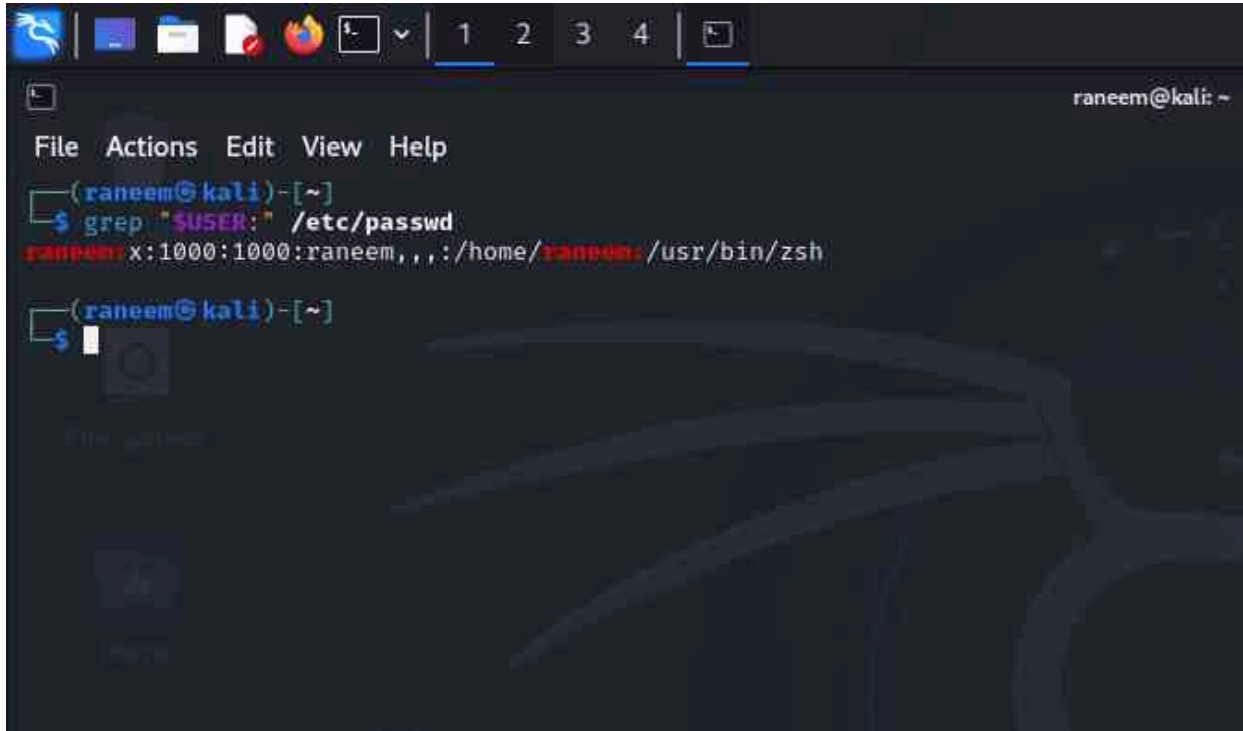


TASK A - User Account Management

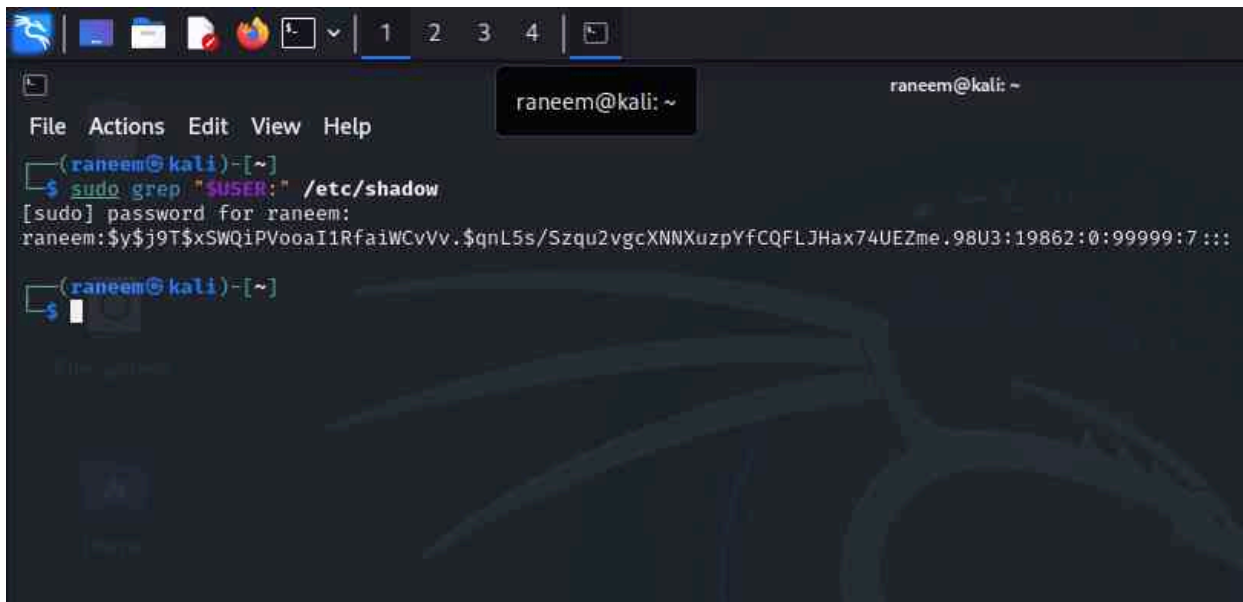
In this assignment, you should replace **xxxxx** with your MIDAS ID in all occurrences

Step 1: Open a terminal window in VM and execute the correct command to display user account information (including the login shell and home directory) for the current user using grep



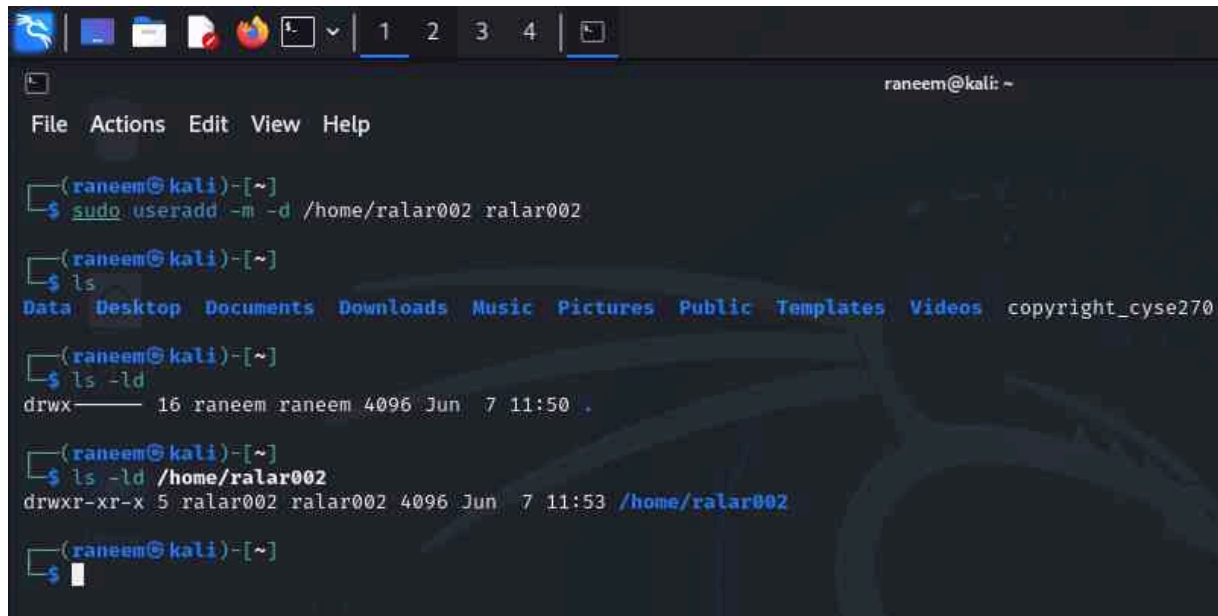
```
raneem@kali: ~  
File Actions Edit View Help  
(raneem@kali)-[~]  
└─$ grep "$USER:" /etc/passwd  
raneem:x:1000:1000:raneem,,,:/home/raneem:/usr/bin/zsh  
  
(raneem@kali)-[~]  
└─$
```

