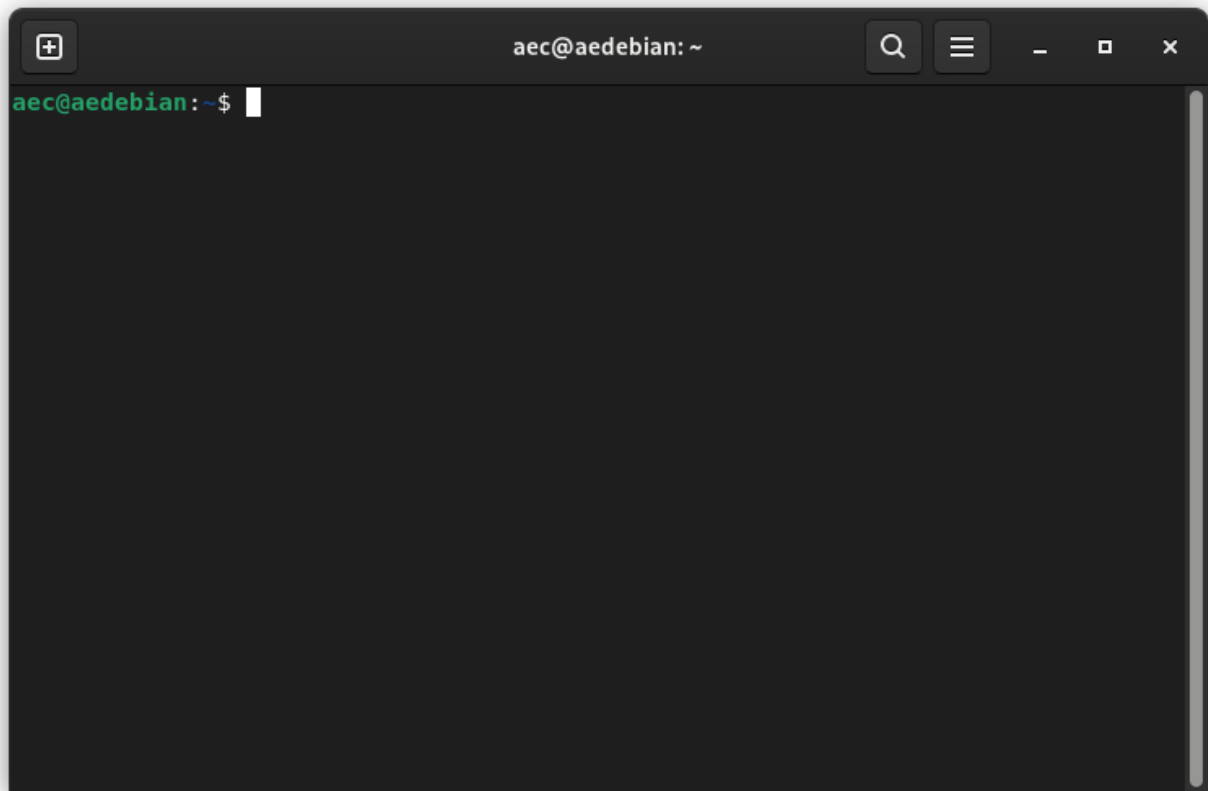


Notes 4

- How to install and remove software using the APT command?

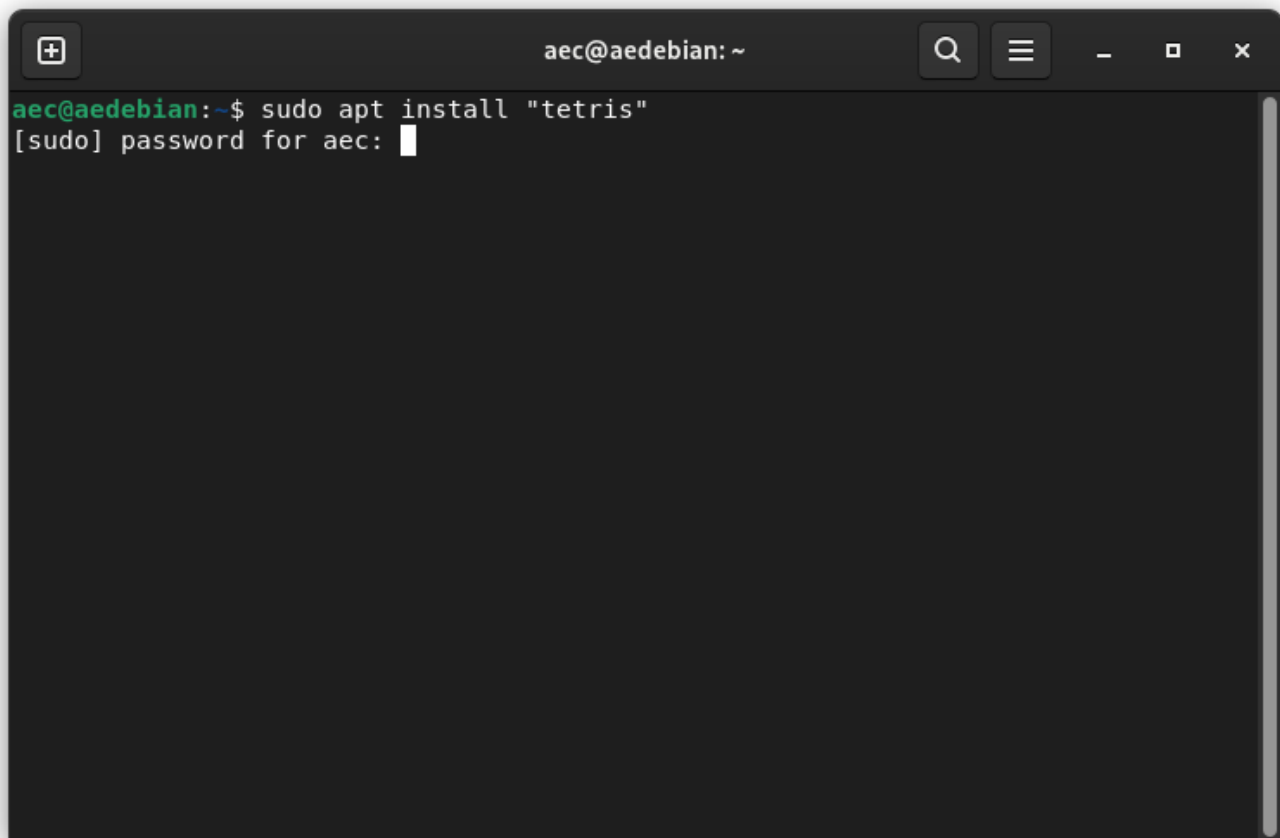
Installing:

- Open the Terminal



- type the next command and type password afterwards:

```
sudo apt install "app name"
```



```
aec@aebian: ~  
aec@aebian:~$ sudo apt install "tetris"  
[sudo] password for aec: 
```

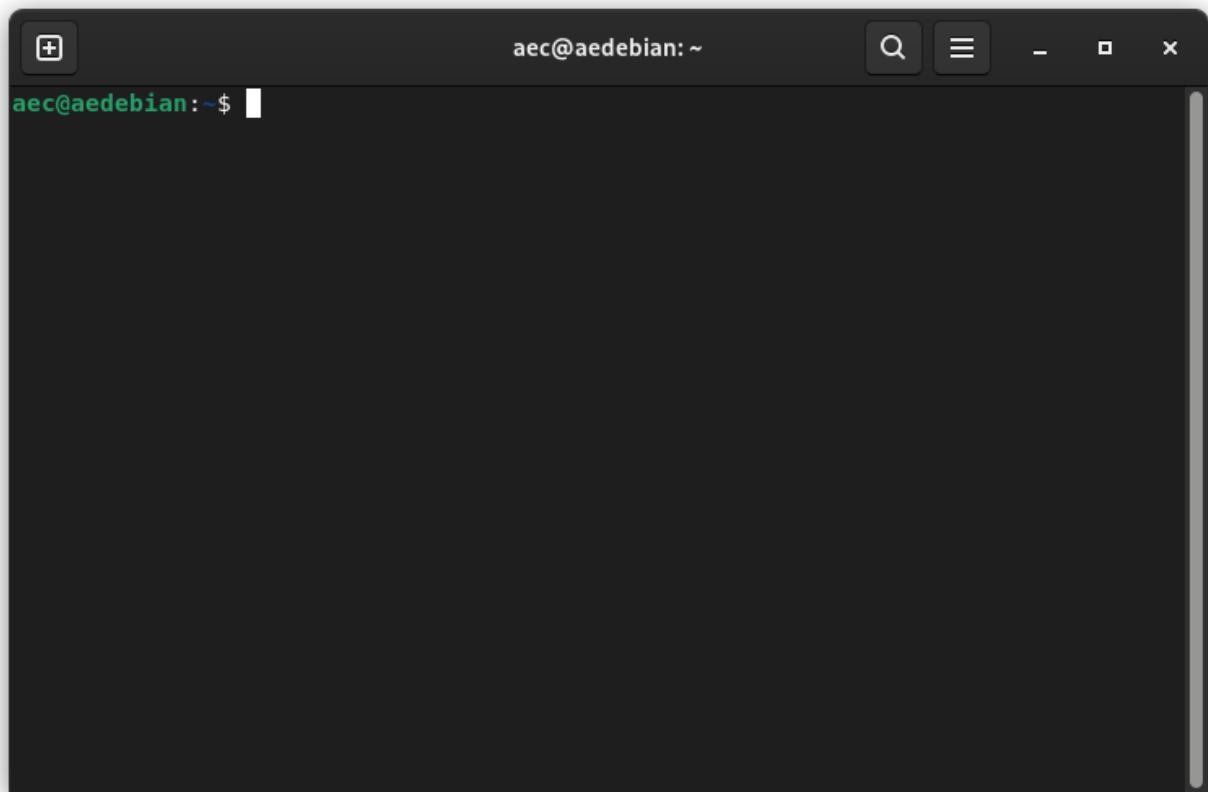
A terminal window with a dark background. The title bar shows 'aec@aebian: ~' and standard window controls. The terminal content shows a user named 'aec' at a machine named 'aebian' running the command 'sudo apt install "tetris"'. The prompt has changed to '[sudo] password for aec:' and a cursor is visible.

