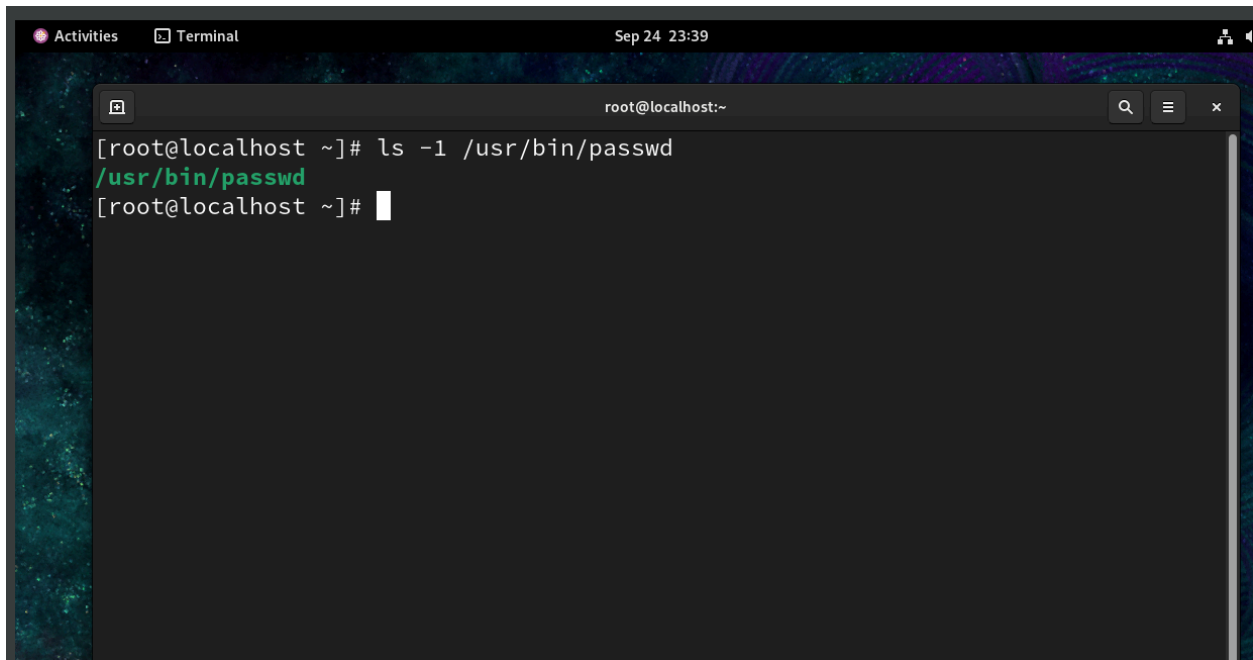


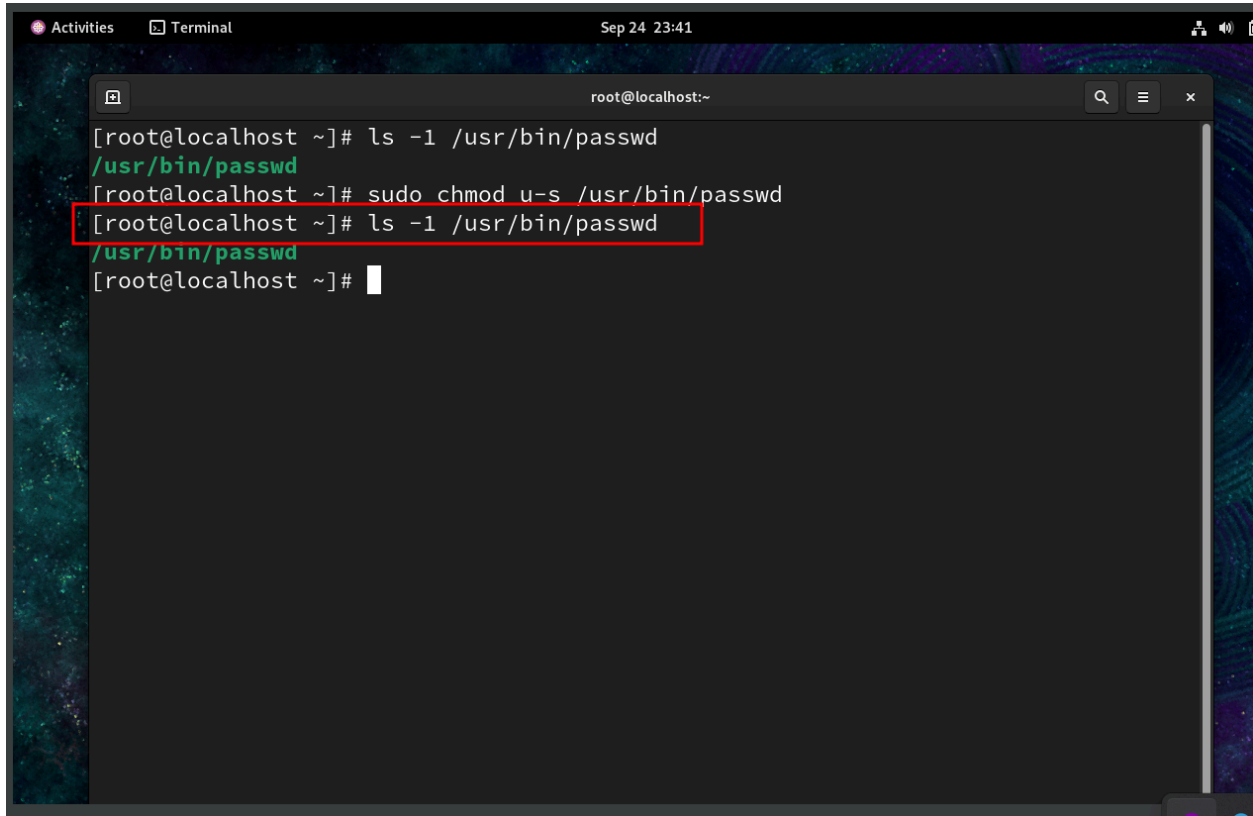
Q. 5. Remove suid permission from passwd command on your Linux system and try changing your password.
Give back the suid permission to passwd command and try changing your password.

1. Checking the current permission of the passwd command

A screenshot of a Linux terminal window. The window title bar shows 'Activities', 'Terminal', and the date/time 'Sep 24 23:39'. The terminal content shows a root user at localhost with a tilde prompt. The command 'ls -l /usr/bin/passwd' has been entered, and the output is '-rwsr-xr-x 1 root root 1460000 Sep 24 23:39 /usr/bin/passwd'. The prompt is now ready for the next command.

```
[root@localhost ~]# ls -l /usr/bin/passwd
-rwsr-xr-x 1 root root 1460000 Sep 24 23:39 /usr/bin/passwd
[root@localhost ~]#
```

