  
(mustafa@kali)-[~]  
$
```



```
mustafa@kali: ~  
File Actions Edit View Help  
  
(mustafa@kali)-[~]  
$ journalctl  
Sep 07 23:39:19 kali kernel: Linux version 6.12.25-amd64 (devel@kali.org) (x>  
Sep 07 23:39:19 kali kernel: Command line: BOOT_IMAGE=/boot/vmlinuz-6.12.25->  
Sep 07 23:39:19 kali kernel: BIOS-provided physical RAM map:  
Sep 07 23:39:19 kali kernel: BIOS-e820: [mem 0x0000000000000000-0x0000000000>  
Sep 07 23:39:19 kali kernel: BIOS-e820: [mem 0x0000000000009fc00-0x0000000000>  
Sep 07 23:39:19 kali kernel: BIOS-e820: [mem 0x000000000000f0000-0x0000000000>  
Sep 07 23:39:19 kali kernel: BIOS-e820: [mem 0x00000000000100000-0x0000000007f>  
Sep 07 23:39:19 kali kernel: BIOS-e820: [mem 0x0000000007fff0000-0x0000000007f>  
Sep 07 23:39:19 kali kernel: BIOS-e820: [mem 0x00000000fec000000-0x00000000fe>  
Sep 07 23:39:19 kali kernel: BIOS-e820: [mem 0x00000000fee000000-0x00000000fe>  
Sep 07 23:39:19 kali kernel: BIOS-e820: [mem 0x00000000fffc00000-0x00000000ff>  
Sep 07 23:39:19 kali kernel: NX (Execute Disable) protection: active  
Sep 07 23:39:19 kali kernel: APIC: Static calls initialized  
Sep 07 23:39:19 kali kernel: SMBIOS 2.5 present.  
Sep 07 23:39:19 kali kernel: DMI: innotek GmbH VirtualBox/VirtualBox, BIOS V>  
Sep 07 23:39:19 kali kernel: DMI: Memory slots populated: 0/0  
Sep 07 23:39:19 kali kernel: Hypervisor detected: KVM  
Sep 07 23:39:19 kali kernel: kvm-clock: Using msrs 4b564d01 and 4b564d00  
Sep 07 23:39:19 kali kernel: kvm-clock: using sched offset of 14049900944 cy>  
Sep 07 23:39:19 kali kernel: clocksource: kvm-clock: mask: 0xffffffffffffffff>  
Sep 07 23:39:19 kali kernel: tsc: Detected 2495.998 MHz processor  
Sep 07 23:39:19 kali kernel: e820: update [mem 0x00000000-0x000000fff] usable>  
Sep 07 23:39:19 kali kernel: e820: remove [mem 0x000a0000-0x000ffff] usable>  
Sep 07 23:39:19 kali kernel: last_pfn = 0x80000 max_arch_pfn = 0x400000000  
Sep 07 23:39:19 kali kernel: MTRR map: 3 entries (3 fixed + 0 variable; max >  
Sep 07 23:39:19 kali kernel: x86/PAT: Configuration [0-7]: WB WC UC- UC W>  
Sep 07 23:39:19 kali kernel: CPU MTRRs all blank - virtualized system.  
Sep 07 23:39:19 kali kernel: found SMP MP-table at [mem 0x0009fbf0-0x0009fbf>  
Sep 07 23:39:19 kali kernel: RAMDISK: [mem 0x28419000-0x30203fff]  
Sep 07 23:39:19 kali kernel: ACPI: Early table checksum verification disabled  
Sep 07 23:39:19 kali kernel: ACPI: RSDP 0x00000000000E0000 000024 (v02 VBOX >  
Sep 07 23:39:19 kali kernel: ACPI: XSDT 0x000000007FFF0030 00003C (v01 VBOX >  
Sep 07 23:39:19 kali kernel: ACPI: FACP 0x000000007FFF00F0 0000F4 (v04 VBOX >
```

```
mustafa@kali: ~  
File Actions Edit View Help  
  
(mustafa@kali)-[~]  
$ ip addr show  
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 qdisc noqueue state UNKNOWN group default qlen 1000  
    link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00  
    inet 127.0.0.1/8 scope host lo  
        valid_lft forever preferred_lft forever  
    inet6 ::1/128 scope host noprefixroute  
        valid_lft forever preferred_lft forever  
2: eth0: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc fq_codel state UP group default qlen 1000  
    link/ether 08:00:27:d1:f8:5d brd ff:ff:ff:ff:ff:ff  
    inet 10.0.2.15/24 brd 10.0.2.255 scope global dynamic noprefixroute eth0  
        valid_lft 82000sec preferred_lft 82000sec  
    inet6 fd17:625c:f037:2:dada:c4de:575:2c7b/64 scope global dynamic noprefixroute  
        valid_lft 86021sec preferred_lft 14021sec  
    inet6 fe80::6530:a9b4:56a1:57ee/64 scope link noprefixroute  
        valid_lft forever preferred_lft forever  
  
(mustafa@kali)-[~]  
$
```

```
mustafa@kali: ~  
File Actions Edit View Help  
  
(mustafa@kali)-[~]  
$ ifconfig  
eth0: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500  
    inet 10.0.2.15 netmask 255.255.255.0 broadcast 10.0.2.255  
    inet6 fd17:625c:f037:2:dada:c4de:575:2c7b prefixlen 64 scopeid 0<global>  
    inet6 fe80::6530:a9b4:56a1:57ee prefixlen 64 scopeid 0<link>  
    ether 08:00:27:d1:f8:5d txqueuelen 1000 (Ethernet)  
    RX packets 52873 bytes 77505364 (73.9 MiB)  
    RX errors 0 dropped 0 overruns 0 frame 0  
    TX packets 14415 bytes 870028 (849.6 KiB)  
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0  
  
lo: flags=73<UP,LOOPBACK,RUNNING> mtu 65536  
    inet 127.0.0.1 netmask 255.0.0.0  
    inet6 ::1 prefixlen 128 scopeid 0<host>  
    loop txqueuelen 1000 (Local Loopback)  
    RX packets 28 bytes 1680 (1.6 KiB)  
    RX errors 0 dropped 0 overruns 0 frame 0  
    TX packets 28 bytes 1680 (1.6 KiB)  
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0  
  
(mustafa@kali)-[~]  
$
```