

UNIVERSIDAD AUTONOMA  
DEL ESTADO DE MEXICO.



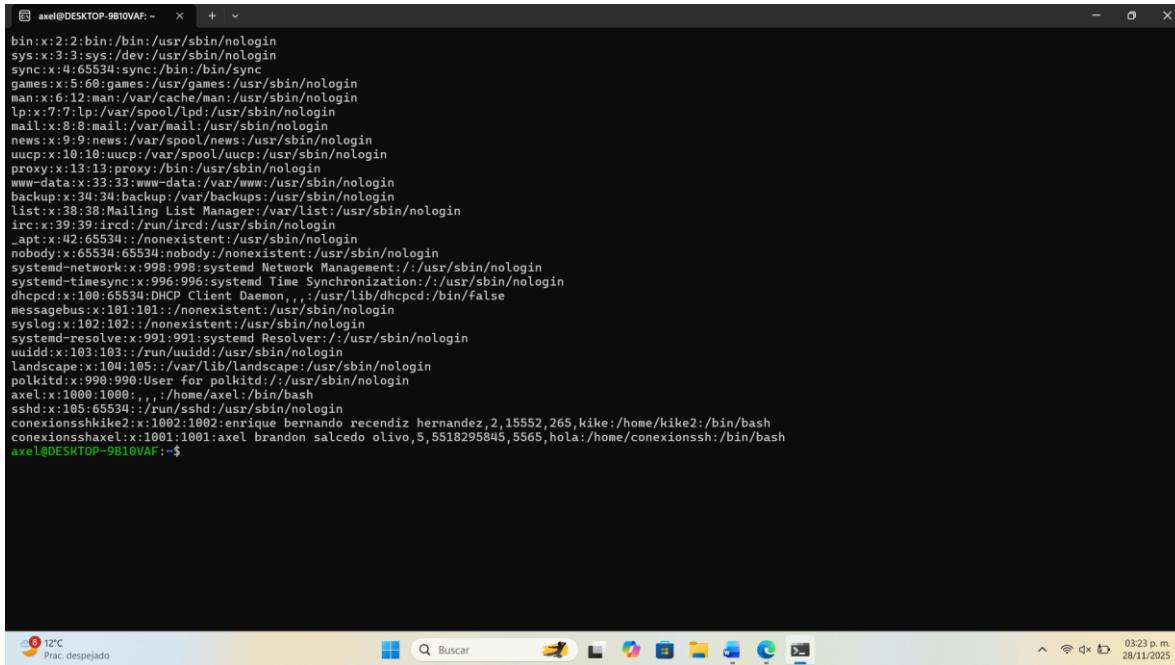
AXEL BRANDON SALCEDO OLIVO

EXAMEN PRACTICO

7MO SEMESTRE

28/11/2025

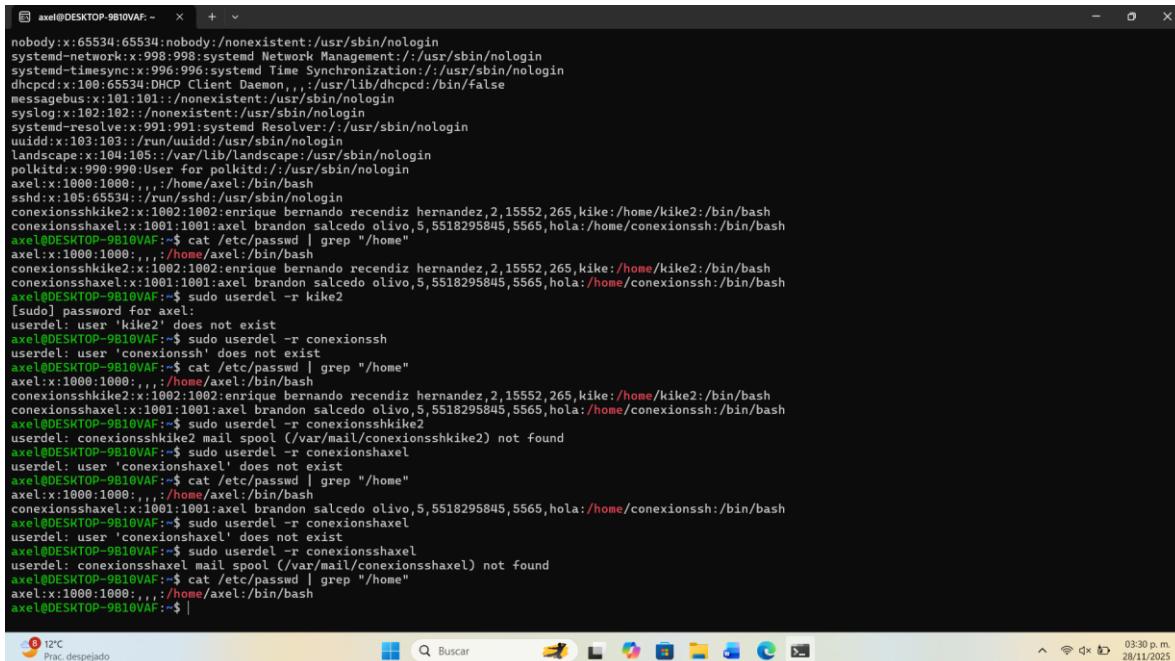
## Mostrar todos los usuarios registrados



```
axel@DESKTOP-9B10VAF:~ + ~
bin:x:2:2:bin:/bin:/usr/sbin/nologin
sys:x:3:3:sys:/dev:/usr/sbin/nologin
sync:x:4:65534:sync:/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:APT:nobody:/usr/sbin/nologin
nobody:x:65534:65534:nobody:/nonexistent:/usr/sbin/nologin
systemd-network:x:998:998:system Network Management:/:/usr/sbin/nologin
systemd-timesync:x:996:996:system Time Synchronization:/:/usr/sbin/nologin
dhcpcd:x:100:65534:DHCP Client Daemon,,,:/usr/lib/dhcpcd:/bin/false
messagebus:x:101:101:/nonexistent:/usr/sbin/nologin
sslog:x:102:102:/nonexistent:/usr/sbin/nologin
systemd-resolve:x:991:991:system Resolver:/:/usr/sbin/nologin
uuidd:x:103:103:/run/uuid:/usr/sbin/nologin
landscape:x:104:105:/var/lib/landscape:/usr/sbin/nologin
polkitd:x:990:990:User for polkitd:/usr/sbin/nologin
axel:x:1000:1000,,,:/home/axel:/bin/bash
sshd:x:105:65534:/:/run/sshd:/usr/sbin/nologin
conexionsshkike2:x:1002:enrique bernardo recendiz hernandez,2,15552,265,kike:/home/kike2:/bin/bash
conexionsshaxel:x:1001:1001:axel brandon salcedo olivo,5,5518295845,5565,hola:/home/conexionssh:/bin/bash
axel@DESKTOP-9B10VAF:~$
```

