

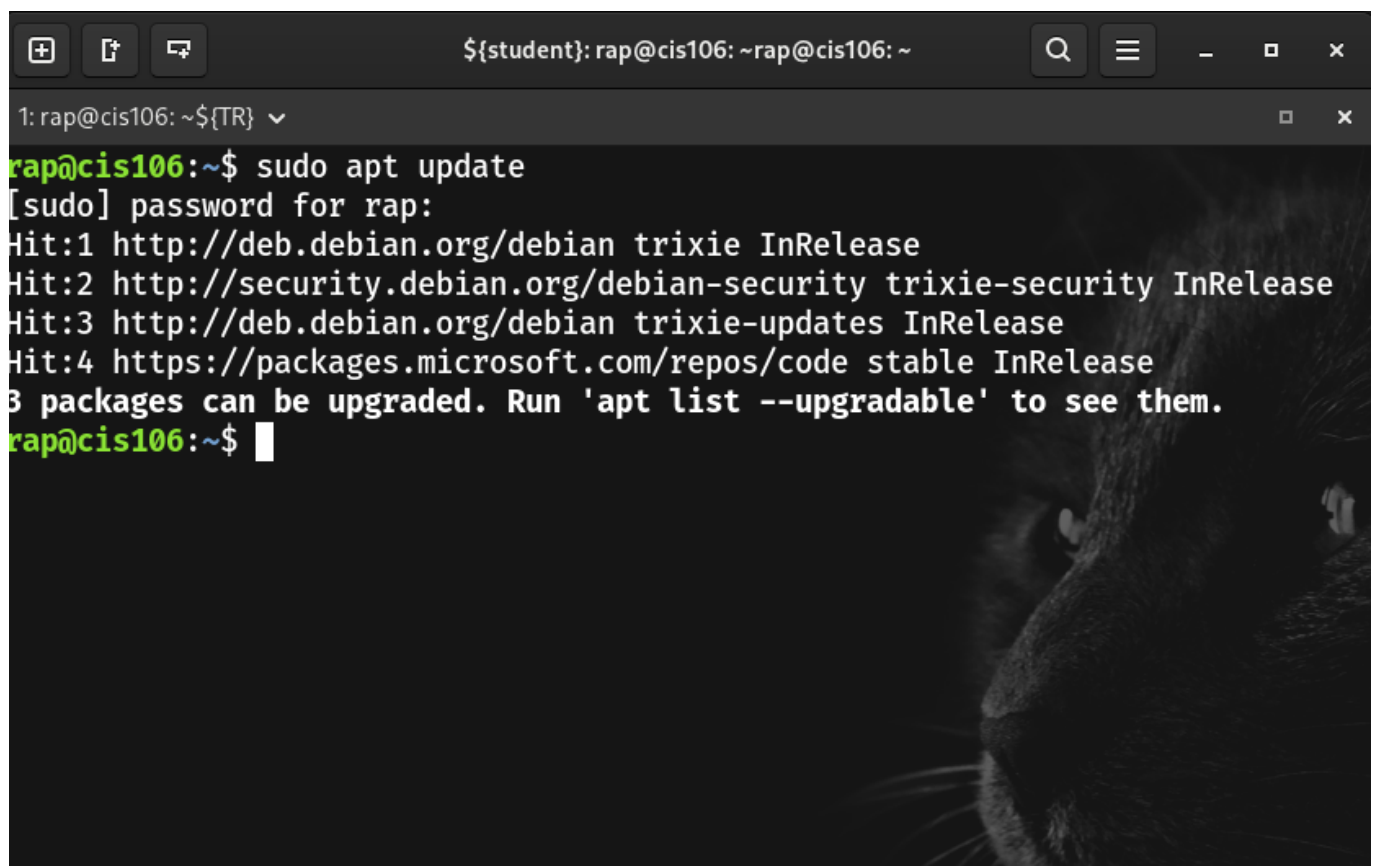
Notes 4

How to install and remove software using the APT command.

Installing Software with APT

Update the Package List

Command `sudo apt update`

A terminal window with a dark background and a faint image of a cat's face on the right side. The window title is "\${student}: rap@cis106: ~rap@cis106: ~". The terminal shows the command "sudo apt update" being executed. The output indicates that several package lists have been retrieved from various sources, including Debian trixie and Microsoft stable. It concludes by stating that 3 packages can be upgraded and suggests running "apt list --upgradable" to see them.

```
$ {student}: rap@cis106: ~rap@cis106: ~
1: rap@cis106: ~${TR}
rap@cis106:~$ sudo apt update
[sudo] password for rap:
Hit:1 http://deb.debian.org/debian trixie InRelease
Hit:2 http://security.debian.org/debian-security trixie-security InRelease
Hit:3 http://deb.debian.org/debian trixie-updates InRelease
Hit:4 https://packages.microsoft.com/repos/code stable InRelease
3 packages can be upgraded. Run 'apt list --upgradable' to see them.
rap@cis106:~$
```