- review the information

```
1/1 + [?] [x] Tilix: aec@aedebian: ~
1: aec@aedebian: ~
Continue? [Y/n] y
Get:1 http://deb.debian.org/debian trixie/main amd64 libfmt10 amd64 10.1.1+ds1-4 [127 kB]
Get:2 http://deb.debian.org/debian trixie/main amd64 libphysfs1 amd64 3.0.2-6+b2 [67.9 kB]
Get:3 http://deb.debian.org/debian trixie/main amd64 libSDL2-image-2.0-0 amd64 2.8.8+dfsg-1 [67.0 kB]
Get:4 http://deb.debian.org/debian trixie/main amd64 libopusfile0 amd64 0.12-4+b3 [42.6 kB]
Get:5 http://deb.debian.org/debian trixie/main amd64 libxmp4 amd64 4.6.2-2 [319 kB]
Get:6 http://deb.debian.org/debian trixie/main amd64 libSDL2-mixer-2.0-0 amd64 2.8.1+dfsg-2 [82.5 kB]
Get:7 http://deb.debian.org/debian trixie/main amd64 libSDL2-ttf-2.0-0 amd64 2.24.0+dfsg-2 [36.2 kB]
Get:8 http://deb.debian.org/debian trixie/main amd64 blockattack amd64 2.9.0-1+b1 [6,732 kB]
Fetched 7,473 kB in 0s (16.7 MB/s)
Selecting previously unselected package libfmt10:amd64.
(Reading database ... 195059 files and directories currently installed.)
Preparing to unpack .../0-libfmt10_10.1.1+ds1-4_amd64.deb ...
Unpacking libfmt10:amd64 (10.1.1+ds1-4) ...
Selecting previously unselected package libphysfs1:amd64.
Preparing to unpack .../1-libphysfs1_3.0.2-6+b2_amd64.deb ...
Unpacking libphysfs1:amd64 (3.0.2-6+b2) ...
Selecting previously unselected package libSDL2-image-2.0-0:amd64.
Preparing to unpack .../2-libSDL2-image-2.0-0_2.8.8+dfsg-1_amd64.deb ...
Unpacking libSDL2-image-2.0-0:amd64 (2.8.8+dfsg-1) ...
Selecting previously unselected package libopusfile0:amd64.
Preparing to unpack .../3-libopusfile0_0.12-4+b3_amd64.deb ...
Unpacking libopusfile0:amd64 (0.12-4+b3) ...
Selecting previously unselected package libxmp4:amd64.
Preparing to unpack .../4-libxmp4_4.6.2-2_amd64.deb ...
Unpacking libxmp4:amd64 (4.6.2-2) ...
Selecting previously unselected package libSDL2-mixer-2.0-0:amd64.
Preparing to unpack .../5-libSDL2-mixer-2.0-0_2.8.1+dfsg-2_amd64.deb ...
Unpacking libSDL2-mixer-2.0-0:amd64 (2.8.1+dfsg-2) ...
Selecting previously unselected package libSDL2-ttf-2.0-0:amd64.
Preparing to unpack .../6-libSDL2-ttf-2.0-0_2.24.0+dfsg-2_amd64.deb ...
Unpacking libSDL2-ttf-2.0-0:amd64 (2.24.0+dfsg-2) ...
Selecting previously unselected package blockattack.
Preparing to unpack .../7-blockattack_2.9.0-1+b1_amd64.deb ...
Unpacking blockattack (2.9.0-1+b1) ...
Setting up libSDL2-image-2.0-0:amd64 (2.8.8+dfsg-1) ...
Setting up libxmp4:amd64 (4.6.2-2) ...
Setting up libphysfs1:amd64 (3.0.2-6+b2) ...
Setting up libSDL2-ttf-2.0-0:amd64 (2.24.0+dfsg-2) ...
Setting up libopusfile0:amd64 (0.12-4+b3) ...
Setting up libfmt10:amd64 (10.1.1+ds1-4) ...
Setting up libSDL2-mixer-2.0-0:amd64 (2.8.1+dfsg-2) ...
Setting up blockattack (2.9.0-1+b1) ...
Processing triggers for desktop-file-utils (0.28-1) ...
Processing triggers for hicolor-icon-theme (0.18-2) ...
Processing triggers for gnome-menus (3.36.0-3) ...
Processing triggers for libc-bin (2.41-12) ...
Processing triggers for man-db (2.13.1-1) ...
Processing triggers for mailcap (3.74) ...
aec@aedebian:~$
```