## 1.2 Depurar usuarios existentes

```
cat /etc/passwd | grep "/home"
```



```
axel@DESKTOP-9B10VAF:~ + ~
nobody:x:65534:65534:nobody:/nonexistent:/usr/sbin/nologin
systemd-network:x:998:998:system Network Management:/:/usr/sbin/nologin
systemd-timesync:x:996:996:system Time Synchronization:/:/usr/sbin/nologin
dhcpcd:x:100:65534:DHCP Client Daemon,,,:/usr/lib/dhcpcd:/bin/false
messagebus:x:101:101:/nonexistent:/usr/sbin/nologin
sslog:x:102:102:/nonexistent:/usr/sbin/nologin
systemd-resolve:x:991:991:system Resolver:/:/usr/sbin/nologin
uuidd:x:103:103:/run/uuid:/usr/sbin/nologin
landscape:x:104:105:/var/lib/landscape:/usr/sbin/nologin
polkitd:x:990:990:User for polkitd:/usr/sbin/nologin
axel:x:1000:1000,,,:/home/axel:/bin/bash
sshd:x:105:65534:/:/run/sshd:/usr/sbin/nologin
conexionsshkike2:x:1002:enrique bernardo recendiz hernandez,2,15552,265,kike:/home/kike2:/bin/bash
conexionsshaxel:x:1001:1001:axel brandon salcedo olivo,5,5518295845,5565,hola:/home/conexionssh:/bin/bash
axel@DESKTOP-9B10VAF:~$ sudo userdel -r kike2
[sudo] password for axel:
userdel: user 'kike2' does not exist
axel@DESKTOP-9B10VAF:~$ sudo userdel -r conexionssh
userdel: user 'conexionssh' does not exist
axel@DESKTOP-9B10VAF:~$ cat /etc/passwd | grep "/home"
axel:x:1000:1000,,,:/home/axel:/bin/bash
conexionshkike2:x:1002:enrique bernardo recendiz hernandez,2,15552,265,kike:/home/kike2:/bin/bash
conexionsshaxel:x:1001:1001:axel brandon salcedo olivo,5,5518295845,5565,hola:/home/conexionssh:/bin/bash
axel@DESKTOP-9B10VAF:~$ sudo userdel -r conexionsshkike2
userdel: conexionsshkike2 mail spool (/var/mail/conexionsshkike2) not found
axel@DESKTOP-9B10VAF:~$ sudo userdel -r conexionsshaxel
userdel: user 'conexionsshaxel' does not exist
axel@DESKTOP-9B10VAF:~$ cat /etc/passwd | grep "/home"
axel:x:1000:1000,,,:/home/axel:/bin/bash
conexionsshaxel:x:1001:1001:axel brandon salcedo olivo,5,5518295845,5565,hola:/home/conexionssh:/bin/bash
axel@DESKTOP-9B10VAF:~$ sudo userdel -r conexionsshaxel
userdel: user 'conexionsshaxel' does not exist
axel@DESKTOP-9B10VAF:~$ sudo userdel -r conexionssh
userdel: conexionssh mail spool (/var/mail/conexionssh) not found
axel@DESKTOP-9B10VAF:~$ cat /etc/passwd | grep "/home"
axel:x:1000:1000,,,:/home/axel:/bin/bash
axel@DESKTOP-9B10VAF:~$