Step 2: Execute the correct command to display user password information (including the encrypted password and password aging) for the current user using grep



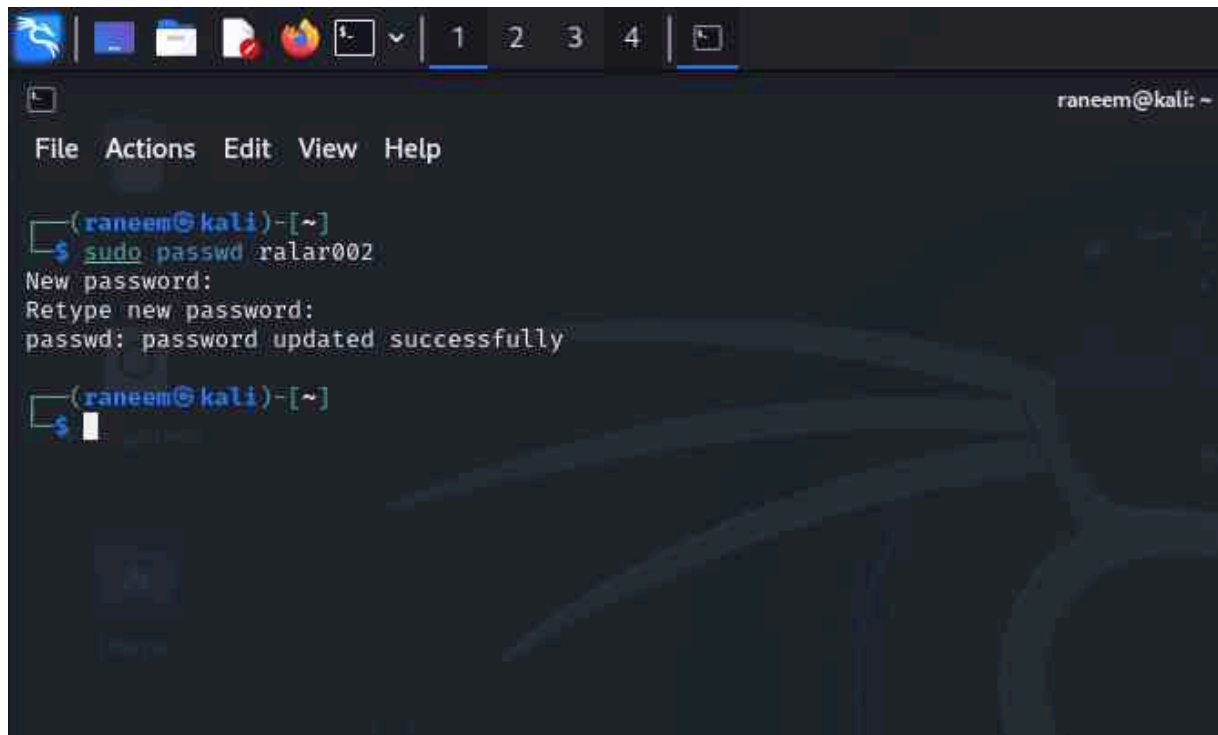
```
raneem@kali: ~  
File Actions Edit View Help  
(raneem@kali)-[~]  
└─$ sudo grep "$USER:" /etc/shadow  
[sudo] password for raneem:  
raneem:$y$j9T$xSWQiPVooaI1RfaiWCvVv.$qnL5s/Szqu2vgcXNNXuzpYfCQFLJHax74UEZme.98U3:19862:0:99999:7:::  
  
(raneem@kali)-[~]  
└─$
```

Step 3: Create a new user named **xxxxx** and explicitly use options to create the home directory/**home/xxxxx** for this user



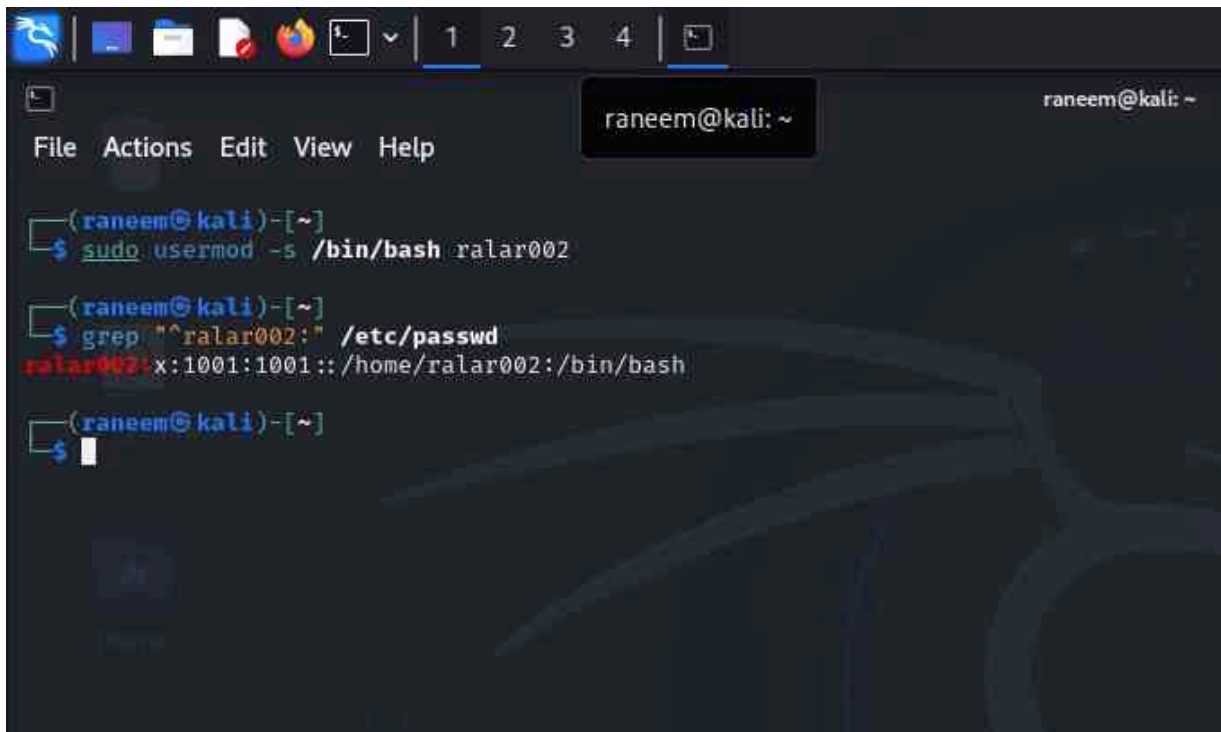
A terminal window on a Kali Linux system. The prompt is `(raneem@kali)-[~]`. The user enters `sudo useradd -m -d /home/ralar002 ralar002`. The prompt returns to `(raneem@kali)-[~]`. The user enters `ls`. The terminal shows a directory listing: `Data Desktop Documents Downloads Music Pictures Public Templates Videos copyright_cyse270`. The prompt returns to `(raneem@kali)-[~]`. The user enters `ls -ld`. The terminal shows: `drwx----- 16 raneem raneem 4096 Jun 7 11:50 .`. The prompt returns to `(raneem@kali)-[~]`. The user enters `ls -ld /home/ralar002`. The terminal shows: `drwxr-xr-x 5 ralar002 ralar002 4096 Jun 7 11:53 /home/ralar002`. The prompt returns to `(raneem@kali)-[~]`. The user enters `$`.