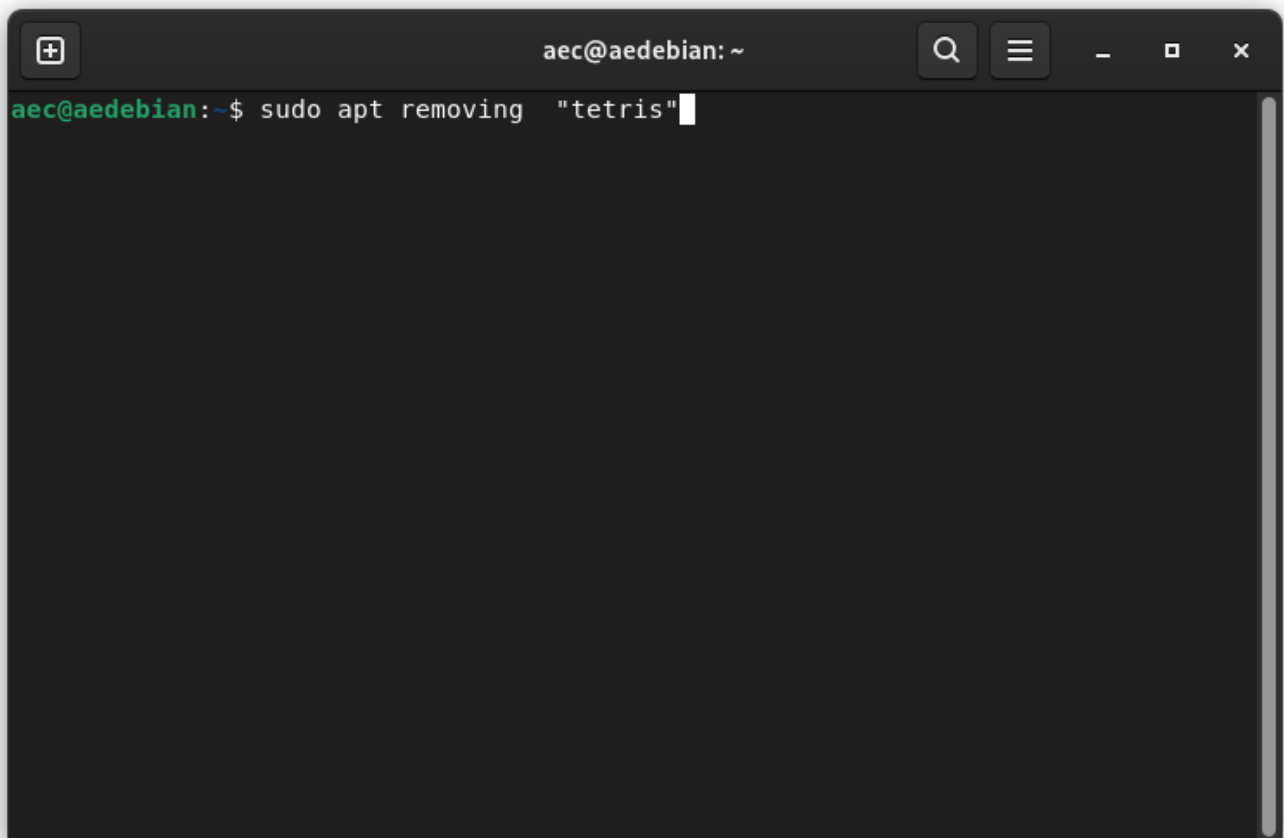
Removing:

- Open the Terminal



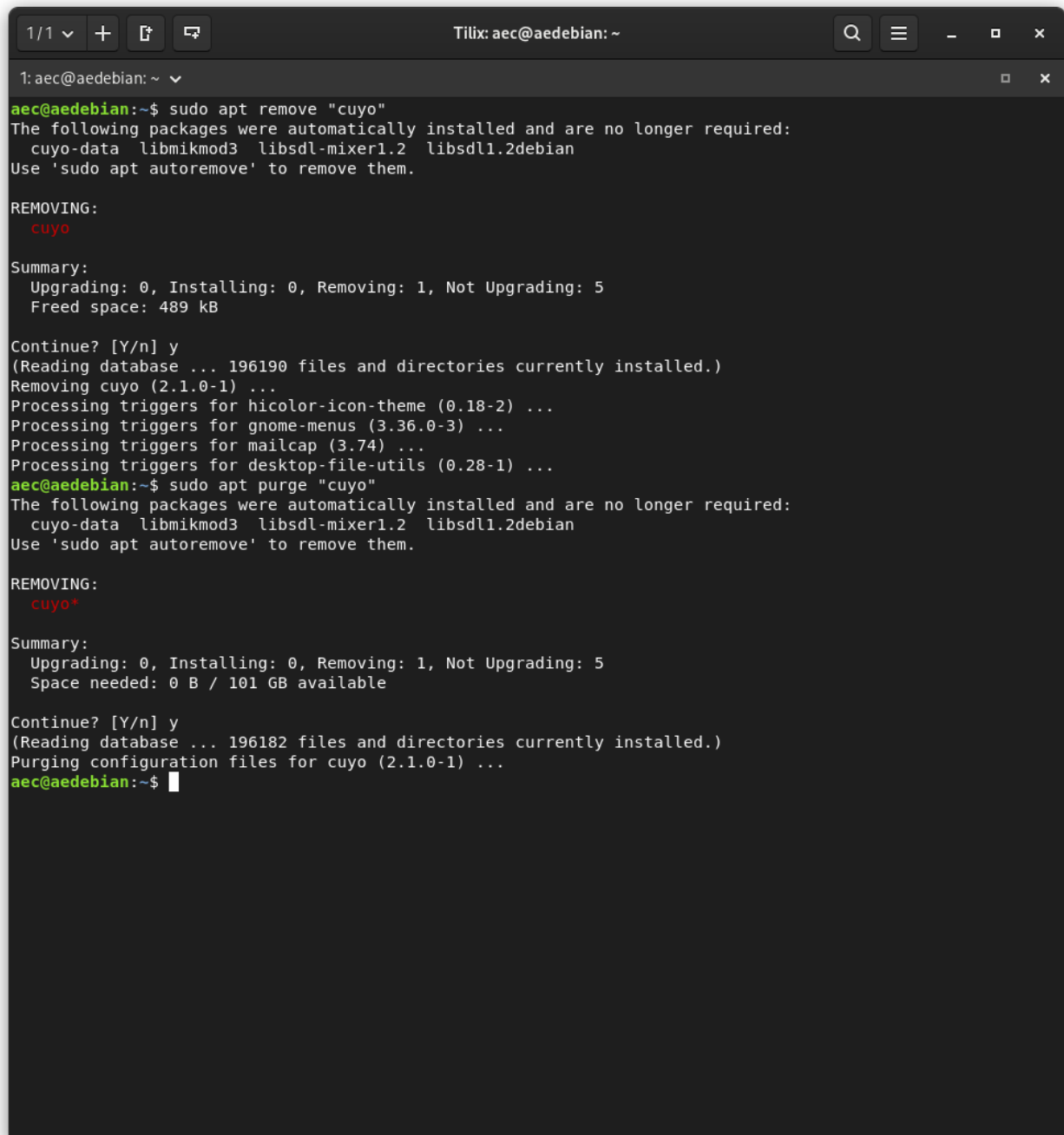
- type the next command and type password afterwards:

```
sudo apt remove "app name"
```