```

## 1.3 completo

A terminal window titled 'axel@DESKTOP-9B10VAF:~'. The session starts with attempting to change permissions on a script, then using sudo to do so successfully. It lists files in the current directory, creates a new file 'crear\_usuario.sh', and runs it to create a user 'Ol\_Sa'. The terminal shows the user's creation and its details in /etc/passwd. The status bar at the bottom right indicates the date and time.

```
axel@DESKTOP-9B10VAF:~ $ chmod +x crear_usuario.sh
./crear_usuario.sh
chmod: changing permissions of 'crear_usuario.sh': Operation not permitted
-bash: ./crear_usuario.sh: Permission denied
axel@DESKTOP-9B10VAF:~ $ chmod +x crear_usuario.sh
chmod: changing permissions of 'crear_usuario.sh': Operation not permitted
axel@DESKTOP-9B10VAF:~ $ sudo chmod +x crear_usuario.sh
axel@DESKTOP-9B10VAF:~ $ ls -l
total 742404
-rw-rw-r-- 1 axel axel 440 Nov 14 16:21 ABSO.txt
-rw-rw-r-- 1 axel axel 440 Nov 14 16:25 asistenciaABSO.txt
-rwxr-xr-x 1 root root 1856 Nov 28 15:34 crear_usuario.sh
-rw-r--r-- 1 axel axel 768217600 Nov 28 15:52 kali-linux-2025.3-installer-netinst-amd64.iso
-rw-r--r-- 1 axel axel 25 Nov 28 15:53 kali-linux-2025.3-installer-netinst-amd64.iso.Zone.Identifier
-rw-r--r-- 1 axel axel 2581 Nov 13 16:38 llave.asc
-rw-r--r-- 1 axel axel 2480 Nov 14 14:23 llavesita.asc
-rw-r--r-- 1 root root 25 Nov 14 14:24 llavesita.asc.Zone.Identifier
-rw-r--r-- 1 root root 31 Nov 28 15:35 mensajes.txt
-rw-r--r-- 1 root root 3 Nov 14 16:09 name.sh
-rw-r--r-- 1 root root 204 Nov 13 16:41 novela.txt.txt
axel@DESKTOP-9B10VAF:~ $ nano crear_usuario.sh
axel@DESKTOP-9B10VAF:~ $ ./crear_usuario.sh
*** Verificando usuario Ol_Sa ===
El usuario Ol_Sa no se ha encontrado, pero será creado el dia 28 de November del 2025 a las 15:44
Archivo creado: CU Mensaje Log281125.txt

Creando usuario Ol_Sa...
Usuario creado exitosamente
*** Verificación del usuario ===
uid=1001(Ol_Sa) gid=1003(Ol_Sa) groups=1003(Ol_Sa)

Información en /etc/passwd:
Ol_Sa:x:1001:1003:/home/Ol_Sa:/bin/bash

Directorio home:
drwxr-x--- 2 Ol_Sa Ol_Sa 4096 Nov 28 15:44 /home/Ol_Sa
axel@DESKTOP-9B10VAF:~ $ cat /etc/passwd | grep "/home"
axel:x:1000:1000::/home/axel:/bin/bash
Ol_Sa:x:1001:1003:/home/Ol_Sa:/bin/bash
axel@DESKTOP-9B10VAF:~ |
```

