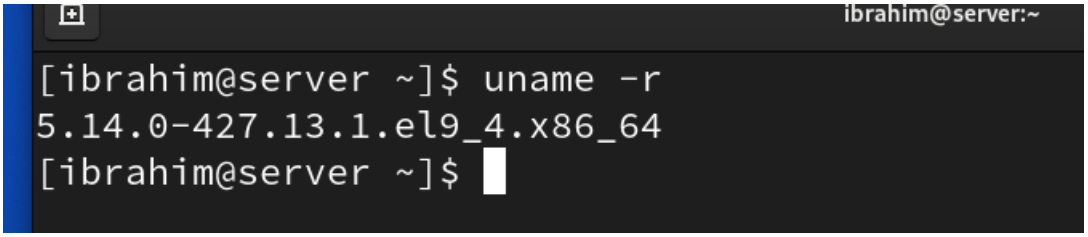
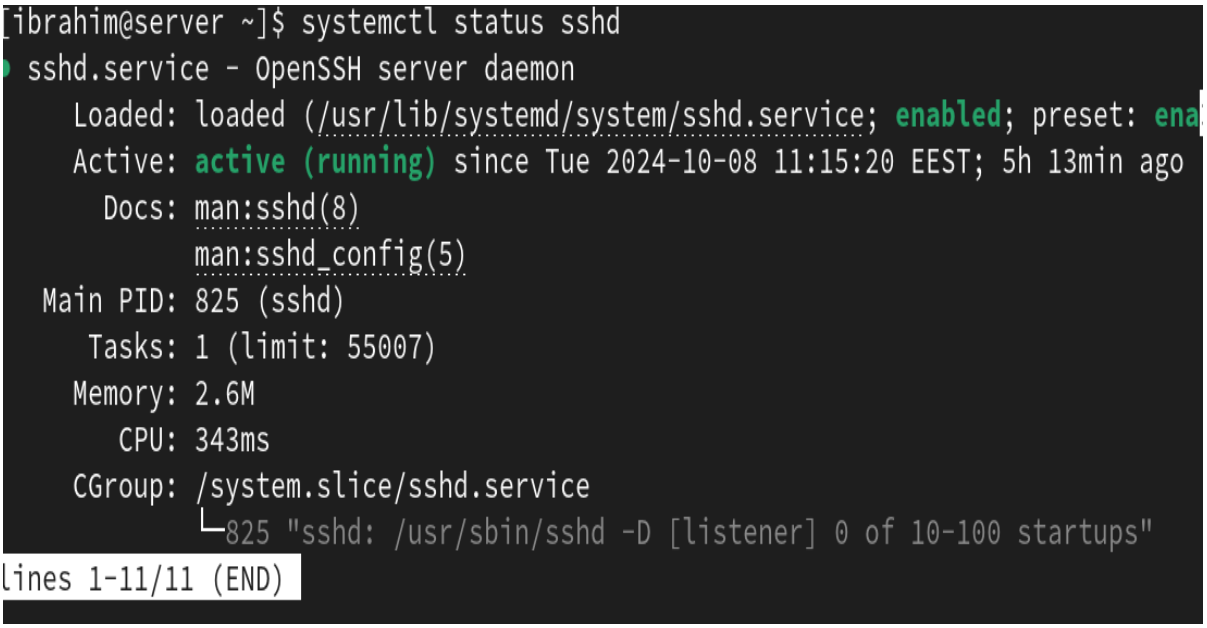
Task_1: System Basics (Chapter 1 - Getting Started with RHEL)

1- Display the hostname of the system.

2- Show the current kernel version



3- Verify if the SSH service is running



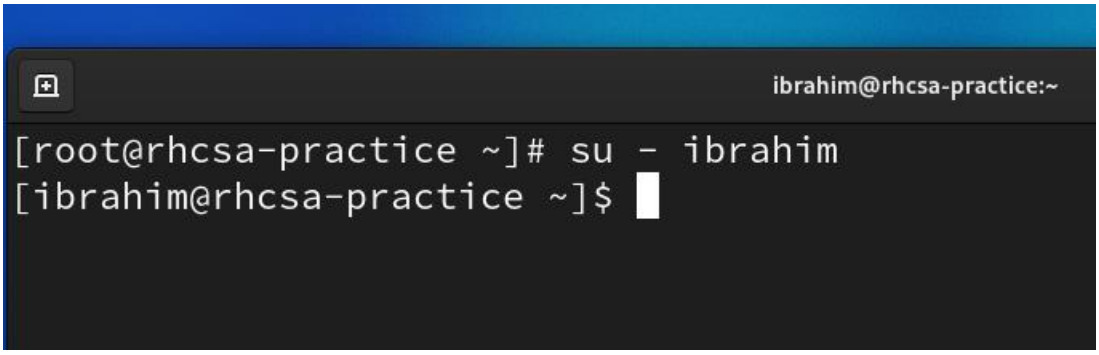
4- Set the system's hostname to rhcsa-practice.localdomain

```
[ibrahim@server ~]$ sudo hostname rhcsa-practice.localdomain
[sudo] password for ibrahim:
[ibrahim@server ~]$ hostname
rhcsa-practice.localdomain
[ibrahim@server ~]$
```