Step 4: Set a password for the new user



A terminal window on a Kali Linux system. The prompt is `(raneem@kali)-[~]`. The user enters `sudo passwd ralar002`. The terminal shows: `New password:`, `Retype new password:`, and `passwd: password updated successfully`. The prompt returns to `(raneem@kali)-[~]`. The user enters `$`.

Step 5: Set bash shell as the default login shell for the new user **xxxxx**, then verify the change

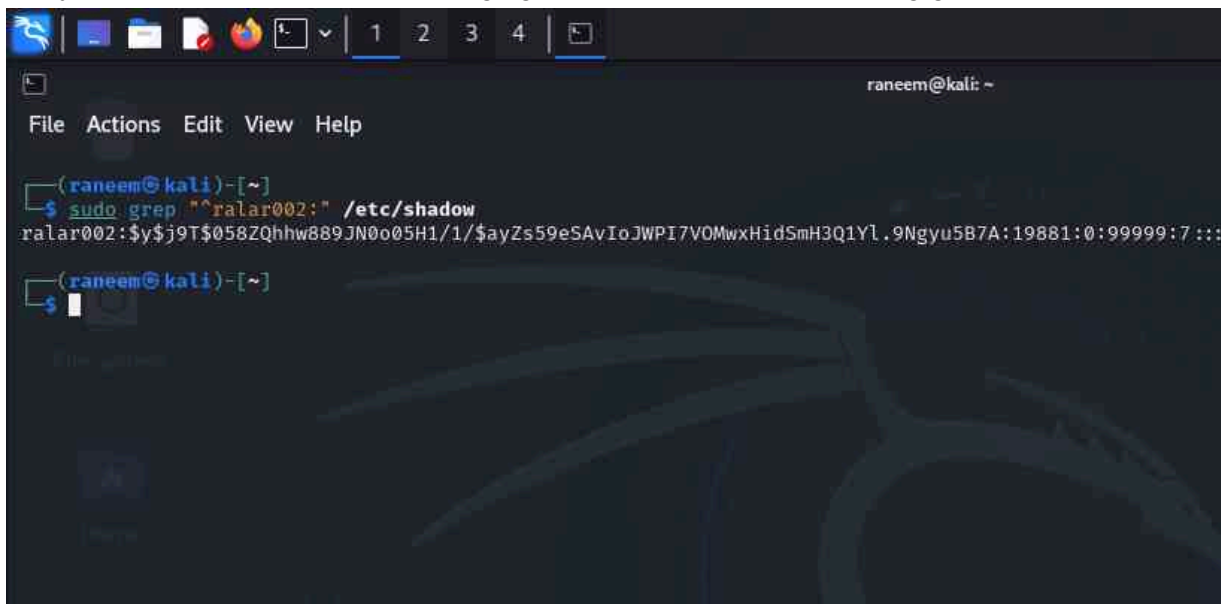


```
(raneem@kali)-[~]
└─$ sudo usermod -s /bin/bash ralar002

(raneem@kali)-[~]
└─$ grep "^ralar002:" /etc/passwd
ralar002:x:1001:1001::/home/ralar002:/bin/bash

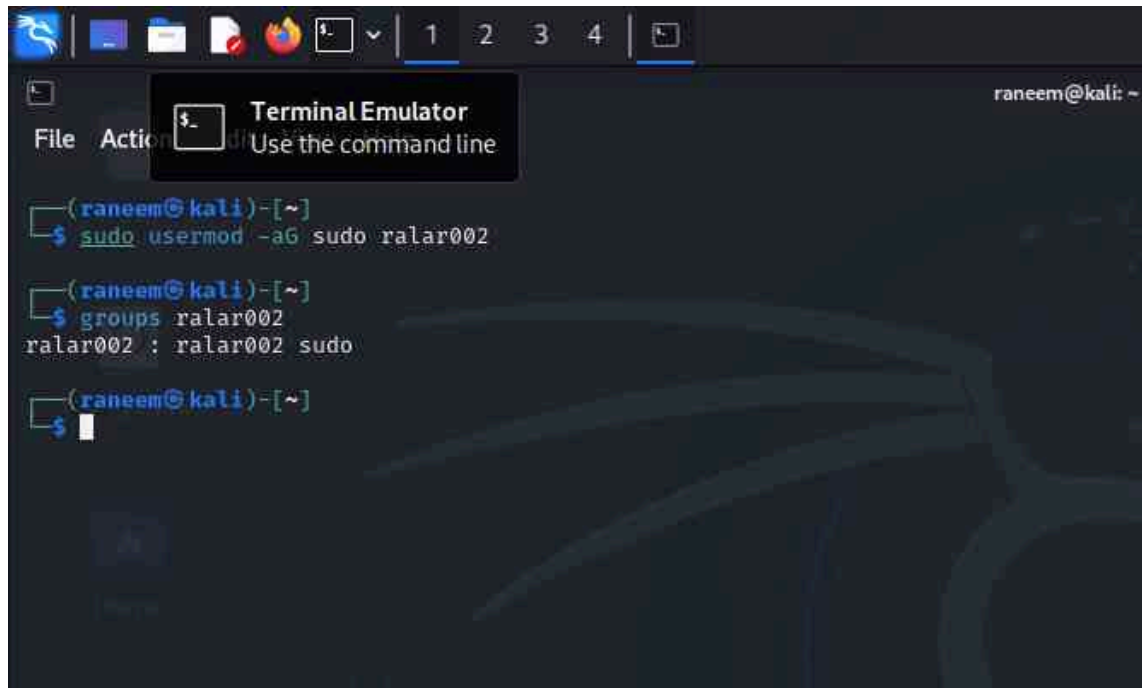
(raneem@kali)-[~]
└─$
```

Step 6: Execute the correct command to display user password information (including the encrypted password and password aging) for the new user **xxxxx** using grep



```
(raneem@kali)-[~]
└─$ sudo grep "^ralar002:" /etc/shadow
ralar002:$y$j9T$058ZQhhw889JN0o05H1/1/$ayZs59eSAvIoJWPI7VOMwxHidSmH3Q1Yl.9Ngyu5B7A:19881:0:99999:7:::
```

Step 7: Add the new user **xxxxx** to sudo group without overriding the existing group membership