ÚLTIMA HORA  
Ernestina Godoy... 03:46 p.m.  
28/11/2025

## 2 al 2.1.3 terminado

A terminal window titled 'axel@DESKTOP-9B10VAF:~'. The session shows the use of the 'passwd' command to change the password for the user 'Ol\_Sa'. It then uses 'chage' to modify various account parameters like password expiration and warning days. The terminal shows the changes being made and the resulting updated account information in /etc/passwd. The status bar at the bottom right indicates the date and time.

```
axel@DESKTOP-9B10VAF:~ $ sudo passwd Ol_Sa
New password:
Retype new password:
passwd: password updated successfully
axel@DESKTOP-9B10VAF:~ $ sudo chage -d 0 Ol_Sa
axel@DESKTOP-9B10VAF:~ $ sudo chage -E $(date -d "+3 days" +%Y-%m-%d) Ol_Sa
axel@DESKTOP-9B10VAF:~ $ sudo chage -l Ol_Sa
Last password change : password must be changed
Password expires : password must be changed
Password inactive : password must be changed
Account expires : Dec 01, 2025
Minimum number of days between password change : 0
Maximum number of days between password change : 99999
Number of days of warning before password expires : 7
axel@DESKTOP-9B10VAF:~ $ sudo usermod -l Quality_assurance Ol_Sa
axel@DESKTOP-9B10VAF:~ $ sudo chage -l Quality_assurance
Last password change : password must be changed
Password expires : password must be changed
Password inactive : password must be changed
Account expires : Dec 01, 2025
Minimum number of days between password change : 0
Maximum number of days between password change : 99999
Number of days of warning before password expires : 7
axel@DESKTOP-9B10VAF:~ |
```