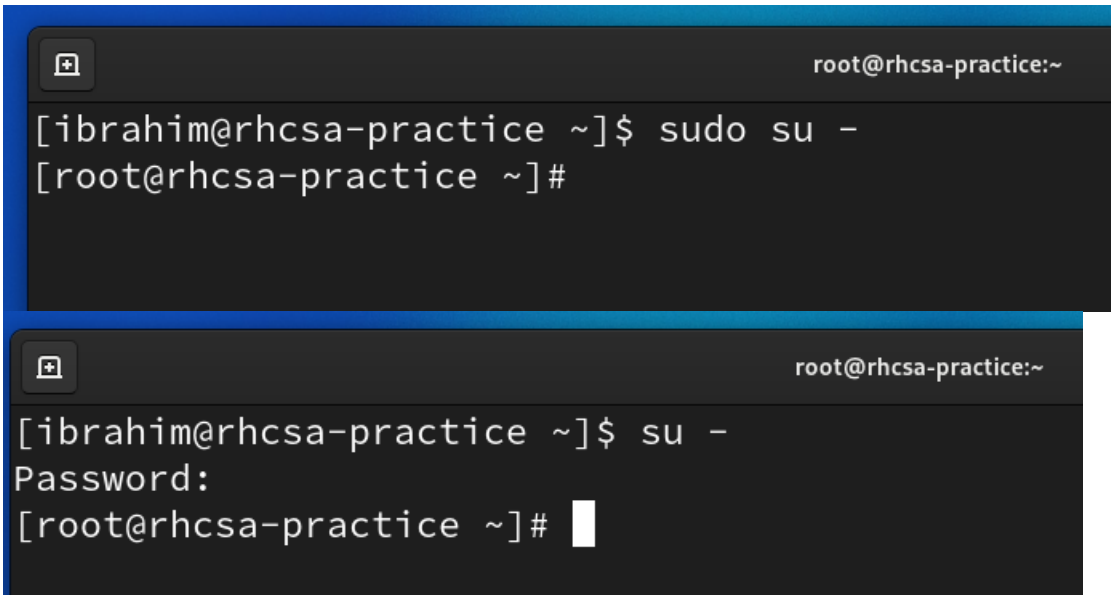
Task 2: Access the Command Line (Chapter 2 - Accessing the Command Line)

1- Login as Different Users:

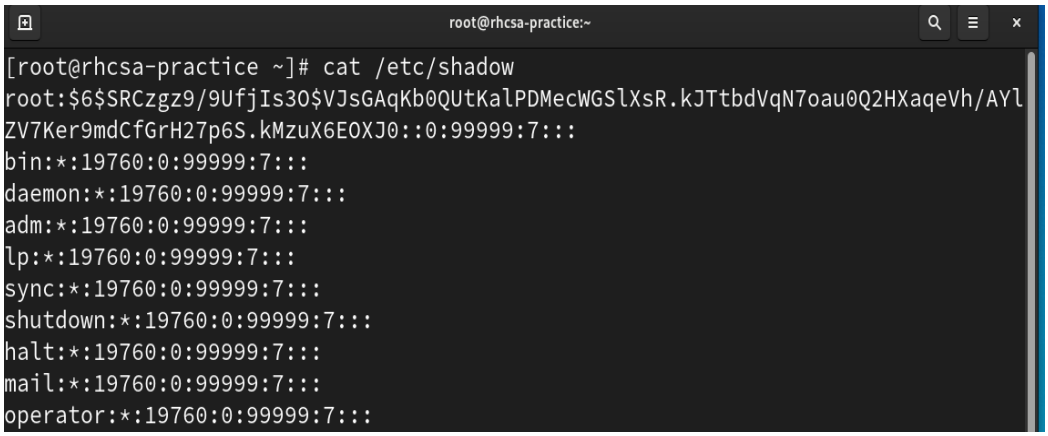
a- Login as Different Users:



b- Switch to the root user using the su command

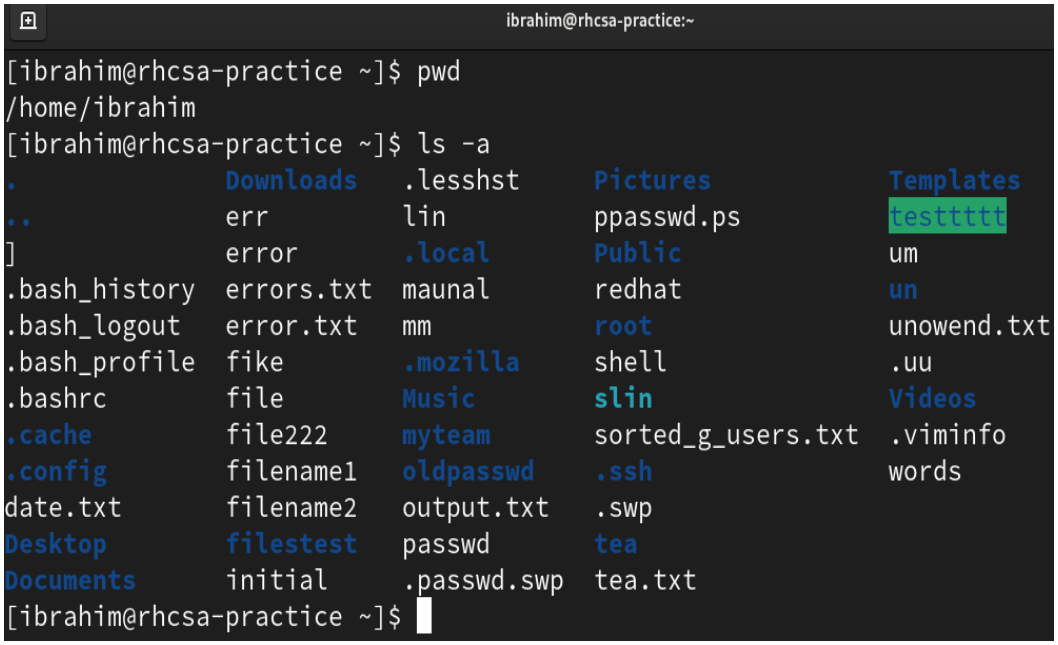


c- After gaining root access, displa

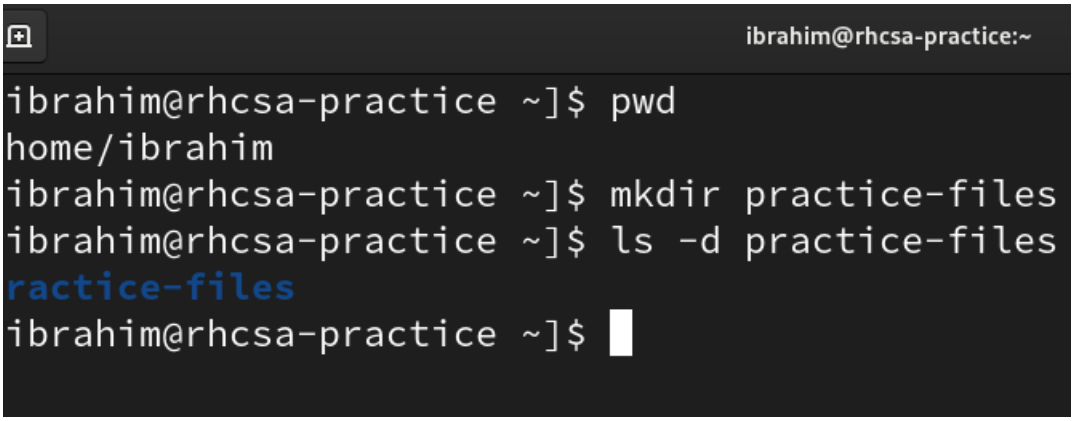


2- Bash Shell Basics:

a- Display all files, including hidden files, in your home directory.



b- Create a directory called practice-files inside your home directory

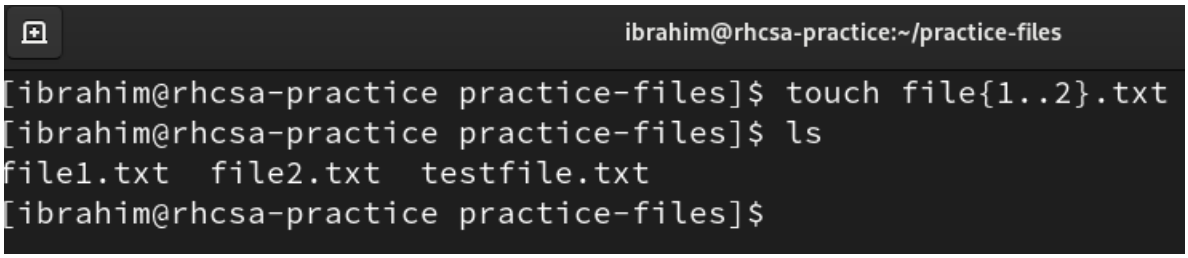


c- Navigate to this directory and create a text file named testfile.txt with the content "RHCSA Exam Practice".

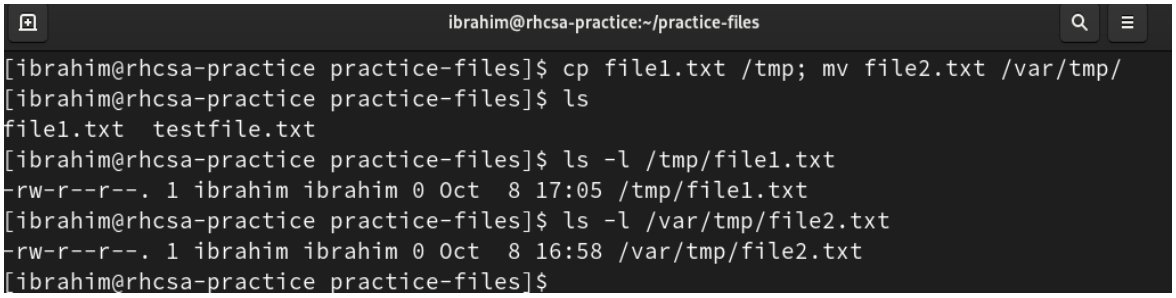
Task 3: Managing Files and Directories (Chapter 3 - Managing Files from the Command Line)

1- File Operations:

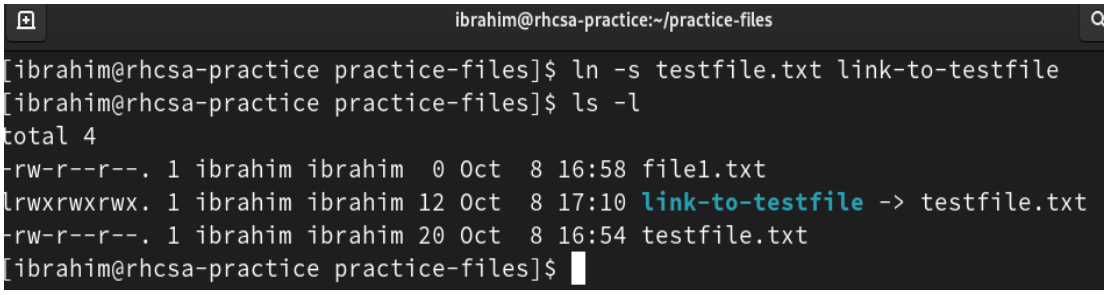
a- Inside the practice-files directory, create two more files named file1.txt and file2.txt.