2. Remove the SUID from the passwd command and verify the suid has been removed

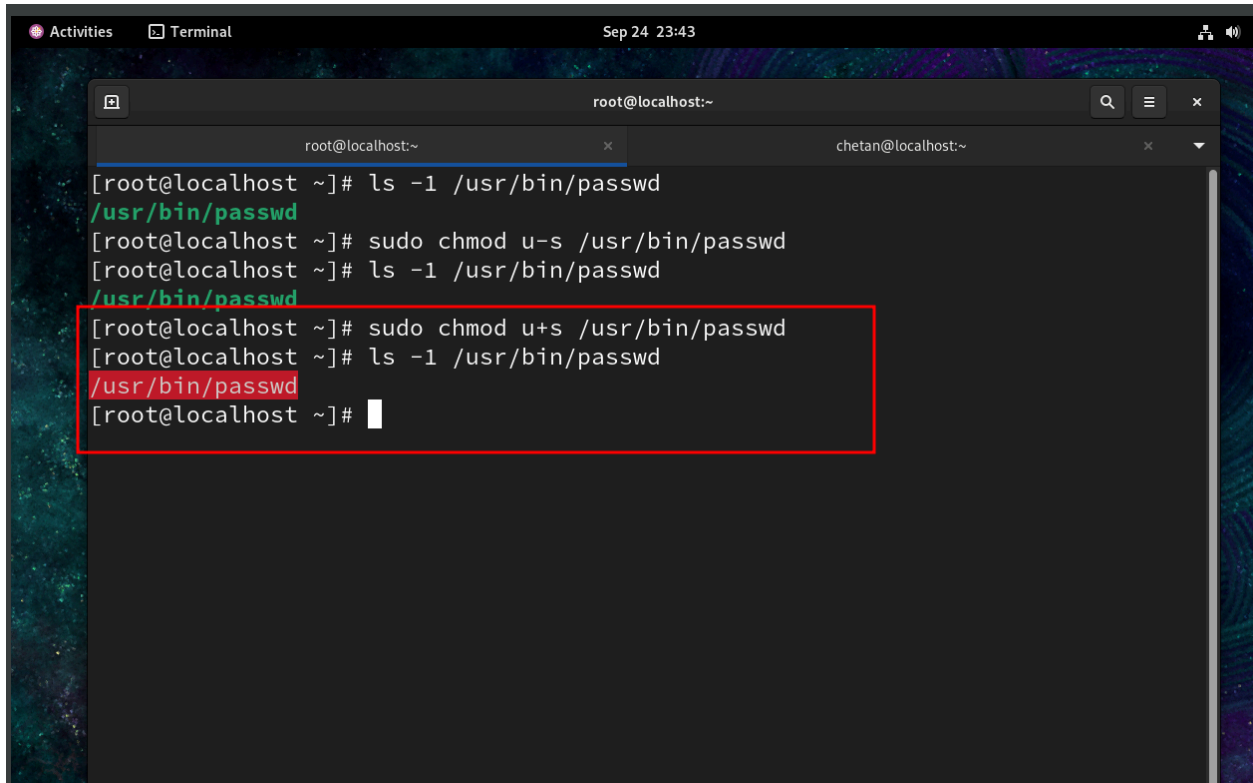
A terminal window titled "Terminal" with a date and time of "Sep 24 23:41". The prompt is "root@localhost:~". The user enters the command "ls -l /usr/bin/passwd", which outputs "/usr/bin/passwd" in green. Then, the user enters "sudo chmod u-s /usr/bin/passwd". Finally, the user enters "ls -l /usr/bin/passwd" again, which also outputs "/usr/bin/passwd" in green. The last line shows the prompt "[root@localhost ~]#" with a cursor. The third command and its output are highlighted with a red box.

```
[root@localhost ~]# ls -l /usr/bin/passwd
/usr/bin/passwd
[root@localhost ~]# sudo chmod u-s /usr/bin/passwd
[root@localhost ~]# ls -l /usr/bin/passwd
/usr/bin/passwd
[root@localhost ~]#
```

3. Try to change the passwd but it show error

```
[chetan@localhost ~]$ passwd
Changing password for user chetan.
Current password:
passwd: Authentication token manipulation error
[chetan@localhost ~]$
```