18°C  
Mayom. nublado 03:46 p.m.  
28/11/2025

## 2.1.4 al 2.15 completo

The screenshot shows a terminal window on the left and a file viewer window on the right. The terminal window displays a series of commands and their outputs related to the Canny edge detection script. The file viewer window shows four cards from a game, each with a different pattern of shapes (hearts, diamonds, clubs, spades) that have been processed by the Canny algorithm to highlight edges.

```
-rwxr-xr-x 1 Quality_assurance Quality_assurance 42814 Nov 28 16:37 cartas.jpg.jpeg
axel@DESKTOP-9B10VAF:~$ python3 Canny.py
python3: can't open file '/home/axel/Canny.py': [Errno 2] No such file or directory
axel@DESKTOP-9B10VAF:~$ su - Quality_assurance
Password:
Quality_assurance@DESKTOP-9B10VAF:~$ python3 Canny.py
python3: can't open file '/home/0l_Sa/Canny.py': [Errno 2] No such file or directory
Quality_assurance@DESKTOP-9B10VAF:~$ c
Quality_assurance@DESKTOP-9B10VAF:~$ python3 Canny.py cartas.jpg.jpeg
python3: can't open file '/home/0l_Sa/Canny.py': [Errno 2] No such file or directory
Quality_assurance@DESKTOP-9B10VAF:~$ cd /home/Quality_assurance/
ls -la
total 56
drwxr-xr-x 2 Quality_assurance Quality_assurance 4096 Nov 28 16:37 .
drwxr-xr-x 5 root root 4096 Nov 28 16:19 ..
-rwxr-xr-x 1 Quality_assurance Quality_assurance 189 Nov 28 16:37 Canny.py
-rwxr-xr-x 1 Quality_assurance Quality_assurance 42814 Nov 28 16:37 cartas.jpg.jpeg
Quality_assurance@DESKTOP-9B10VAF:/home/Quality_assurance$ ls -lapython3 Canny.py cartas.jpg.jpeg
ls: invalid option -- 'y'
Try 'ls --help' for more information.
Quality_assurance@DESKTOP-9B10VAF:/home/Quality_assurance$ ls -la
total 56
drwxr-xr-x 2 Quality_assurance Quality_assurance 4096 Nov 28 16:37 .
drwxr-xr-x 5 root root 4096 Nov 28 16:19 ..
-rwxr-xr-x 1 Quality_assurance Quality_assurance 189 Nov 28 16:37 Canny.py
-rwxr-xr-x 1 Quality_assurance Quality_assurance 42814 Nov 28 16:37 cartas.jpg.jpeg
Quality_assurance@DESKTOP-9B10VAF:/home/Quality_assurance$ python3 Canny.py cartas.jpg.jpeg
qt.qpa.xcb: could not connect to display
qt.qpa.plugin: Could not load the Qt platform plugin "xcb" even though it was found.
This application failed to start because no Qt platform plugin could be initialized. Reinstalling the appl:
Available platform plugins are: eglfs, linuxfb, minimal, minimalegl, offscreen, vnc, wayland-egl, wayland,
cb.

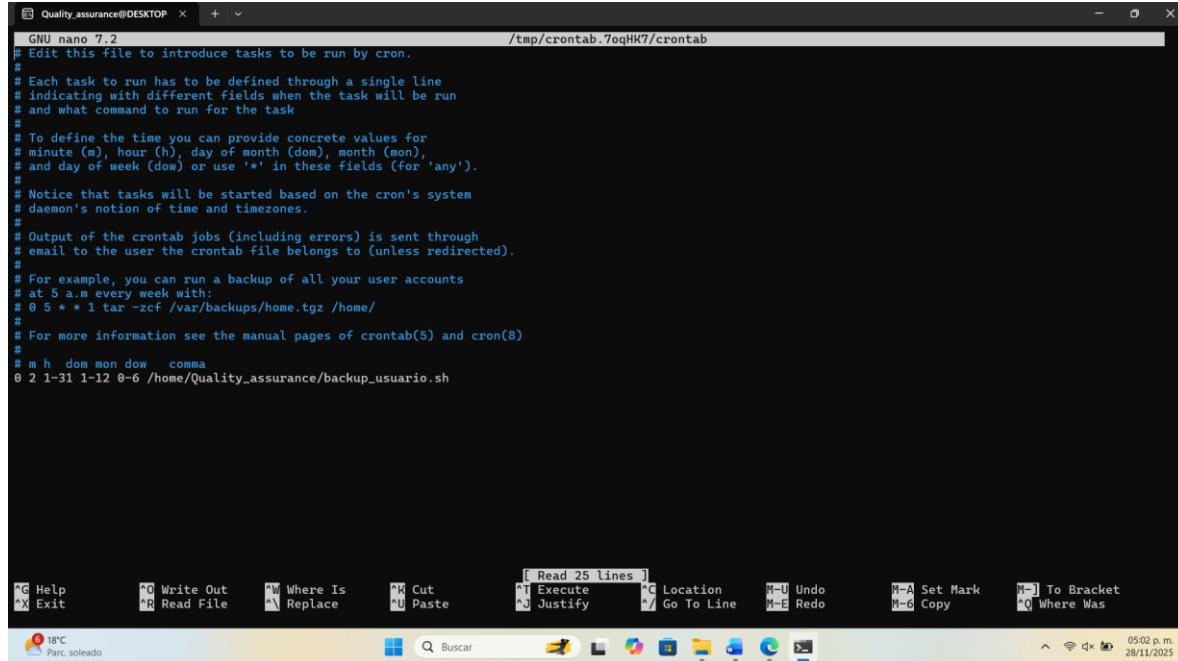
Aborted (core dumped)
Quality_assurance@DESKTOP-9B10VAF:/home/Quality_assurance$ nano Canny.py
Quality_assurance@DESKTOP-9B10VAF:/home/Quality_assurance$ python3 Canny.py cartas.jpg.jpeg
Imagenes guardadas correctamente:
- Original.jpg
- blur_canny.jpg
Quality_assurance@DESKTOP-9B10VAF:/home/Quality_assurance$
```