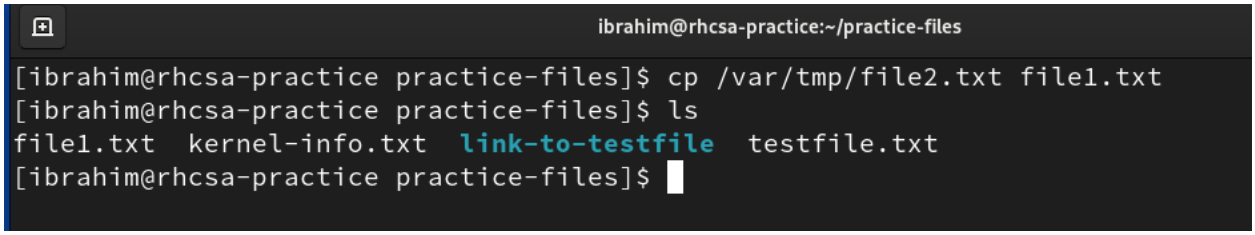
b- Copy file1.txt to /tmp and move file2.txt to /var/tmp.



c- Create a symbolic link to testfile.txt called link-to-testfile in the same directory.



d- Delete file1.txt from /tmp and restore it from /var/tmp.
Since file2.txt was moved to /var/tmp, we will assume you meant to restore file1.txt by copying it back from /var/tmp. To do this, first copy file1.txt back from /var/tmp to practice-file.



2- Search Files:

a- Find all files in your home directory that were modified in the last 24 hours.

```
[ibrahim@rhcsa-practice practice-files]$ sudo find ~ -type f -mtime -1
/home/ibrahim/.local/share/gnome-shell/application_state
/home/ibrahim/.local/share/evolution/addressbook/system/contacts.db
/home/ibrahim/.local/share/nautilus/tags/meta.db-shm
/home/ibrahim/.local/state/wireplumber/restore-stream
/home/ibrahim/.local/state/wireplumber/default-routes
/home/ibrahim/.config/ibus/bus/4e4d7fb0baca4b94ae3430d7c2e759ba-unix-wayland-0
/home/ibrahim/.config/dconf/user
/home/ibrahim/.config/gtk-3.0/bookmarks
/home/ibrahim/.config/monitors.xml
/home/ibrahim/.config/monitors.xml~
/home/ibrahim/.cache/mesa_shader_cache/index
/home/ibrahim/.cache/mesa_shader_cache/a0/1934d7e54f7b9a0b790b4f78bf4ebba26c1077
/home/ibrahim/.cache/mesa_shader_cache/21/56d3ddd6d4b3110e50b9aeb0b6b73293b4f1d7
/home/ibrahim/.cache/mesa_shader_cache/9c/75fe3432b15bf084fd3638988da780bfbf7c93
/home/ibrahim/.cache/mesa_shader_cache/a1/8c23c5a90bef2969f74029e754f11a8ab1b706
/home/ibrahim/.cache/mesa_shader_cache/bb/0b685a5072b9447b59f12d0447ceb44e8745e8
/home/ibrahim/.cache/mesa_shader_cache/0a/360e44351f1a4f919b71b050c8cd6f2335f89a
/home/ibrahim/.cache/mesa_shader_cache/97/66271d582a501b0c992780ad477d8d10110932
/home/ibrahim/.cache/mesa_shader_cache/50/ed7171aaa572b151fe7bae28edfb76d4e15cd1
/home/ibrahim/.bash_history
```

b- Search for the string "bash" in /etc/passwd and display the matching lines.

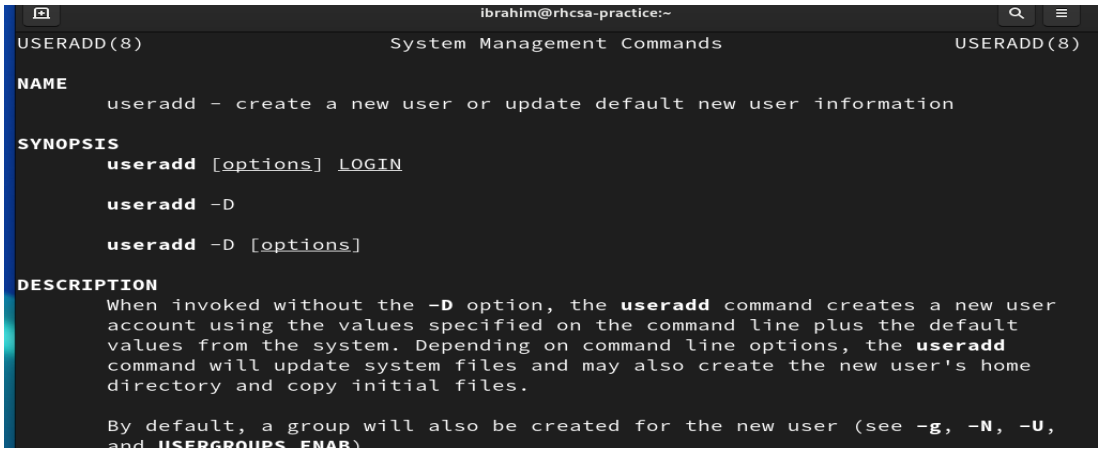
```
ibrahim@rhcsa-practice practice-files]$ cat /etc/passwd | grep "bash"
oot:x:0:0:root:/root:/bin/bash
brahim:x:1000:1000:Ibrahim:/home/ibrahim:/bin/bash
ser01:x:1001:1001::/home/user01:/bin/bash
slam:x:1002:1002:Islam Askar:/home/Islam:/bin/bash
aduser:x:1003:1003::/home/baduser:/bin/bash
ibrahim@rhcsa-practice practice-files]$
```