A terminal window with a dark background. The title bar at the top shows 'aec@a Debian: ~' and standard window controls (search, menu, zoom, close). The terminal content shows the command 'sudo apt removing "tetris"' being entered at the prompt 'aec@a Debian:~\$'.

```
aec@a Debian:~$ sudo apt removing "tetris"
```

- review the information



```
1/1 v + f x Tilix: aec@adebian: ~
1: aec@adebian: ~ v
aec@adebian:~$ sudo apt remove "cuyo"
The following packages were automatically installed and are no longer required:
  cuyo-data libmikmod3 libSDL-mixer1.2 libSDL1.2debian
Use 'sudo apt autoremove' to remove them.

REMOVING:
  cuyo

Summary:
  Upgrading: 0, Installing: 0, Removing: 1, Not Upgrading: 5
  Freed space: 489 kB

Continue? [Y/n] y
(Reading database ... 196190 files and directories currently installed.)
Removing cuyo (2.1.0-1) ...
Processing triggers for hicolor-icon-theme (0.18-2) ...
Processing triggers for gnome-menus (3.36.0-3) ...
Processing triggers for mailcap (3.74) ...
Processing triggers for desktop-file-utils (0.28-1) ...
aec@adebian:~$ sudo apt purge "cuyo"
The following packages were automatically installed and are no longer required:
  cuyo-data libmikmod3 libSDL-mixer1.2 libSDL1.2debian
Use 'sudo apt autoremove' to remove them.

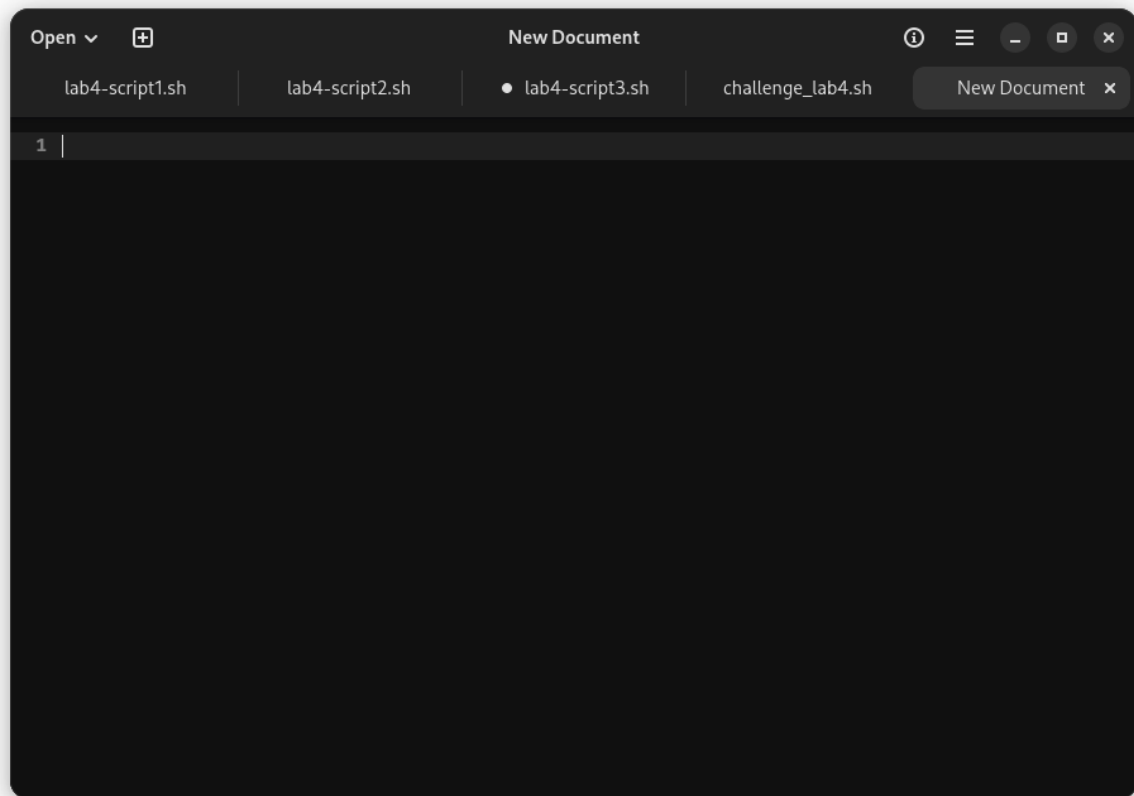
REMOVING:
  cuyo*

Summary:
  Upgrading: 0, Installing: 0, Removing: 1, Not Upgrading: 5
  Space needed: 0 B / 101 GB available

Continue? [Y/n] y
(Reading database ... 196182 files and directories currently installed.)
Purging configuration files for cuyo (2.1.0-1) ...
aec@adebian:~$
```