## 3. muestre el crontab del usuario empleando anteriormente

The screenshot shows a terminal window displaying the contents of the user's crontab. The output shows scheduled tasks for November 28, 2025, including a backup script named 'backup\_usuario.sh' and a file named 'blur\_canny.jpg'. The terminal also shows the user has copied files to the desktop on November 28, 2025.

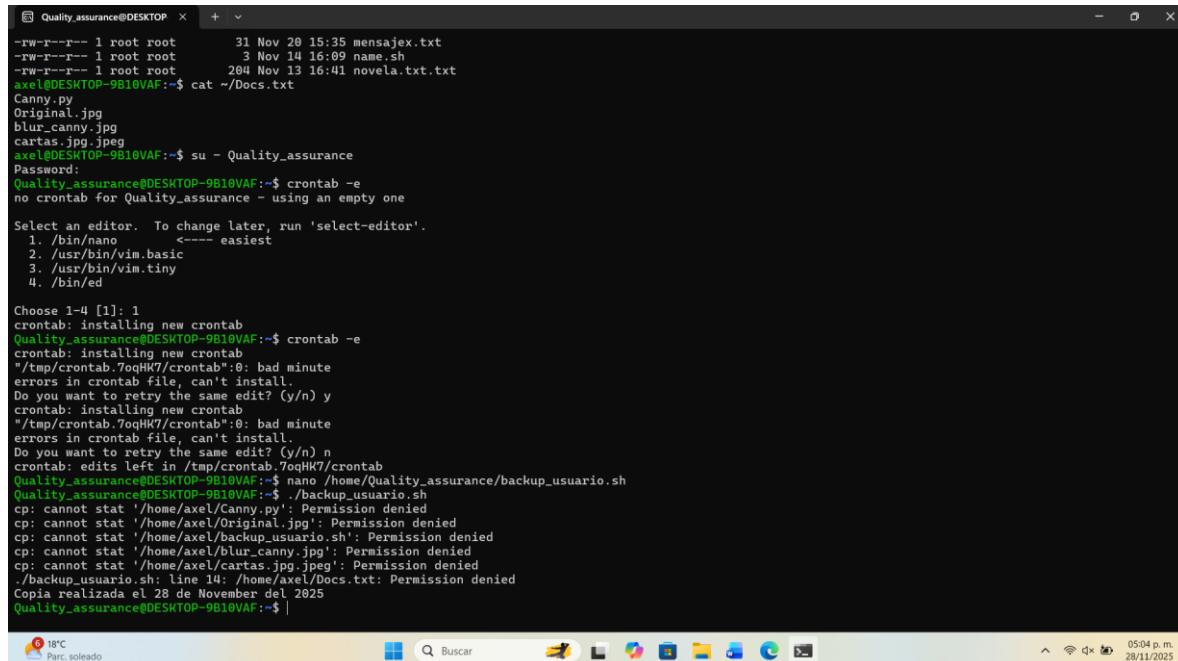
```
Copia realizada el 28 de November del 2025
Quality_assurance@DESKTOP-9B10VAF:~$ exit
logout
axel@DESKTOP-9B10VAF:~$ ^C
axel@DESKTOP-9B10VAF:~$ ls -la
total 74265
drwxr-x--- 5 axel axel 4096 Nov 28 16:54 .
drwxr-xr-x 5 root root 4096 Nov 28 16:19 ..
-rw-r--r-- 1 axel axel 3150 Nov 28 15:09 .bash_history
-rw-r--r-- 1 axel axel 220 Nov 13 16:26 .bash_logout
-rw-r--r-- 1 axel axel 3771 Nov 13 16:26 .bashrc
drwxr-xr-x 2 axel axel 4096 Nov 13 16:26 .cache
drwxr-xr-x 4 axel axel 4096 Nov 14 15:51 .gnupg
drwxr-xr-x 3 axel axel 4096 Nov 28 15:39 .local
-rw-rw-r-- 1 axel axel 0 Nov 28 15:19 .motd_shown
-rw-r--r-- 1 axel axel 807 Nov 13 16:26 .profile
-rw-r--r-- 1 axel axel 0 Nov 13 16:27 .sudo_as_admin_successful
-rw-r--r-- 1 axel axel 448 Nov 14 16:21 ABSO.txt
-rw-r--r-- 1 axel axel 100 Nov 28 15:44 CUMensajeLog281125.txt
-rw-r--r-x 1 root root 306 Nov 28 16:54 Canny.py
-rw-r--r-- 1 axel axel 53 Nov 28 16:54 Docs.txt
-rw-r--r-- 1 root root 53213 Nov 28 16:54 Original.jpg
-rw-r--r-- 1 axel axel 448 Nov 14 16:25 asistenciaABSO.txt
-rw-r--r-x 1 axel axel 432 Nov 28 16:53 backup_usuario.sh
-rw-r--r-- 1 root root 59347 Nov 28 16:54 blur_canny.jpg
-rw-r--r-x 1 root root 42814 Nov 28 16:54 cartas.jpg.jpeg
-rw-r--r-x 1 root root 1856 Nov 28 15:34 crear_usuario.sh
-rw-r--r-- 1 axel axel 768217600 Nov 28 15:52 kali-linux-2025.3-installer-netinst-amd64.iso
-rw-r--r-- 1 axel axel 25 Nov 28 15:53 kali-linux-2025.3-installer-netinst-amd64.iso:Zone.Identifier
-rw-r--r-- 1 axel axel 2501 Nov 13 16:38 llavesita.asc
-rw-r--r-- 1 axel axel 2480 Nov 14 14:23 llavesita.asc:Zone.Identifier
-rw-r--r-- 1 root root 31 Nov 28 15:35 mensajex.txt
-rw-r--r-- 1 root root 3 Nov 14 16:09 name.sh
-rw-r--r-- 1 root root 204 Nov 13 16:41 novela.txt.txt
axel@DESKTOP-9B10VAF:~$ cat ~/Docs.txt
Canny.py
Original.jpg
blur_canny.jpg
cartas.jpg.jpeg
axel@DESKTOP-9B10VAF:~$
```