Task 4: Getting Help in Red Hat Enterprise Linux (Chapter 4 - Getting Help)

1- Man Pages:

a- Display the man page for the useradd command

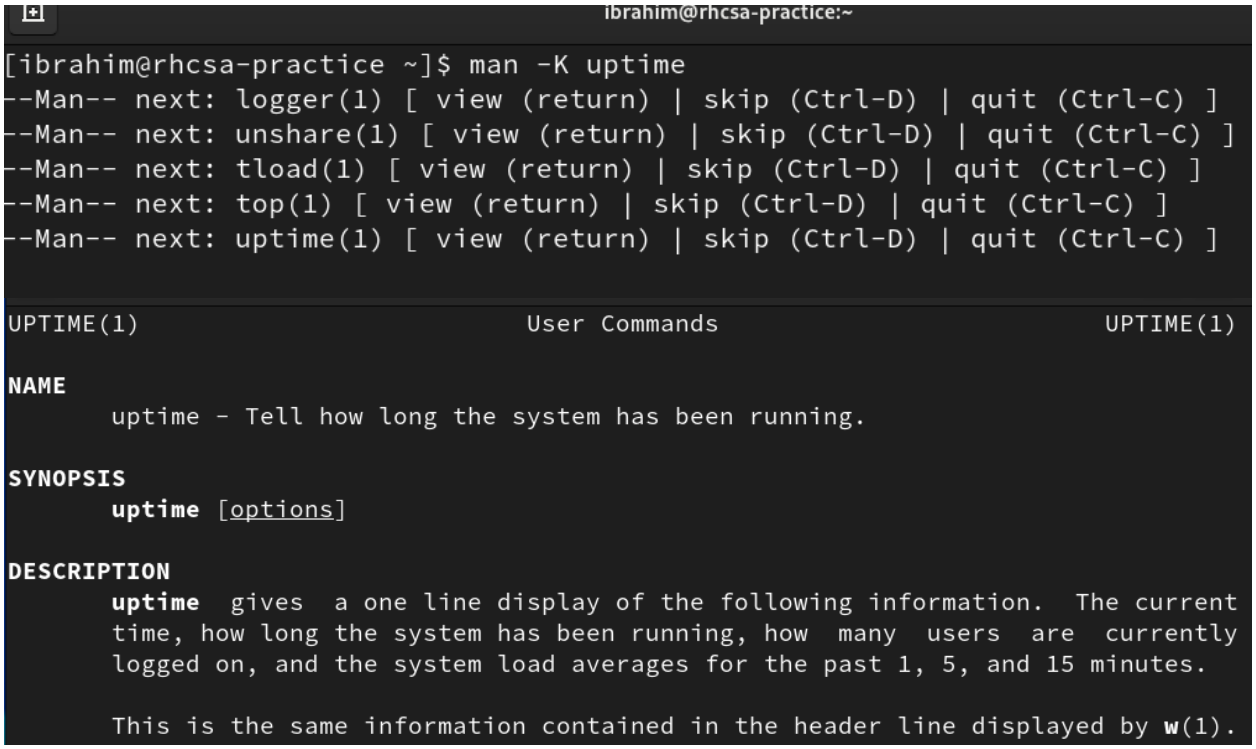
>> man useradd



b- Identify and explain the option to specify a user's home directory in useradd.

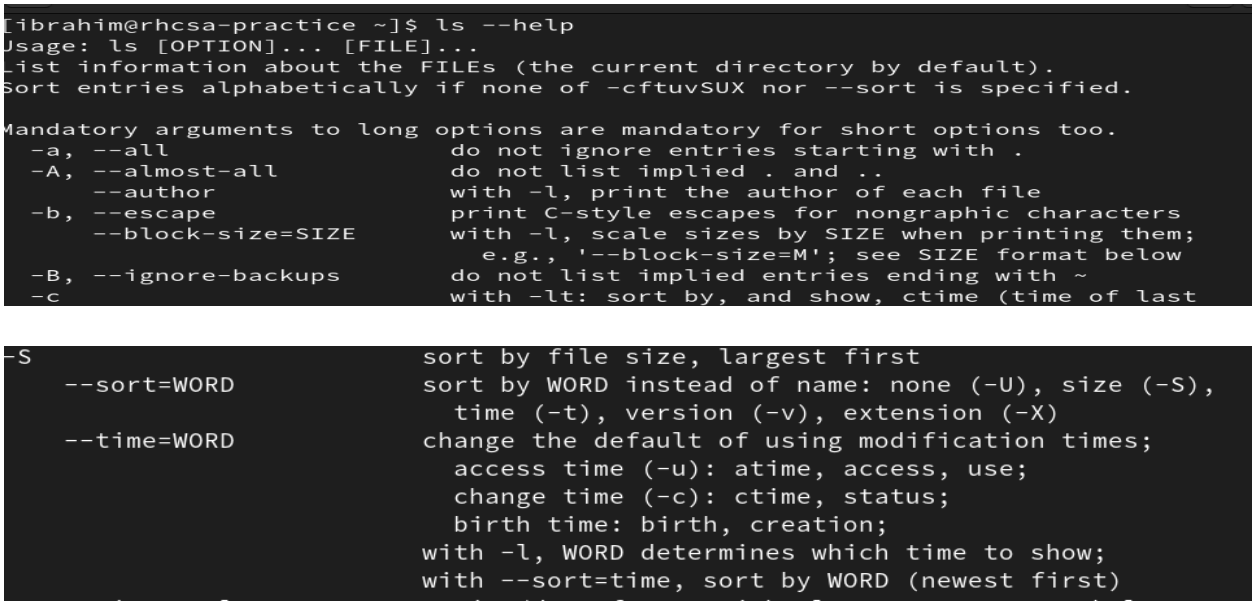
```
-d, --home-dir HOME_DIR
    The new user will be created using HOME_DIR as the value for the user's
    login directory. The default is to append the LOGIN name to BASE_DIR and
    use that as the login directory name. If the directory HOME_DIR does not
    exist, then it will be created unless the -M option is specified.
```

c- Use the man command to find a command that can display the current system's uptime.