Install package

Command `sudo apt install`

```
1: rap@cis106: ~${TR} ▾
rap@cis106:~$ sudo apt install vitetris -y
Installing:
  vitetris

Summary:
  Upgrading: 0, Installing: 1, Removing: 0, Not Upgrading: 3
  Download size: 70.4 kB
  Space needed: 159 kB / 26.1 GB available

Get:1 http://deb.debian.org/debian trixie/main amd64 vitetris amd64 0.59.1-3 [70.4 kB]
Fetched 70.4 kB in 0s (974 kB/s)
Selecting previously unselected package vitetris.
(Reading database ... 204384 files and directories currently installed.)
Preparing to unpack .../vitetris_0.59.1-3_amd64.deb ...
Unpacking vitetris (0.59.1-3) ...
Setting up vitetris (0.59.1-3) ...
Processing triggers for desktop-file-utils (0.28-1) ...
Processing triggers for gnome-menus (3.36.0-3) ...
Processing triggers for man-db (2.13.1-1) ...
Processing triggers for mailcap (3.74) ...
rap@cis106:~$
```

Remove package

Command `sudo apt remove`

```
2: rap@cis106: ~${TR} ▾  
rap@cis106:~$ sudo apt remove vitetris -y  
[sudo] password for rap:  
REMOVING:  
  vitetris  
  
Summary:  
  Upgrading: 0, Installing: 0, Removing: 1, Not Upgrading: 3  
  Freed space: 159 kB  
  
(Reading database ... 204393 files and directories currently installed.)  
Removing vitetris (0.59.1-3) ...  
Processing triggers for gnome-menus (3.36.0-3) ...  
Processing triggers for man-db (2.13.1-1) ...  
Processing triggers for mailcap (3.74) ...  
Processing triggers for desktop-file-utils (0.28-1) ...  
rap@cis106:~$
```

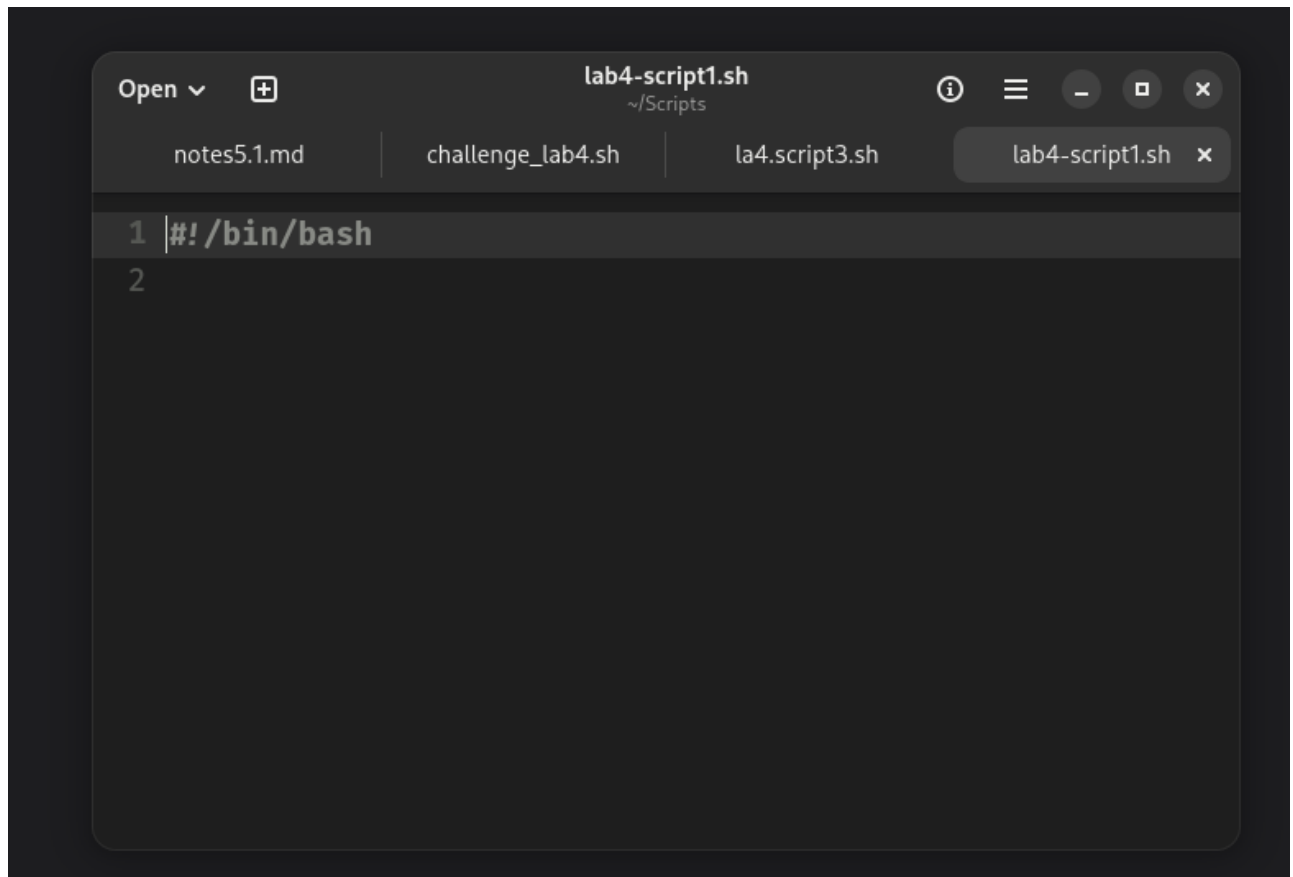
Command sudo apt purge

```
2: rap@cis106: ~${TR} ▾  
rap@cis106:~$ sudo apt purge  
[sudo] password for rap:  
Summary:  
  Upgrading: 0, Installing: 0, Removing: 0, Not Upgrading: 3  
rap@cis106:~$
```