4. Change to default setting

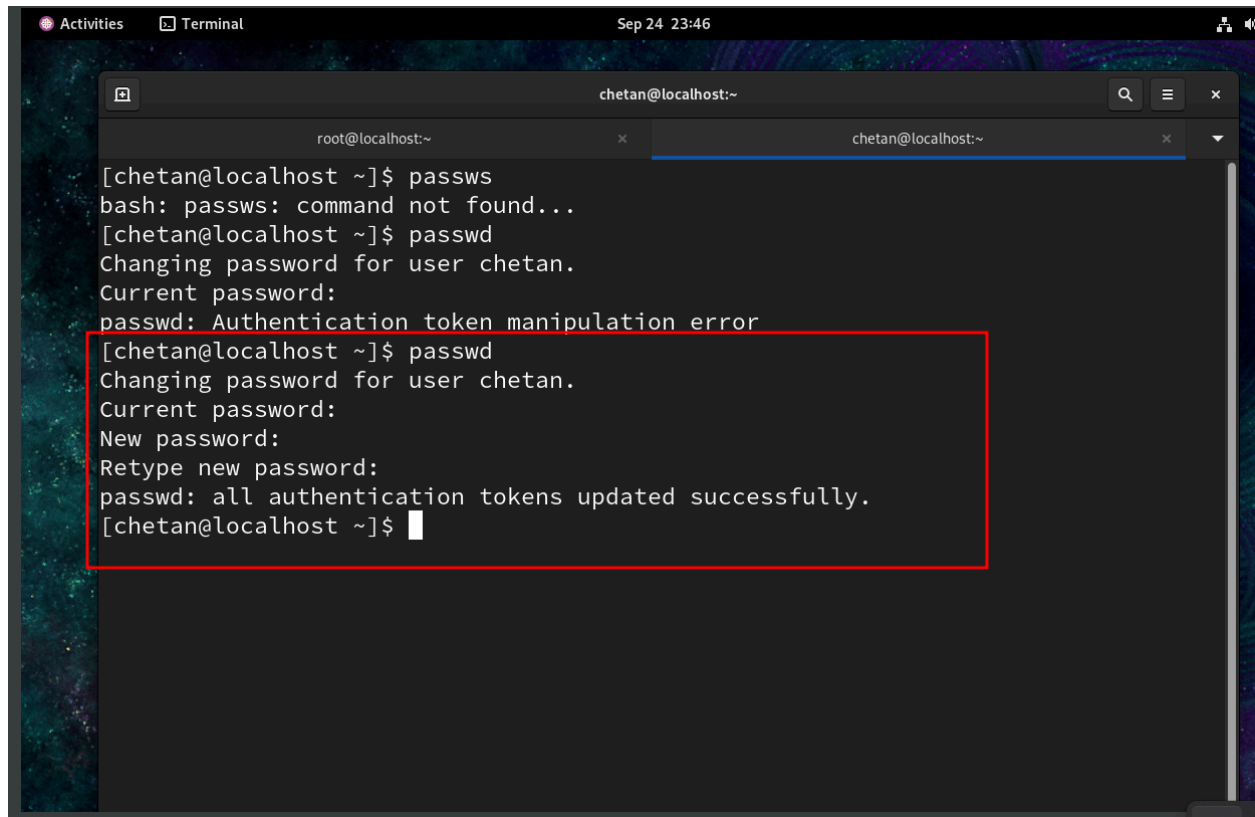


A terminal window titled "Terminal" with a date and time of "Sep 24 23:43". The window shows a root user at localhost. The user runs a series of commands to check and change the permissions of the `/usr/bin/passwd` file. The commands and their outputs are as follows:

```
[root@localhost ~]# ls -l /usr/bin/passwd
-rwxr-xr-x /usr/bin/passwd
[root@localhost ~]# sudo chmod u-s /usr/bin/passwd
[root@localhost ~]# ls -l /usr/bin/passwd
-rwxr-xr-x /usr/bin/passwd
[root@localhost ~]# sudo chmod u+s /usr/bin/passwd
[root@localhost ~]# ls -l /usr/bin/passwd
-rwxr-xr-x /usr/bin/passwd
[root@localhost ~]#
```

The last three lines of the terminal output are enclosed in a red rectangular box, highlighting the process of restoring the default permissions.

5. Now we can change the passwd by the user

A screenshot of a Linux terminal window. The window title is "Terminal" and the system clock shows "Sep 24 23:46". The terminal has two tabs: "root@localhost:~" and "chetan@localhost:~". The active tab is "chetan@localhost:~". The terminal output shows the user "chetan" attempting to change their password using the "passwd" command. The first attempt fails with the error "passwd: Authentication token manipulation error". The second attempt is successful, displaying "passwd: all authentication tokens updated successfully." A red rectangular box highlights the second attempt and its successful outcome.

```
[chetan@localhost ~]$ passws
bash: passws: command not found...
[chetan@localhost ~]$ passwd
Changing password for user chetan.
Current password:
passwd: Authentication token manipulation error
[chetan@localhost ~]$ passwd
Changing password for user chetan.
Current password:
New password:
Retype new password:
passwd: all authentication tokens updated successfully.
[chetan@localhost ~]$
```