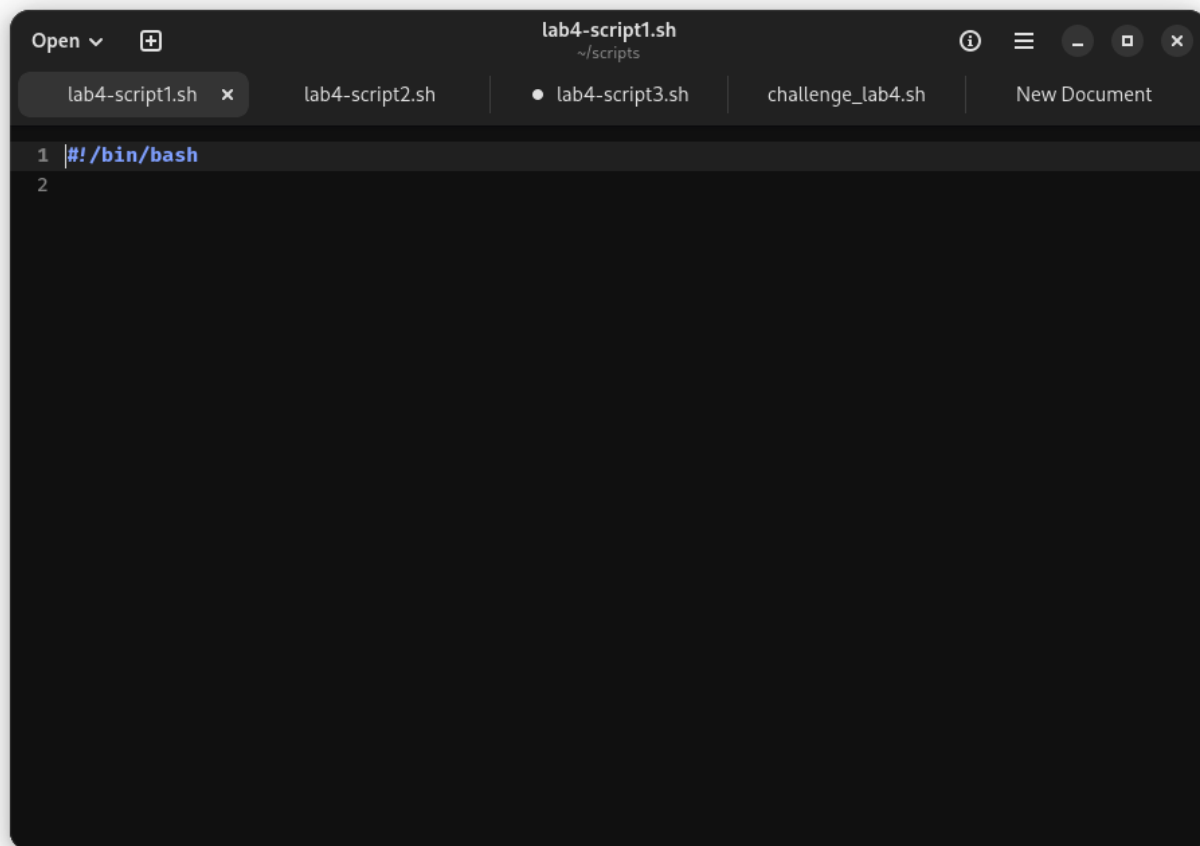
- How to create a shell script step by step including screenshots and how to run it. Try to be as detailed as possible.