2- Help Commands:

a- Use the --help option for the ls command and list three options for sorting output

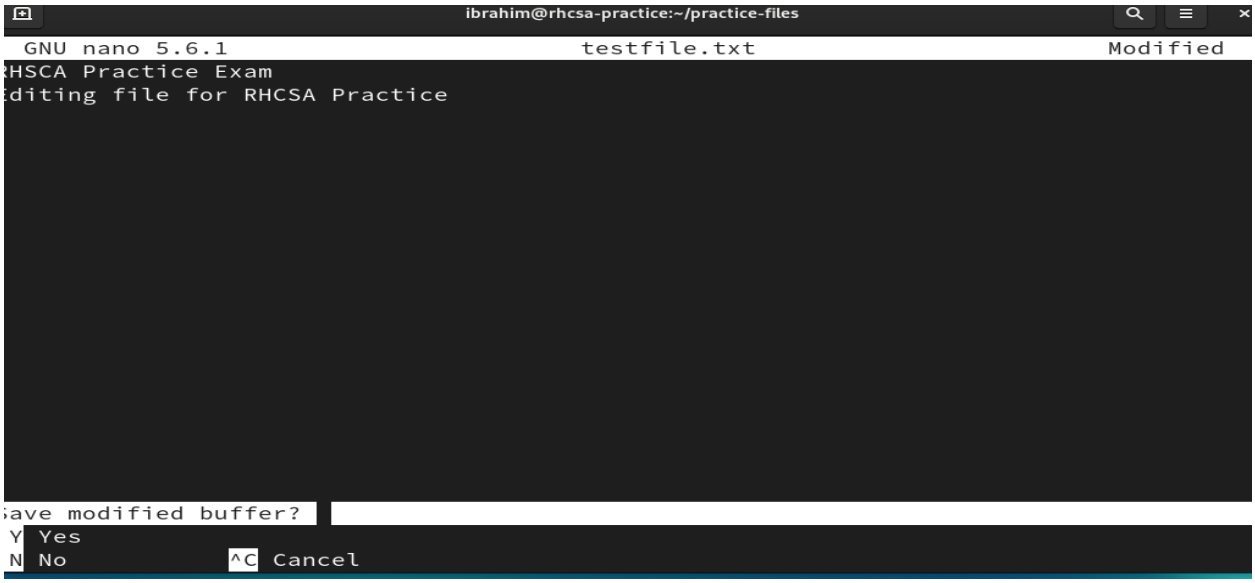


Task 5: Editing Text Files (Chapter 5 - Creating, Viewing, and Editing Text Files)

1- Editing Files:

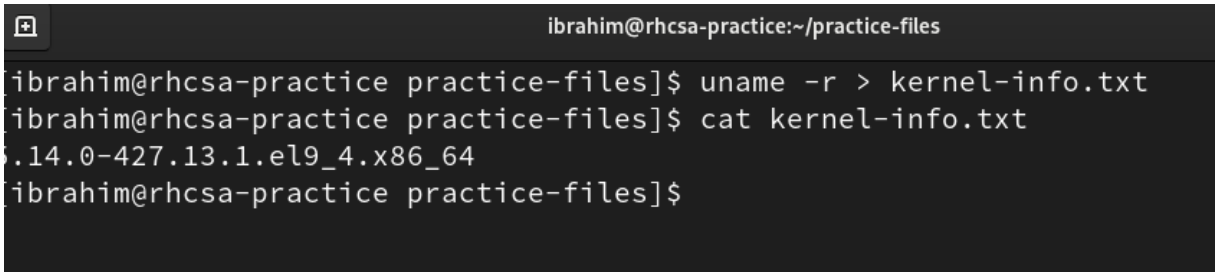
a- Open testfile.txt using the vi or nano editor, add a new line "Editing file for RHCSA practice" at the end, and save it.