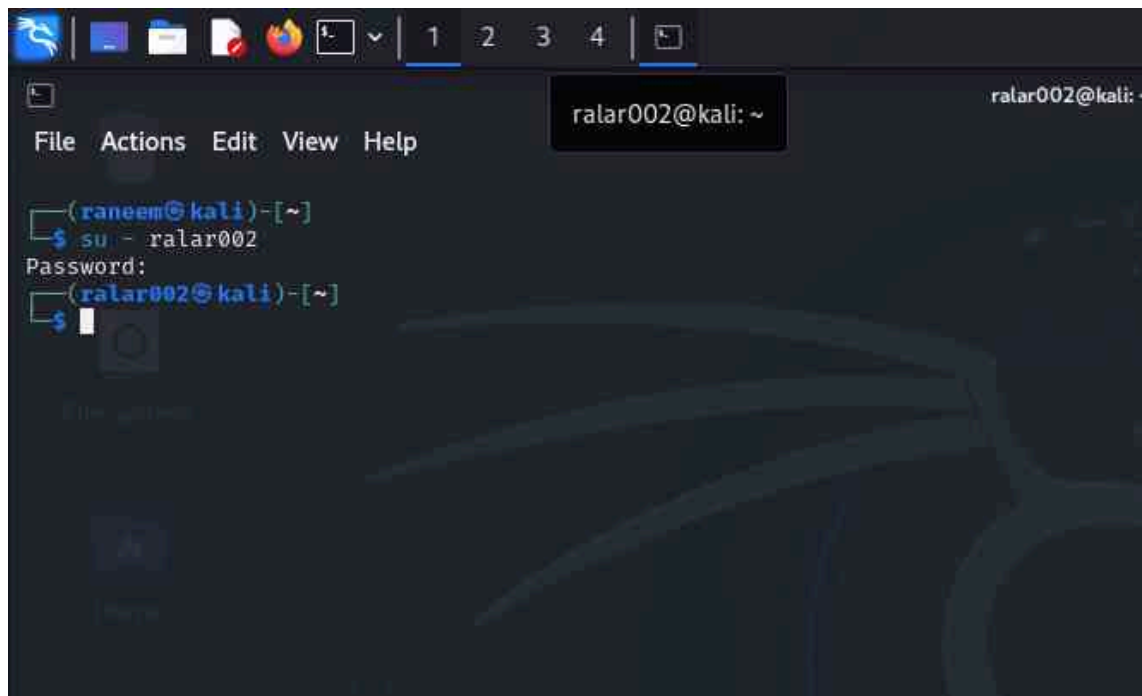
A terminal window titled "Terminal Emulator" with a menu bar containing "File" and "Action". The terminal shows the following commands and output:

```
(raneem@kali)-[~]
└─$ sudo usermod -aG sudo ralar002

(raneem@kali)-[~]
└─$ groups ralar002
ralar002 : ralar002 sudo

(raneem@kali)-[~]
└─$
```

Step 8: Switch to the new user's account

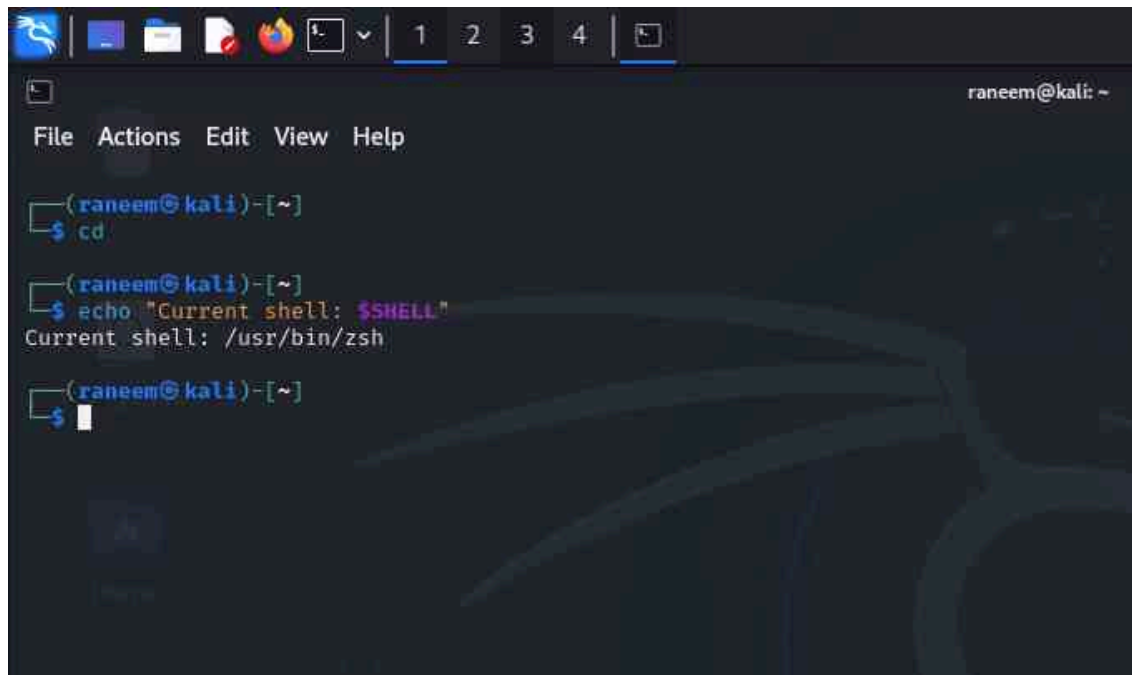


A terminal window titled "Terminal Emulator" with a menu bar containing "File", "Actions", "Edit", "View", and "Help". The terminal shows the following commands and output:

```
(raneem@kali)-[~]
└─$ su - ralar002
Password:
(ralar002@kali)-[~]
└─$
```

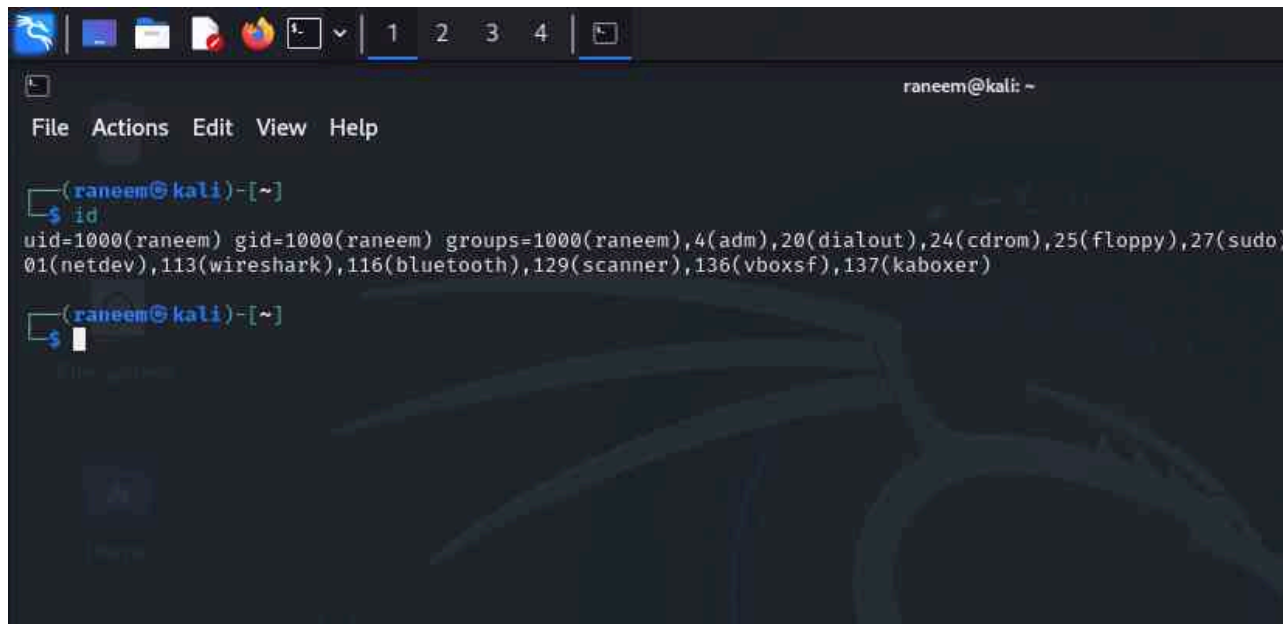
TASK B - Group Account Management

Step 1: Return to your home directory and determine the shell you are using



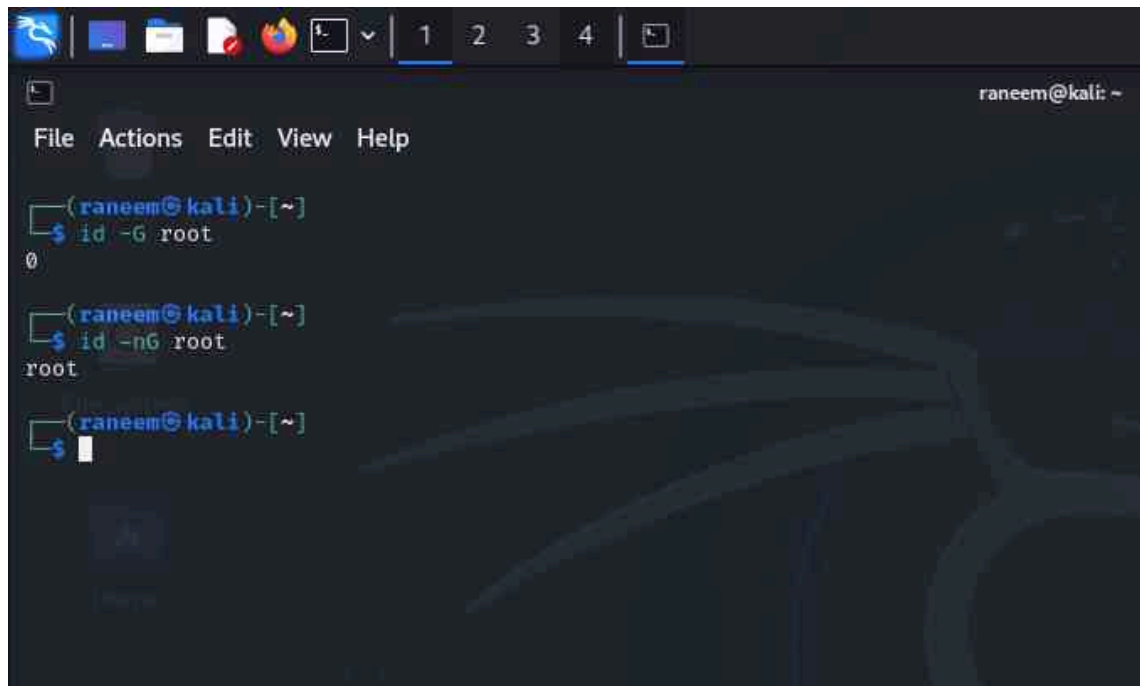
```
raneem@kali: ~  
File Actions Edit View Help  
  
(raneem@kali)-[~]  
└─$ cd  
  
(raneem@kali)-[~]  
└─$ echo "Current shell: $SHELL"  
Current shell: /usr/bin/zsh  
  
(raneem@kali)-[~]  
└─$
```

Step 2: Display the current user's ID and group membership



```
raneem@kali: ~  
File Actions Edit View Help  
  
(raneem@kali)-[~]  
└─$ id  
uid=1000(raneem) gid=1000(raneem) groups=1000(raneem),4(adm),20(dialout),24(cdrom),25(floppy),27(sudo),  
01(netdev),113(wireshark),116(bluetooth),129(scanner),136(vboxsf),137(kaboxer)  
  
(raneem@kali)-[~]  
└─$
```

Step 3: Display the group membership of the root account



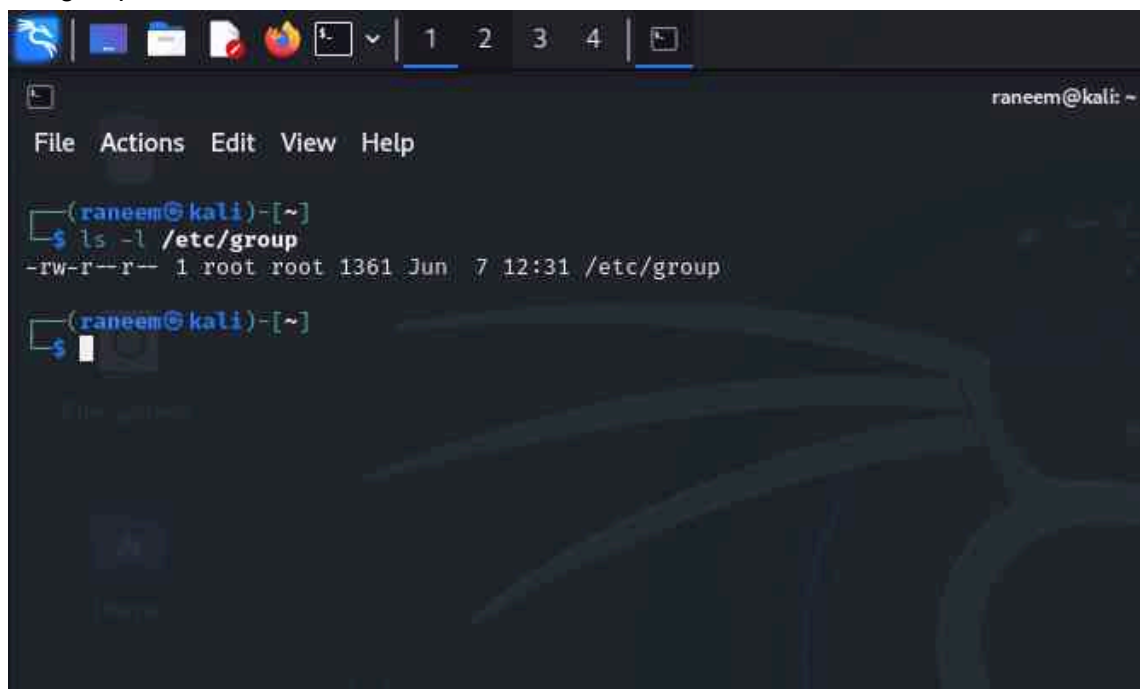
A terminal window on a Kali Linux system. The window title is "raneem@kali: ~". The menu bar includes "File", "Actions", "Edit", "View", and "Help". The terminal shows three commands and their outputs:

```
(raneem@kali)-[~]
└─$ id -G root
0

(raneem@kali)-[~]
└─$ id -nG root
root

(raneem@kali)-[~]
└─$
```

Step 4: Run the correct command to determine the user owner and group owner of the /etc/group file