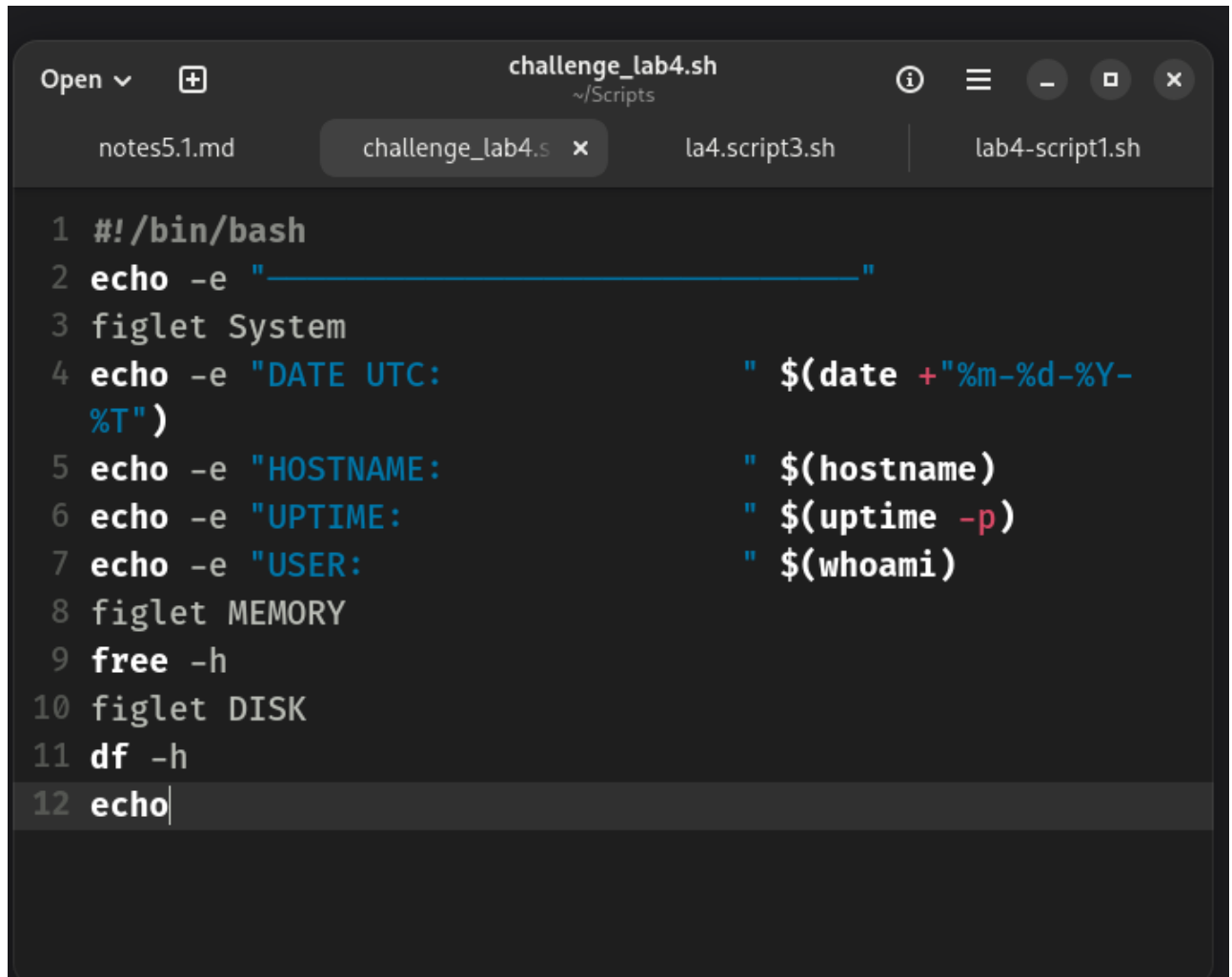
How to create a shell script step by step including screenshots and how to run it.