- Open gnome text edit



- type the next command on the first line:

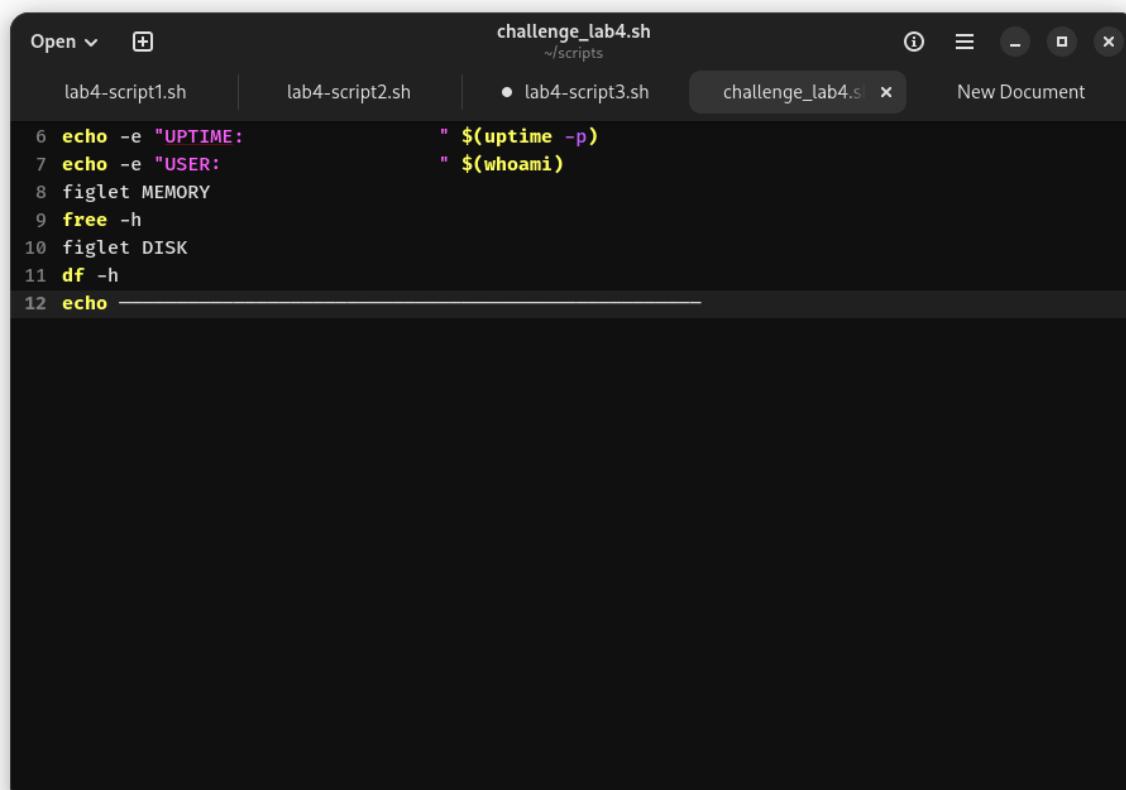
```
#!/bin/bash
```



A screenshot of a code editor window. The title bar shows 'lab4-script1.sh' and the path '~/scripts'. The tab bar has five tabs: 'lab4-script1.sh' (active), 'lab4-script2.sh', 'lab4-script3.sh', 'challenge_lab4.sh', and 'New Document'. The editor area is dark with a light blue cursor at line 1, column 1. The text '1 #!/bin/bash' is visible on the first line, and '2' is on the second line.

```
1 #!/bin/bash
2
```