>> nano tetstfile.txt

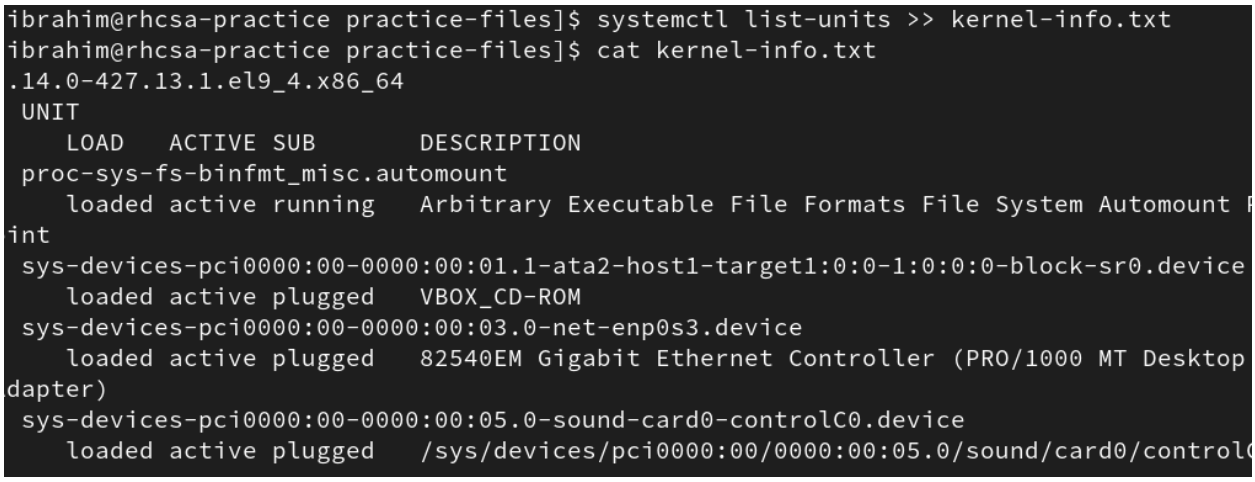


>> press ctrl+x then press Y to save the changes.

b- Redirect the output of uname -r to a file named kernel-info.txt.

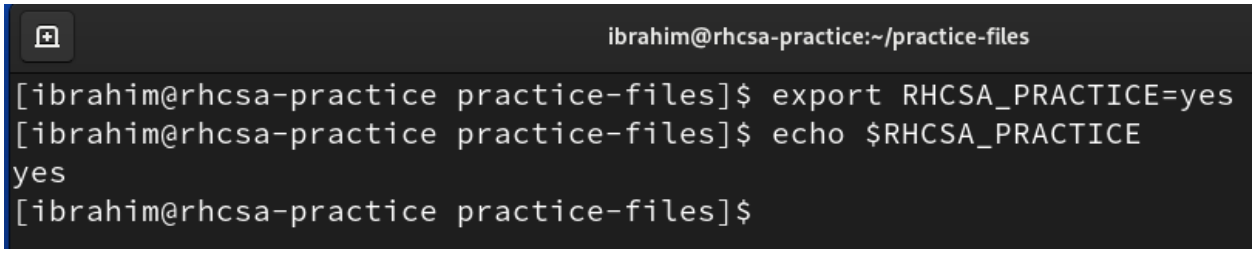


c- Append the list of running services (systemctl list-units) to kernel-info.txt.

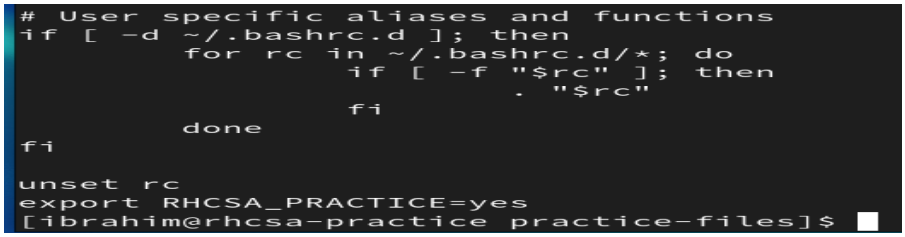


2- Changing Environment Variables:

a- Temporarily set the environment variable RHCSA_PRACTICE to "yes" and verify it.



b- Make the change permanent by adding it to your .bashrc file.

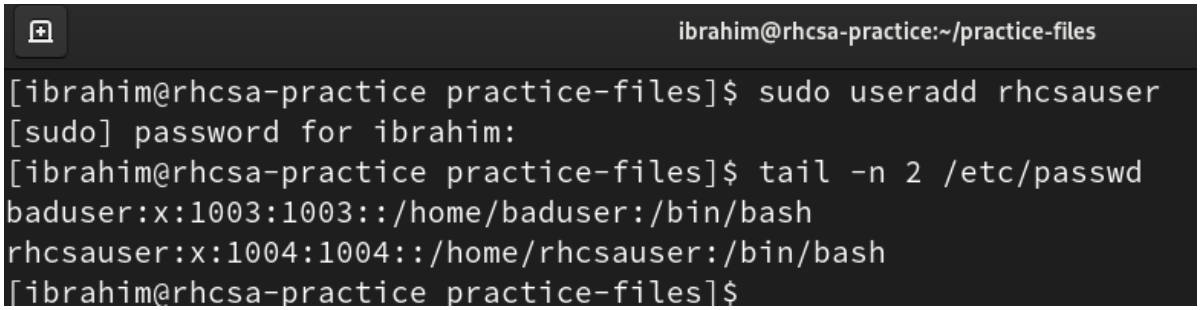


>>source ~/.bashrc

Task 6: User and Group Management (Chapter 6 - Managing Local Users and Groups)

1- Creating and Managing Users:

a- Create a new user named rhcsauser.