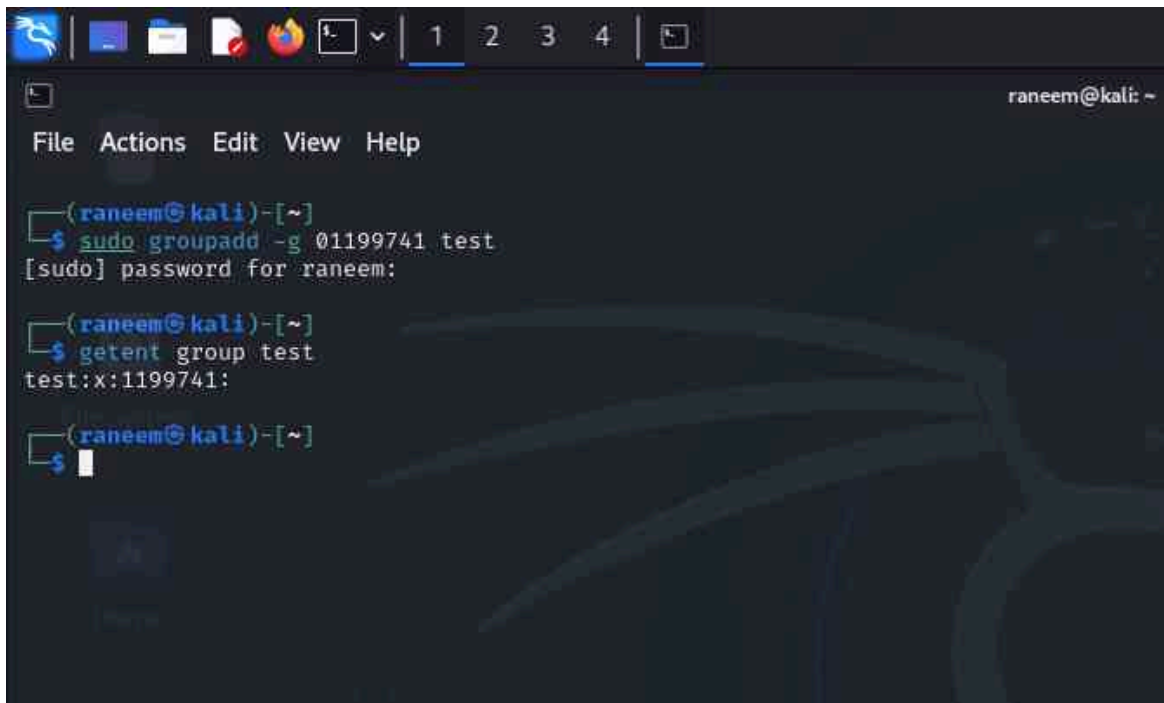


A terminal window on a Kali Linux system. The window title is "raneem@kali: ~". The menu bar includes "File", "Actions", "Edit", "View", and "Help". The terminal shows two commands and their outputs:

```
(raneem@kali)-[~]
└─$ ls -l /etc/group
-rw-r--r-- 1 root root 1361 Jun  7 12:31 /etc/group

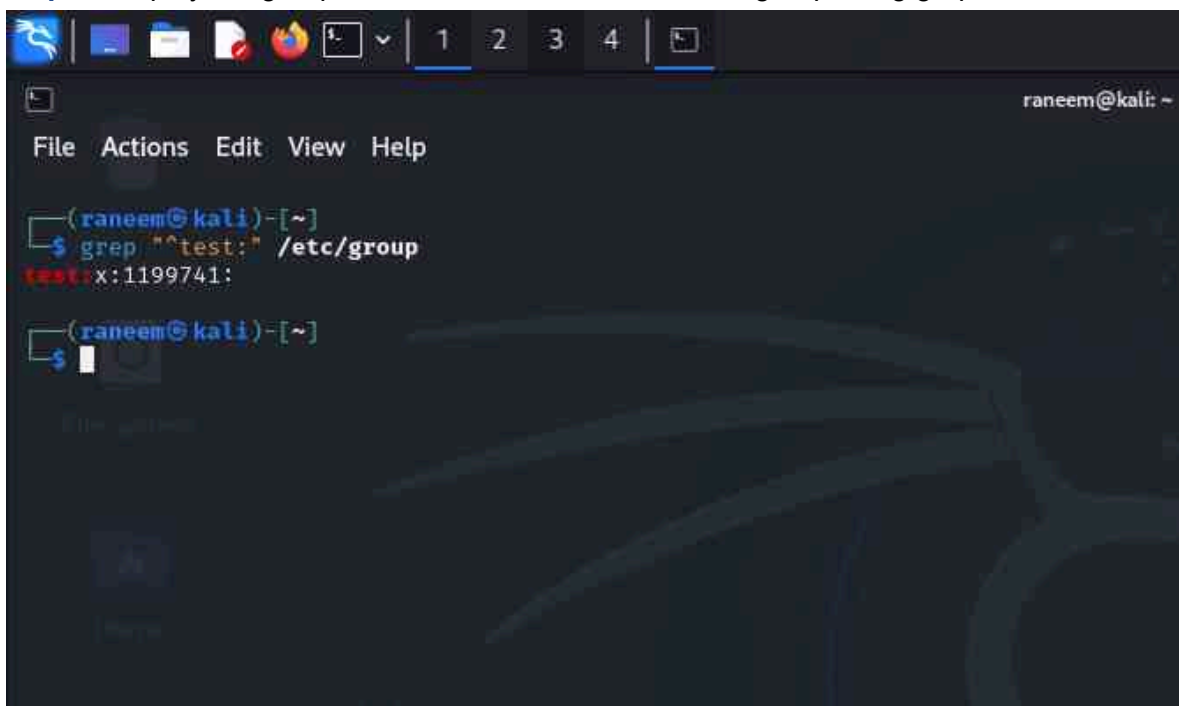
(raneem@kali)-[~]
└─$
```

Step 5: Create a new group named test and use your UIN as the GID



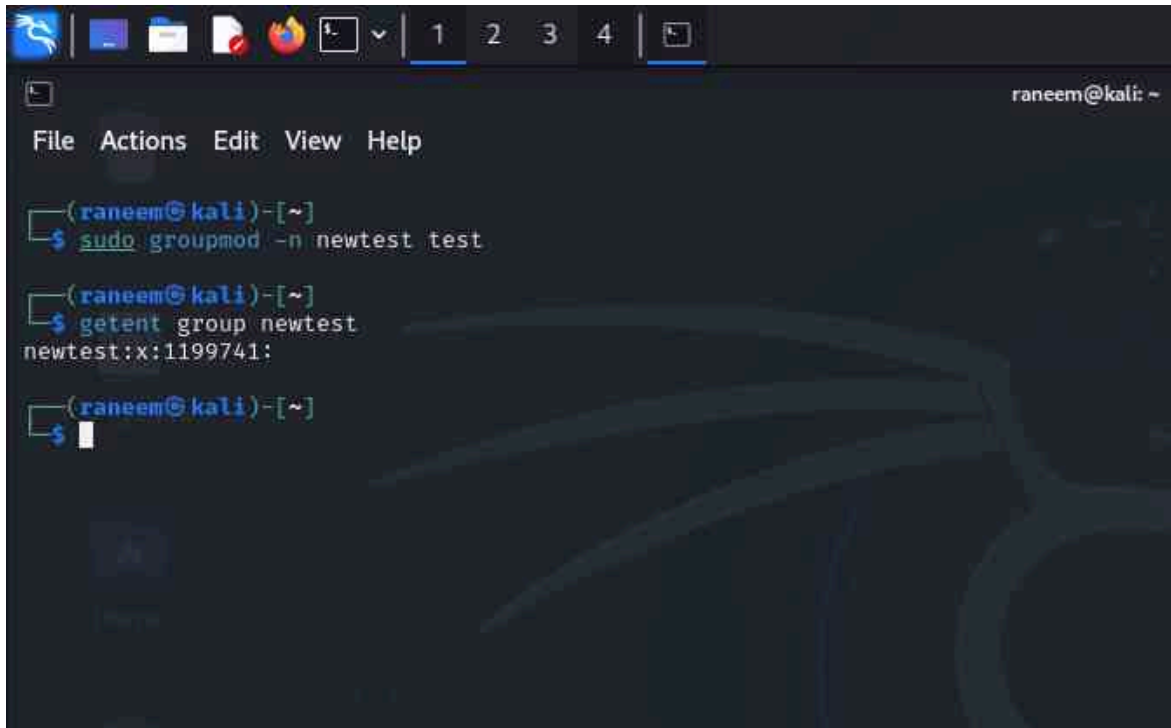
```
(raneem@kali)-[~]
└─$ sudo groupadd -g 01199741 test
[sudo] password for raneem:
(raneem@kali)-[~]
└─$ getent group test
test:x:1199741:
(raneem@kali)-[~]
└─$
```

Step 6: Display the group account information for the test group using grep



```
(raneem@kali)-[~]
└─$ grep "^test:" /etc/group
test:x:1199741:
(raneem@kali)-[~]
└─$
```