### 3.3



```
GNU nano 7.2                                     /tmp/crontab.7oqHK7/crontab
# Edit this file to introduce tasks to be run by cron.
#
# Each task to run has to be defined through a single line
# indicating with different fields when the task will be run
# and what command to run for the task
#
# To define the time you can provide concrete values for
# minute (m), hour (h), day of month (dom), month (mon),
# and day of week (dow) or use '*' in these fields (for 'any').
#
# Notice that tasks will be started based on the cron's system
# daemon's notion of time and timezones.
#
# Output of the crontab jobs (including errors) is sent through
# email to the user the crontab file belongs to (unless redirected).
#
# For example, you can run a backup of all your user accounts
# at 5 a.m every week with:
# 0 5 * * 1 tar -zcf /var/backups/home.tgz /home/
#
# For more information see the manual pages of crontab(5) and cron(8)
#
# m h dom mon dow   command
0 2 1-31 1-12 0-6 /home/Quality_assurance/backup_usuario.sh
```

### 3.4



```
-rw-r--r-- 1 root root      31 Nov 28 15:35 mensajex.txt
-rw-r--r-- 1 root root      3 Nov 14 16:09 name.sh
-rw-r--r-- 1 root root     204 Nov 13 16:41 novela.txt.txt
axel@DESKTOP-9B10VAF:~$ cat ~/Docs.txt
Canny.py
Original.jpg
blur_canny.jpg
cartas.jpg.jpeg
axel@DESKTOP-9B10VAF:~$ su - Quality_assurance
Password:
Quality_assurance@DESKTOP-9B10VAF:~$ crontab -e
no crontab for Quality_assurance - using an empty one
Select an editor. To change later, run 'select-editor'.
 1. /bin/nano          <---- easiest
 2. /usr/bin/vim.basic
 3. /usr/bin/vim.tiny
 4. /bin/ed

Choose 1-4 [1]: 1
crontab: installing new crontab
Quality_assurance@DESKTOP-9B10VAF:~$ crontab -e
crontab: installing new crontab
"/tmp/crontab.7oqHK7/crontab":0: bad minute
errors in crontab file, can't install.
Do you want to retry the same edit? (y/n) y
crontab: installing new crontab
"/tmp/crontab.7oqHK7/crontab":0: bad minute
errors in crontab file, can't install.
Do you want to retry the same edit? (y/n) n
crontab: edits left in /tmp/crontab.7oqHK7/crontab
Quality_assurance@DESKTOP-9B10VAF:~$ nano /home/Quality_assurance/backup_usuario.sh
Quality_assurance@DESKTOP-9B10VAF:~$ ./backup_usuario.sh
cp: cannot stat '/home/axel/Canny.py': Permission denied
cp: cannot stat '/home/axel/Original.jpg': Permission denied
cp: cannot stat '/home/axel/backup_usuario.sh': Permission denied
cp: cannot stat '/home/axel/blur_canny.jpg': Permission denied
cp: cannot stat '/home/axel/cartas.jpg.jpeg': Permission denied
./backup_usuario.sh: line 14: /home/axel/Docs.txt: Permission denied
Copia realizada el 28 de November del 2025
Quality_assurance@DESKTOP-9B10VAF:~$
```

### 3.5

The screenshot shows a terminal window titled 'axel@DESKTOP-9B10VAF: ~'. The terminal displays the following command sequence:

```
Canny.py  
Original.jpg  
blur_canny.jpg  
cartas.jpeg  
axel@DESKTOP-9B10VAF:~$ su - Quality_assurance  
Password:  
Quality_assurance@DESKTOP-9B10VAF:~$ crontab -e  
no crontab for Quality_assurance - using an empty one  
Select an editor. To change later, run 'select-editor'.  
1. /bin/nano <---- easiest  
2. /usr/bin/vim.basic  
3. /usr/bin/vim.tiny  
4. /bin/ed  
Choose 1-4 [1]: 1  
crontab: installing new crontab  
Quality_assurance@DESKTOP-9B10VAF:~$ crontab -e  
crontab: installing new crontab  
"/tmp/crontab.7oqHK7/crontab": 0: bad minute  
errors in crontab file, can't install.  
Do you want to retry the same edit? (y/n) y  
crontab: installing new crontab  
"/tmp/crontab.7oqHK7/crontab": 0: bad minute  
errors in crontab file, can't install.  
Do you want to retry the same edit? (y/n) n  
crontab: edits left in /tmp/crontab.7oqHK7/crontab  
Quality_assurance@DESKTOP-9B10VAF:~$ nano /home/Quality_assurance/backup_usuario.sh  
Quality_assurance@DESKTOP-9B10VAF:~$ ./backup_usuario.sh  
cp: cannot stat '/home/axel/Canny.py': Permission denied  
cp: cannot stat '/home/axel/Original.jpg': Permission denied  
cp: cannot stat '/home/axel/backup_usuario.sh': Permission denied  
cp: cannot stat '/home/axel/blur_canny.jpg': Permission denied  
cp: cannot stat '/home/axel/cartas.jpeg.jpeg': Permission denied  
. ./backup_usuario.sh: line 14: /home/axel/Docs.txt: Permission denied  
Copia realizada el 28 de Noviembre del 2025  
Quality_assurance@DESKTOP-9B10VAF:~$ exit  
logout  
axel@DESKTOP-9B10VAF:~$ cat ~/CopyDocuments.txt  
cat: /home/axel/CopyDocuments.txt: No such file or directory  
axel@DESKTOP-9B10VAF:~$ |
```

The terminal window is part of a desktop environment, as evidenced by the taskbar icons at the bottom.

4