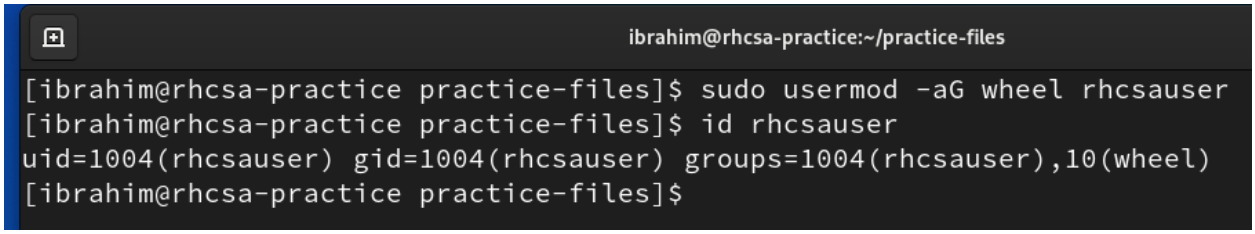
b- Set the password for rhcsauser to RedHat2024!.

```
[ibrahim@rhcsa-practice practice-files]$ sudo passwd rhcsauser
Changing password for user rhcsauser.
New password:
Retype new password:
passwd: all authentication tokens updated successfully.
[ibrahim@rhcsa-practice practice-files]$ echo "rhcsauser:RedHat2024!" | chpasswd
chpasswd: Permission denied.
chpasswd: cannot lock /etc/passwd; try again later.
[ibrahim@rhcsa-practice practice-files]$ echo "rhcsauser:RedHat2024!" | sudo chpasswd
[ibrahim@rhcsa-practice practice-files]$
```

```
[ibrahim@rhcsa-practice practice-files]$ su - rhcsauser
Password:
[rhcsauser@server ~]$
```

>> you can use one of the two methods (passwd command , chpasswd)

c- Add rhcsauser to the wheel group for sudo access.

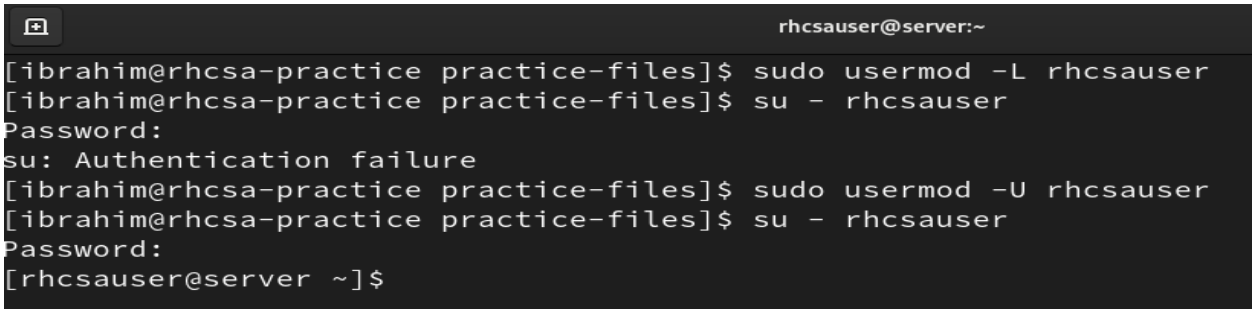


2- Managing Passwords and Groups

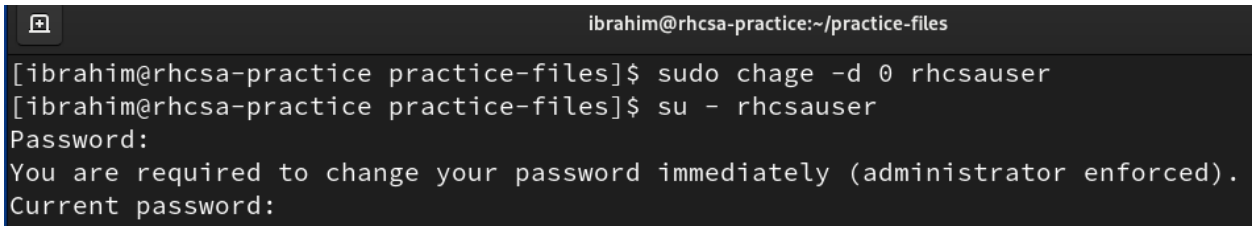
a- Create a new group named practicegroup and add rhcsauser to this group.

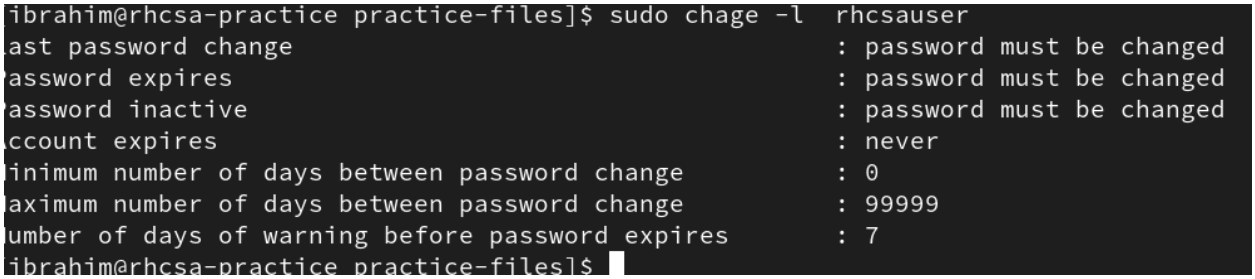
```
[ibrahim@rhcsa-practice practice-files]$ sudo groupadd practicegroup
[ibrahim@rhcsa-practice practice-files]$ sudo tail -n 3 /etc/group
test:x:2222:
rhcsauser:x:1004:
practicegroup:x:30002:
[ibrahim@rhcsa-practice practice-files]$ sudo usermod -aG practicegroup rhcsauser
[ibrahim@rhcsa-practice practice-files]$ id rhcsauser
uid=1004(rhcsauser) gid=1004(rhcsauser) groups=1004(rhcsauser),10(wheel),30002(practicegroup)
[ibrahim@rhcsa-practice practice-files]$
```

b- Lock the password for rhcsauser and then unlock it.



c- Change rhcsauser's password expiration to force the user to reset the password after the next login.





3- Superuser Access:

a- Use the sudo command as rhcsauser to create a file in /root called practice.txt with the content "This was created using sudo".