Pick a file for script

- Gnome text edit



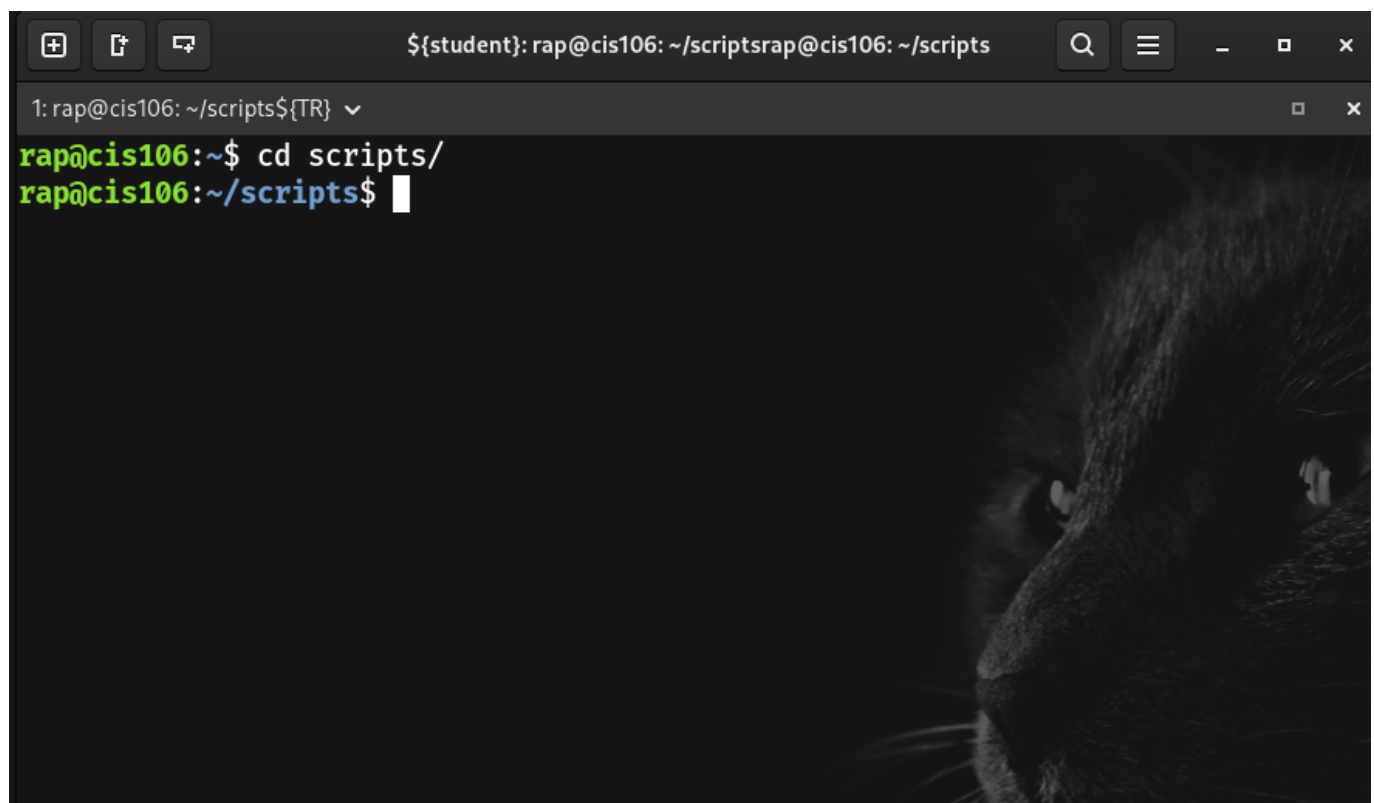
- Save as and name the shell script



The screenshot shows a code editor window titled "challenge_lab4.sh" with the path "~/Scripts". The editor has tabs for "notes5.1.md", "challenge_lab4.s", "la4.script3.sh", and "lab4-script1.sh". The script content is as follows:

```
1 #!/bin/bash
2 echo -e "_____ "
3 figlet System
4 echo -e "DATE UTC:           " $(date +"%m-%d-%Y-%T")
5 echo -e "HOSTNAME:           " $(hostname)
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



The screenshot shows a terminal window with the prompt "\${student}: rap@cis106: ~/scripts". The user has entered the command "cd scripts/" and the prompt has changed to "rap@cis106: ~/scripts\$". The terminal background features a dark image of a cat's face.

Run it