Step 7: Change the group name of the test group to newtest

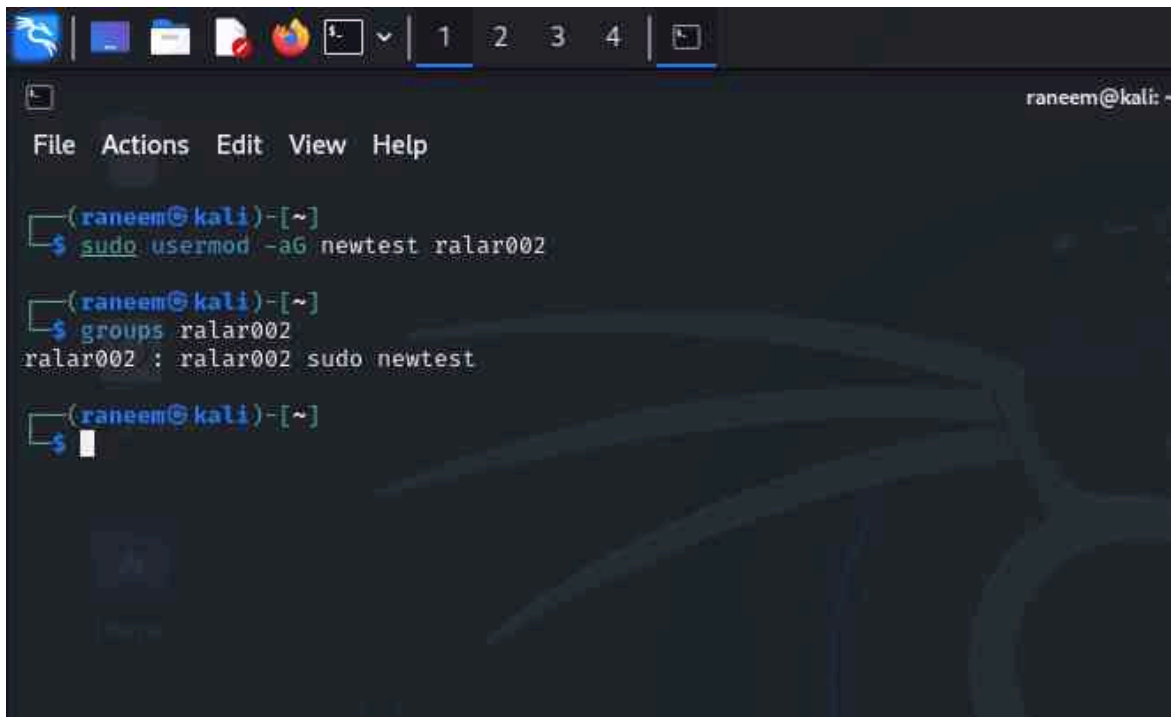


```
(raneem@kali)-[~]
└─$ sudo groupmod -n newtest test

(raneem@kali)-[~]
└─$ getent group newtest
newtest:x:1199741:

(raneem@kali)-[~]
└─$
```

Step 8: Add the current account (xxxxx) as a secondary member of the newtest group without overriding this user's current group membership

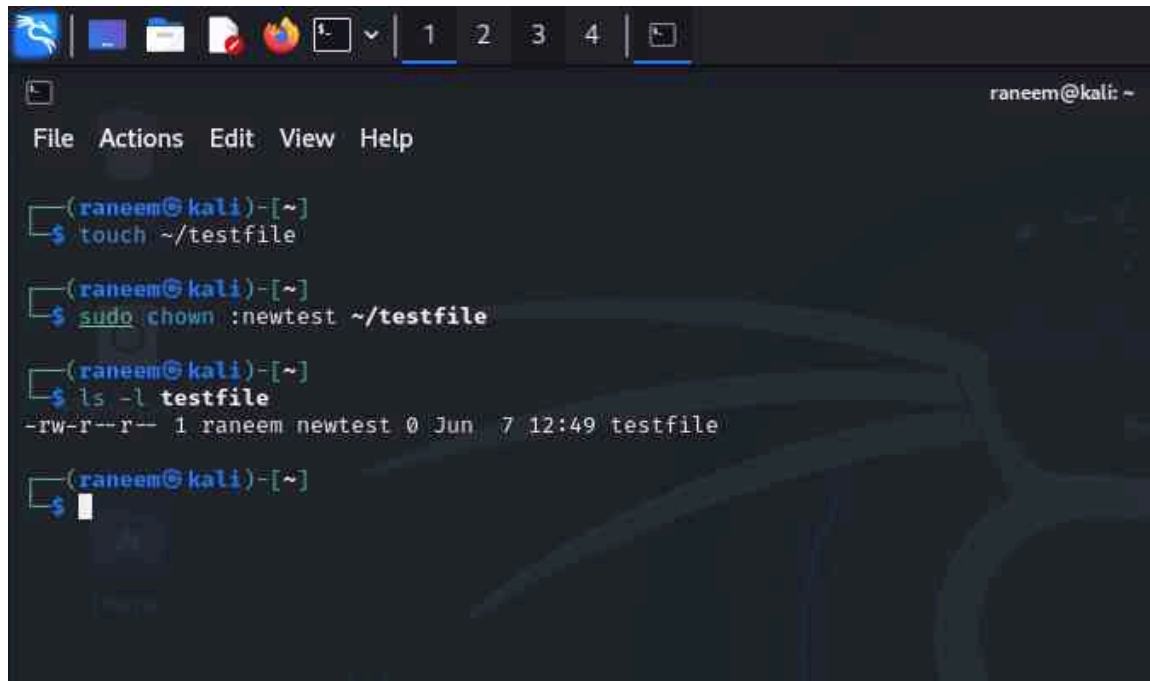


```
(raneem@kali)-[~]
└─$ sudo usermod -aG newtest ralar002

(raneem@kali)-[~]
└─$ groups ralar002
ralar002 : ralar002 sudo newtest

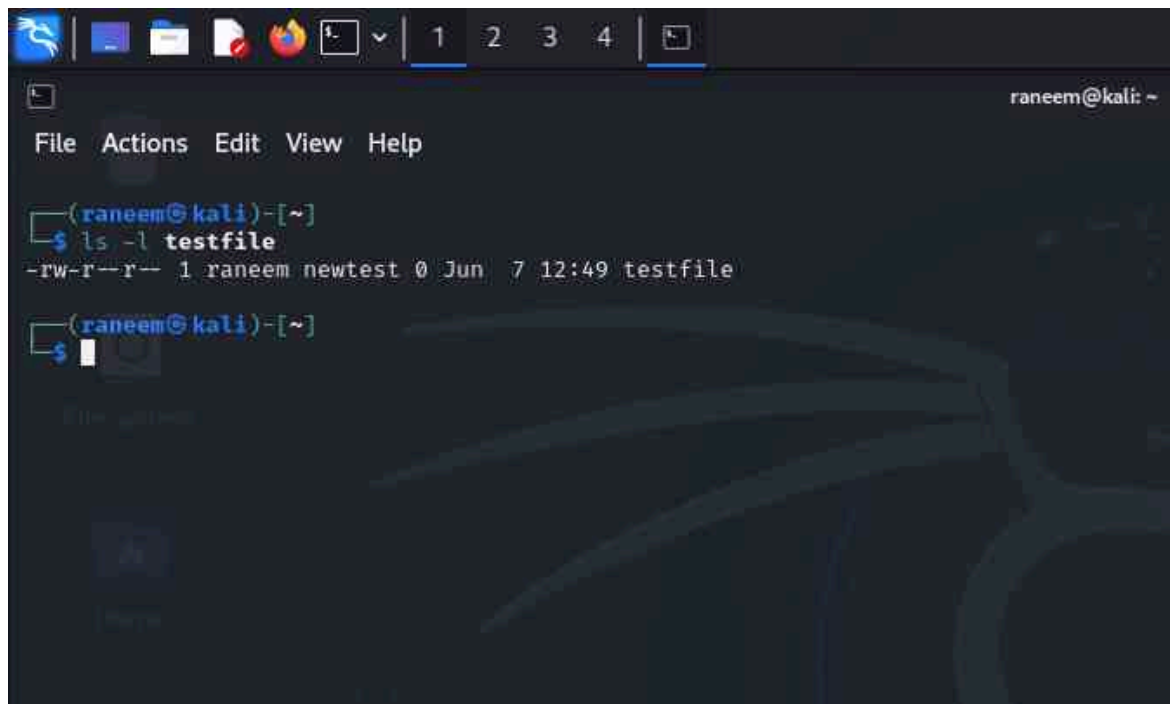
(raneem@kali)-[~]
└─$
```

Step 9: Create a new file **testfile** in the account's home directory, then change the group owner to newtest



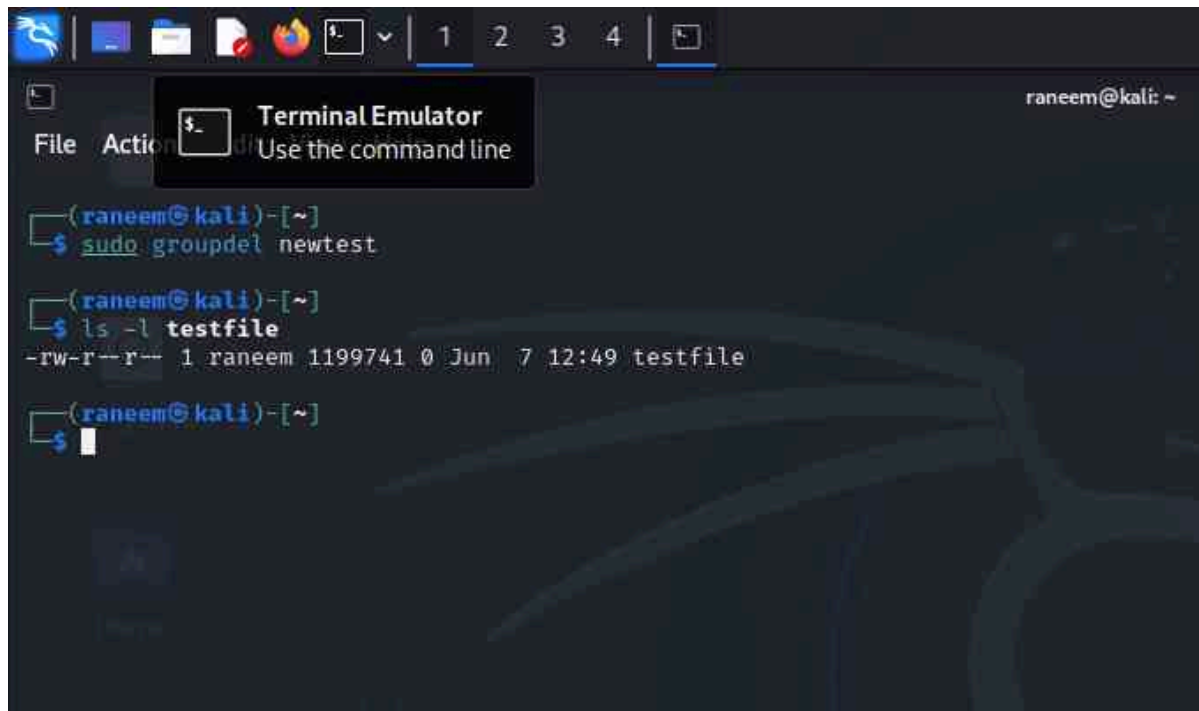
```
raneem@kali: ~  
File Actions Edit View Help  
  
(raneem@kali)-[~]  
└─$ touch ~/testfile  
  
(raneem@kali)-[~]  
└─$ sudo chown :newtest ~/testfile  
  
(raneem@kali)-[~]  
└─$ ls -l testfile  
-rw-r--r-- 1 raneem newtest 0 Jun  7 12:49 testfile  
  
(raneem@kali)-[~]  
└─$
```

Step 10: Display the user owner and group owner information of the file **testfile**



```
raneem@kali: ~  
File Actions Edit View Help  
  
(raneem@kali)-[~]  
└─$ ls -l testfile  
-rw-r--r-- 1 raneem newtest 0 Jun  7 12:49 testfile  
  
(raneem@kali)-[~]  
└─$
```

Step 11: Delete the newtest group, then repeat the previous step

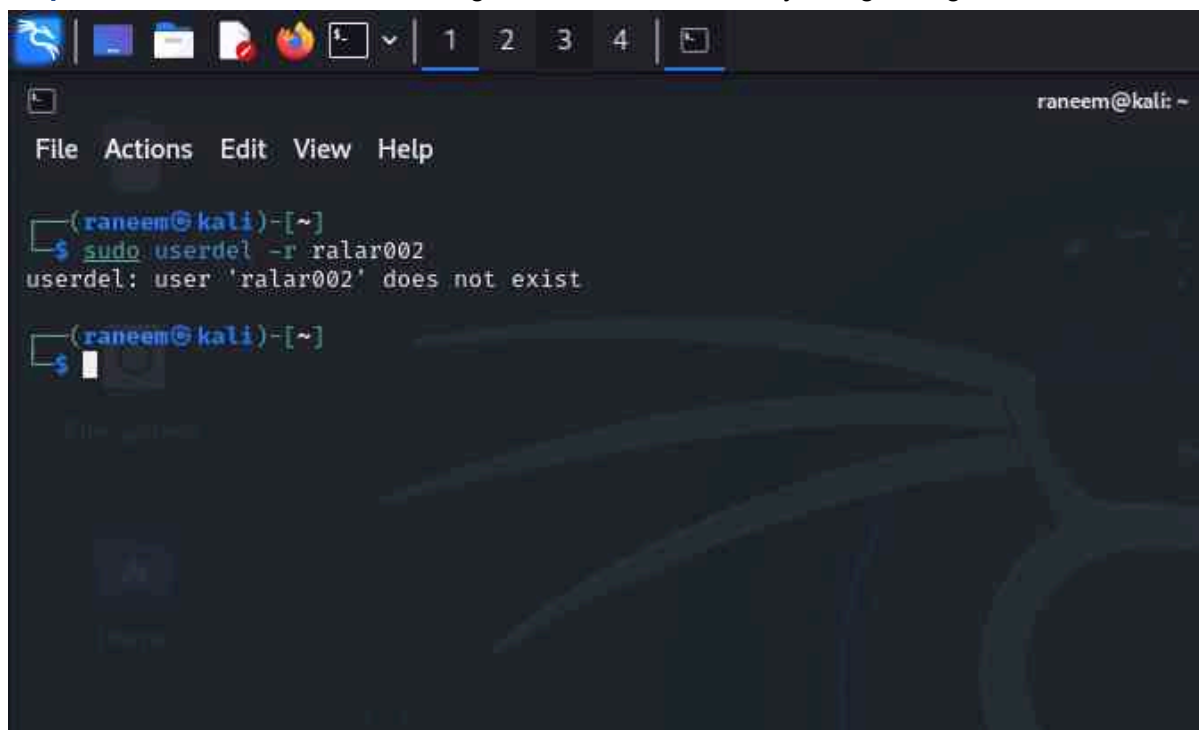


```
(raneem@kali)-[~]
└─$ sudo groupdel newtest

(raneem@kali)-[~]
└─$ ls -l testfile
-rw-r--r-- 1 raneem 1199741 0 Jun  7 12:49 testfile

(raneem@kali)-[~]
└─$
```

Step 12: Delete the user **xxxxx** along with the home directory using a single command



```
(raneem@kali)-[~]
└─$ sudo userdel -r ralar002
userdel: user 'ralar002' does not exist

(raneem@kali)-[~]
└─$
```

Note: I forgot to screenshot this step earlier, so I had to redo it. This is why the output shows “userdel: user ‘ralar002’ does not exist”