- Save as and name the shell script

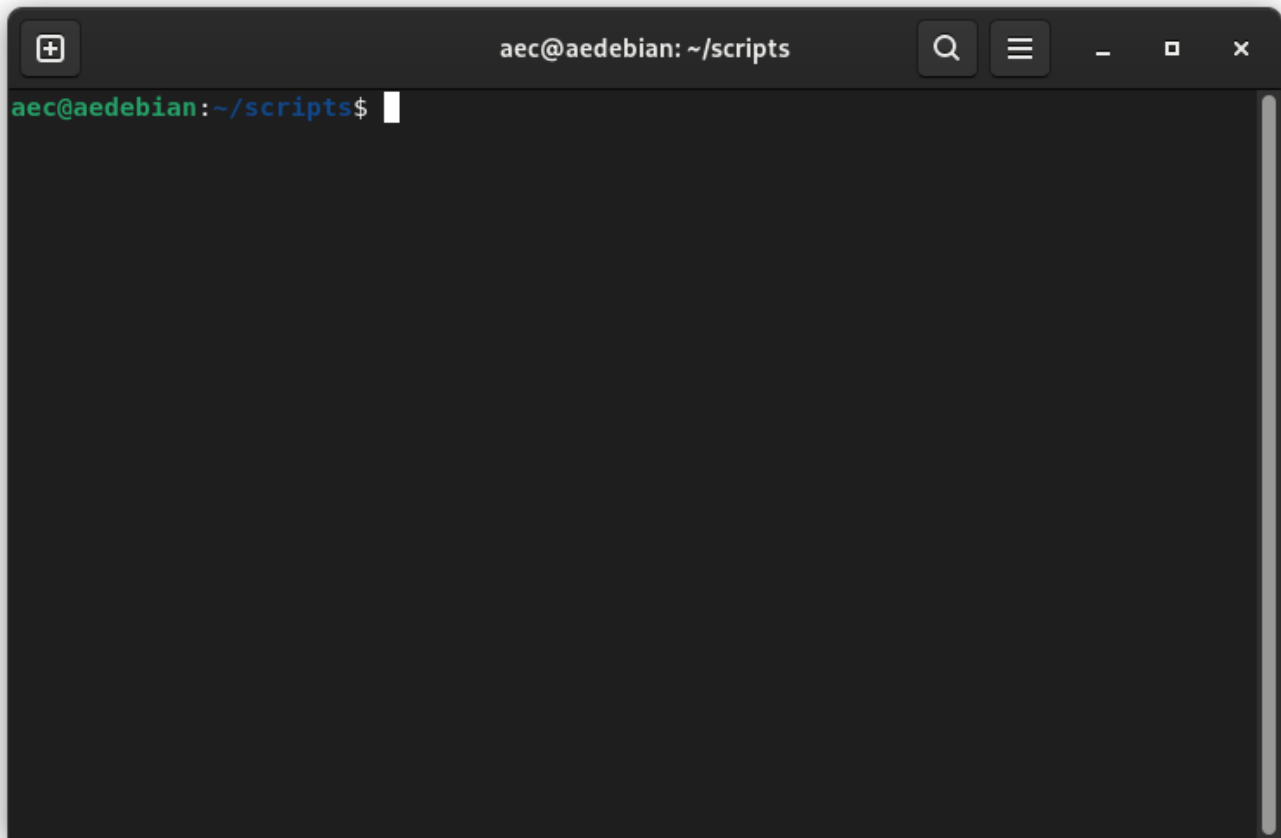


A screenshot of a code editor window. The title bar shows 'challenge_lab4.sh' and the path '~/scripts'. The tab bar has five tabs: 'lab4-script1.sh', 'lab4-script2.sh', 'lab4-script3.sh', 'challenge_lab4.sh' (active), and 'New Document'. The editor area is dark with a light blue cursor at line 12, column 1. The text is as follows:

```
6 echo -e "UPTIME:           " $(uptime -p)
7 echo -e "USER:             " $(whoami)
8 figlet MEMORY
9 free -h
10 figlet DISK
11 df -h
12 echo _____
```

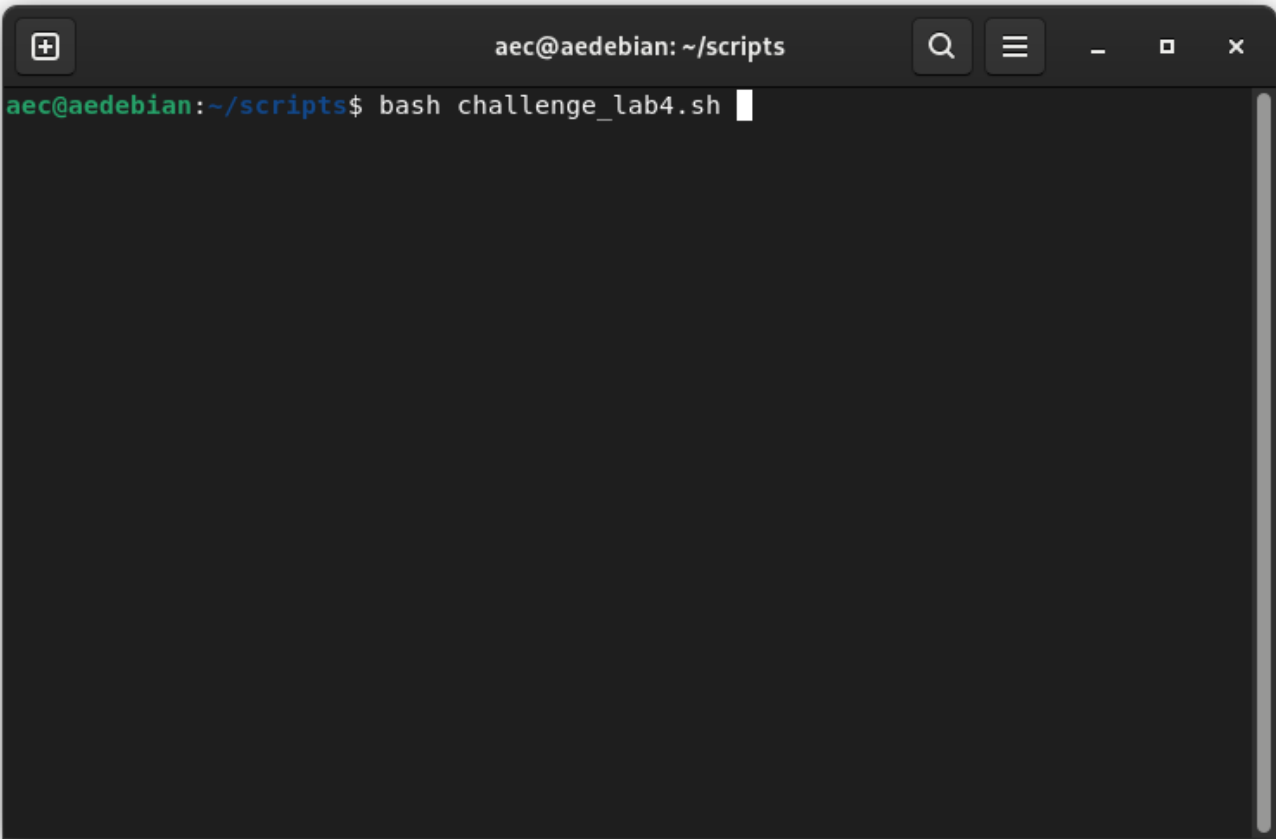

- Open the shell script on the terminal

```
cd scripts/
```



Next command:

```
bash "script's file name"
```



Running:

