

Lab 3 | Installing software and navigating the file system | Answers

Assignment description [here](#)

Question 1

1. Which command did you use to search for the themes and to install them?

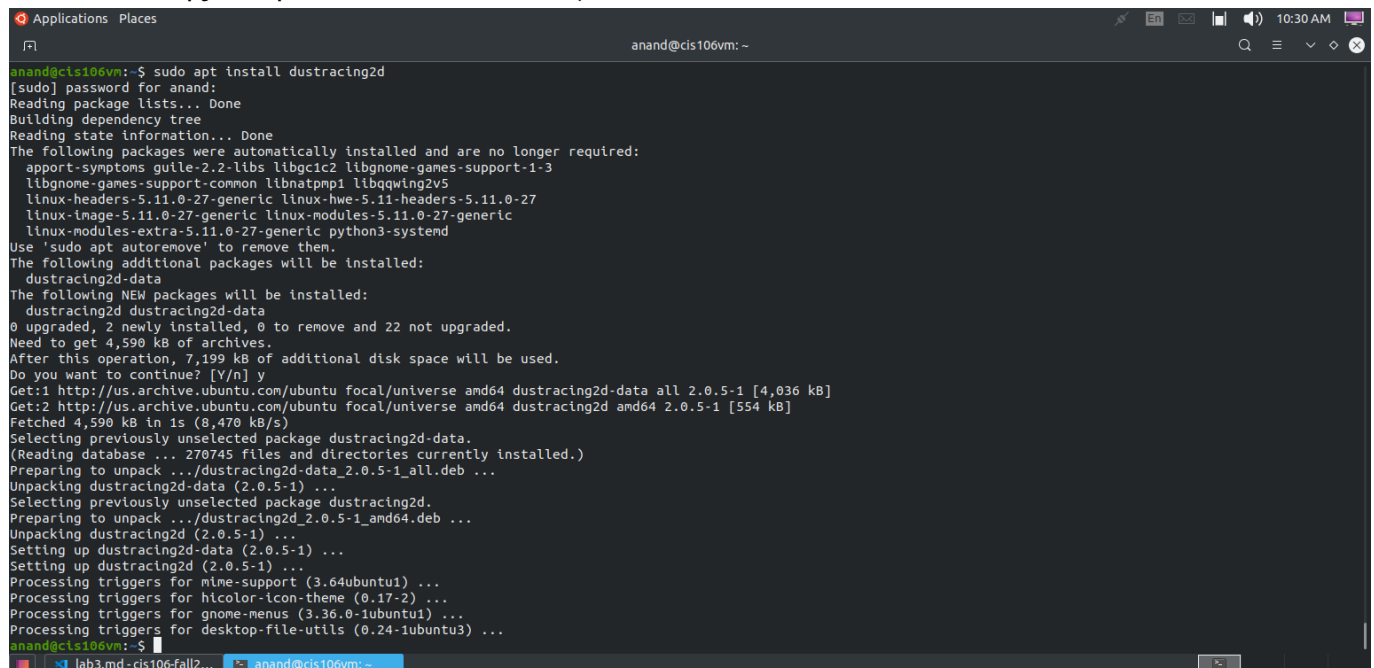
- i used for this command line to search theme for = apt search 'gtk theme'.
- i installed breeze-gtk-theme in my computer and i used this command line for install= sudo apt install breeze-gtk-theme

2. Which commands did you use to find and install the web browser?

- i used this command line for find the web browser= apt search web browser
- i used this command line for install = sudo apt install konqueror

3.1 What is the name of the package? dustracing2d

3.2 What dependencies are needed in order to install the package? (you can either take a screenshot of the terminal or copy and paste from the terminal)



```
anand@cis106vm: ~  
anand@cis106vm:~$ sudo apt install dustracing2d  
[sudo] password for anand:  
Reading package lists... Done  
Building dependency tree  
Reading state information... Done  
The following packages were automatically installed and are no longer required:  
  apport-symptoms guile-2.2-libs libgcic2 libgnome-games-support-1-3  
  libgnome-games-support-common libnatpmp1 libqwing2v5  
  linux-headers-5.11.0-27-generic linux-hwe-5.11-headers-5.11.0-27  
  linux-image-5.11.0-27-generic linux-modules-5.11.0-27-generic  
  linux-modules-extra-5.11.0-27-generic python3-systemd  
Use 'sudo apt autoremove' to remove them.  
The following additional packages will be installed:  
  dustracing2d-data  
The following NEW packages will be installed:  
  dustracing2d dustracing2d-data  
0 upgraded, 2 newly installed, 0 to remove and 22 not upgraded.  
Need to get 4,590 kB of archives.  
After this operation, 7,199 kB of additional disk space will be used.  
Do you want to continue? [Y/n] y  
Get:1 http://us.archive.ubuntu.com/ubuntu focal/universe amd64 dustracing2d-data all 2.0.5-1 [4,036 kB]  
Get:2 http://us.archive.ubuntu.com/ubuntu focal/universe amd64 dustracing2d amd64 2.0.5-1 [554 kB]  
Fetched 4,590 kB in 1s (8,470 kB/s)  
Selecting previously unselected package dustracing2d-data.  
(Reading database ... 270745 files and directories currently installed.)  
Preparing to unpack ../dustracing2d-data_2.0.5-1_all.deb ...  
Unpacking dustracing2d-data (2.0.5-1) ...  
Selecting previously unselected package dustracing2d.  
Preparing to unpack ../dustracing2d_2.0.5-1_amd64.deb ...  
Unpacking dustracing2d (2.0.5-1) ...  
Setting up dustracing2d-data (2.0.5-1) ...  
Setting up dustracing2d (2.0.5-1) ...  
Processing triggers for mime-support (3.64ubuntu1) ...  
Processing triggers for hicolor-icon-theme (0.17-2) ...  
Processing triggers for gnome-menus (3.36.0-1ubuntu1) ...  
Processing triggers for desktop-file-utils (0.24-1ubuntu3) ...  
anand@cis106vm:~$
```

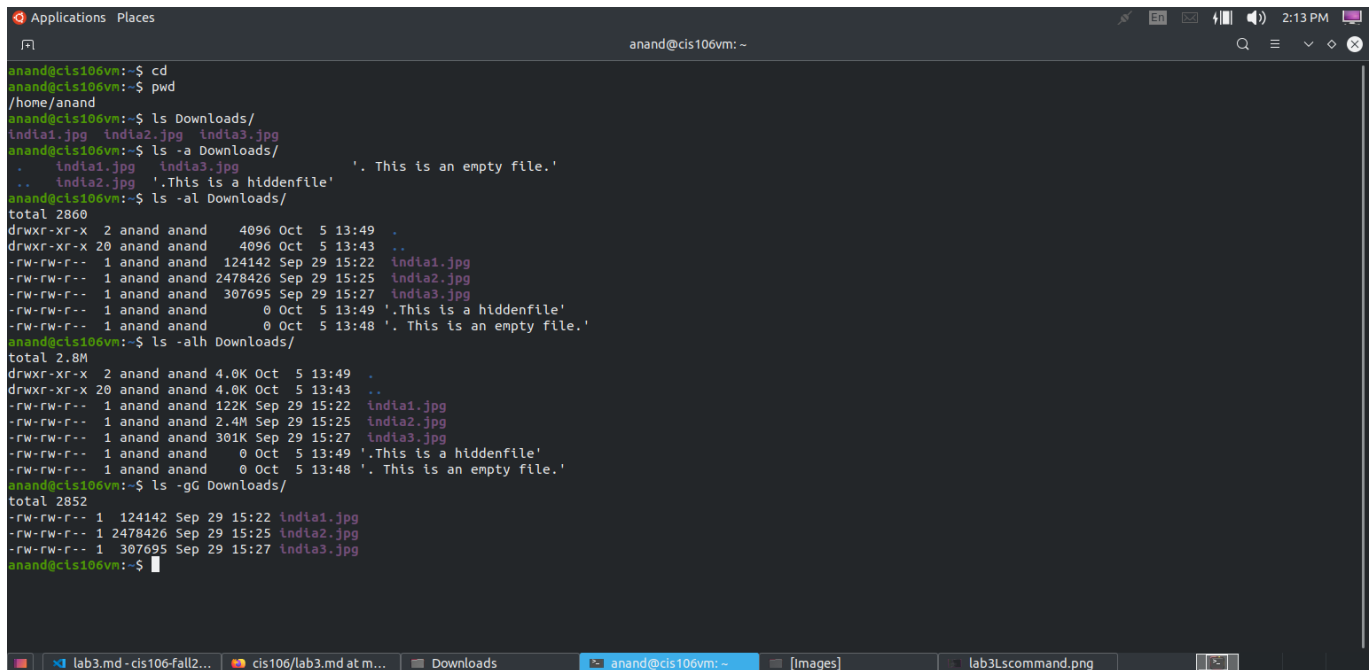
3.3 How much disk space will the package utilize after installation? Need to get 4,590 kB of archives. After this operation, 7,199 kB of additional disk space will be used.

Question 2

```
anand@cis106vm: /etc/firefox/pref
anand@cis106vm:~$ pwd
/home/anand
anand@cis106vm:~$ cd /usr/share/themes
anand@cis106vm:/usr/share/themes$ pwd
/usr/share/themes
anand@cis106vm:/usr/share/themes$ cd /
anand@cis106vm:/$ cd /etc/firefox/pref
anand@cis106vm:/etc/firefox/pref$
```

```
anand@cis106vm: ~/Documents
anand@cis106vm:~$ cd
anand@cis106vm:~$ cd Downloads/
anand@cis106vm:~/Downloads$ cd
anand@cis106vm:~$ cd
anand@cis106vm:~$ pwd
/home/anand
anand@cis106vm:~$ cd Documents/
anand@cis106vm:~/Documents$
```

Question 3



```
anand@cis106vm:~$ cd
anand@cis106vm:~$ pwd
/home/anand
anand@cis106vm:~$ ls Downloads/
india1.jpg india2.jpg india3.jpg
anand@cis106vm:~$ ls -a Downloads/
.  india1.jpg  india3.jpg  '. This is an empty file.'
.. india2.jpg  '.This is a hiddenfile'
anand@cis106vm:~$ ls -al Downloads/
total 2860
drwxr-xr-x  2 anand anand   4096 Oct  5 13:49 .
drwxr-xr-x 20 anand anand   4096 Oct  5 13:43 ..
-rw-rw-r--  1 anand anand 124142 Sep 29 15:22 india1.jpg
-rw-rw-r--  1 anand anand 2478426 Sep 29 15:25 india2.jpg
-rw-rw-r--  1 anand anand 307695 Sep 29 15:27 india3.jpg
-rw-rw-r--  1 anand anand    0 Oct  5 13:49 '.This is a hiddenfile'
-rw-rw-r--  1 anand anand    0 Oct  5 13:48 '. This is an empty file.'
anand@cis106vm:~$ ls -alh Downloads/
total 2.8M
drwxr-xr-x  2 anand anand 4.0K Oct  5 13:49 .
drwxr-xr-x 20 anand anand 4.0K Oct  5 13:43 ..
-rw-rw-r--  1 anand anand 122K Sep 29 15:22 india1.jpg
-rw-rw-r--  1 anand anand 2.4M Sep 29 15:25 india2.jpg
-rw-rw-r--  1 anand anand 301K Sep 29 15:27 india3.jpg
-rw-rw-r--  1 anand anand    0 Oct  5 13:49 '.This is a hiddenfile'
-rw-rw-r--  1 anand anand    0 Oct  5 13:48 '. This is an empty file.'
anand@cis106vm:~$ ls -lg Downloads/
total 2852
-rw-rw-r--  1 124142 Sep 29 15:22 india1.jpg
-rw-rw-r--  1 2478426 Sep 29 15:25 india2.jpg
-rw-rw-r--  1 307695 Sep 29 15:27 india3.jpg
anand@cis106vm:~$
```

Question 4

```

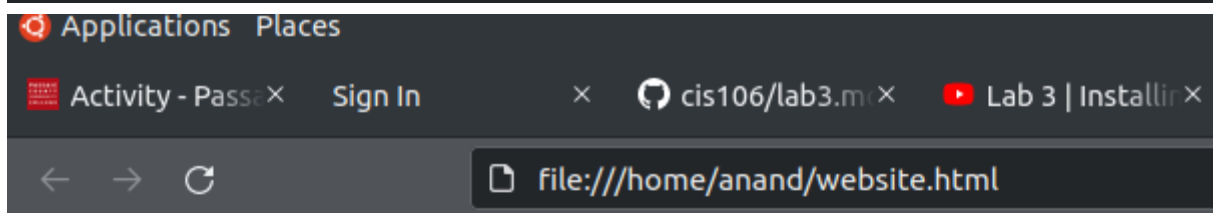
anand@cis106vm: ~
anand@cis106vm: ~
anand@cis106vm:~$ tree ~/Downloads/
/home/anand/Downloads/
├── india1.jpg
├── india2.jpg
└── india3.jpg

0 directories, 3 files
anand@cis106vm:~$ tree -pugh ~/Downloads/
/home/anand/Downloads/
├── [-rw-rw-r-- anand anand 121K] india1.jpg
├── [-rw-rw-r-- anand anand 2.4M] india2.jpg
└── [-rw-rw-r-- anand anand 300K] india3.jpg

0 directories, 3 files
anand@cis106vm:~$ tree -tD ~/Downloads/
/home/anand/Downloads/
├── [Sep 29 15:22] india1.jpg
├── [Sep 29 15:25] india2.jpg
└── [Sep 29 15:27] india3.jpg

0 directories, 3 files
anand@cis106vm:~$ tree -Ho Downloads/ website.html
anand@cis106vm:~$ ls
cis106-fall21 Desktop Documents Downloads Music Pictures Public snap Templates Videos website.html
anand@cis106vm:~$ xdg-open website.html
anand@cis106vm:~$

```



Directory Tree

```

Downloads/
├── cis106-fall21
│   ├── Images
│   │   ├── a1.png
│   │   ├── a2.png
│   │   ├── a3.png
│   │   ├── lab3_game.png
│   │   ├── lab3q2.png
│   │   ├── lab3q3.png
│   │   ├── picture1.png
│   │   ├── picture2.png
│   │   ├── picture3.png
│   │   ├── Question 3 lab3.png
│   │   └── virtualbox.png
│   ├── labs
│   │   ├── lab1.md
│   │   ├── lab1.pdf
│   │   ├── lab2.md
│   │   ├── lab2.pdf
│   │   └── lab3.md
│   ├── Notes
│   └── README.md
├── Desktop
├── Documents
├── Downloads
│   ├── india1.jpg
│   ├── india2.jpg
│   └── india3.jpg
├── Music
├── Pictures
├── Public
├── snap
│   └── code
│       ├── 74
│       └── 75

```

```
├── common
│   └── current
├── Templates
├── Videos
└── website.html
```

18 directories, 21 files

tree v1.5.0 © 1996 - 2015 by Steve Baker and Thomas Moore

UTM: output tested and modified © 1996 by Steve Baker

lab3.md - cis106-fall2... Directory Tree — Mo... Images

Question 5

```

Applications  Places

anand@cis106vm: ~
anand@cis106vm: ~

anand@cis106vm:~$ exa -l Downloads/
.rw-rw-r-- 124k anand 29 Sep 15:22 india1.jpg
.rw-rw-r-- 2.5M anand 29 Sep 15:25 india2.jpg
.rw-rw-r-- 307k anand 29 Sep 15:27 india3.jpg
anand@cis106vm:~$ exa -mh Downloads/
india1.jpg india2.jpg india3.jpg
anand@cis106vm:~$ exa -lhm Downloads/
Permissions Size User Date Modified Name
.rw-rw-r-- 124k anand 29 Sep 15:22 india1.jpg
.rw-rw-r-- 2.5M anand 29 Sep 15:25 india2.jpg
.rw-rw-r-- 307k anand 29 Sep 15:27 india3.jpg
anand@cis106vm:~$

```

```

Applications  Places

anand@cis106vm: ~
anand@cis106vm: ~

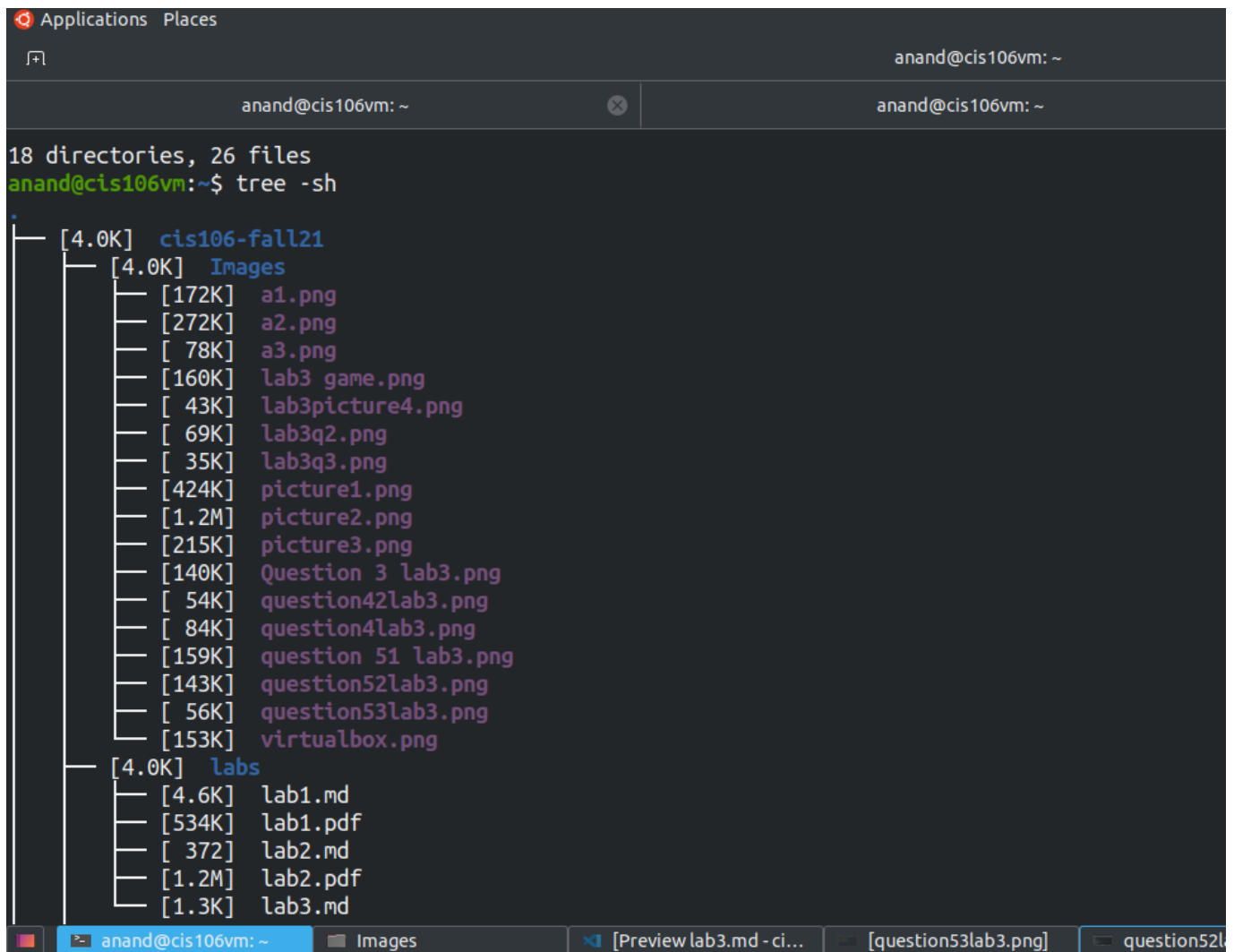
anand@cis106vm:~$ tree -ug
.
├── [anand anand ] cis106-fall21
│   ├── [anand anand ] Images
│   │   ├── [anand anand ] a1.png
│   │   ├── [anand anand ] a2.png
│   │   ├── [anand anand ] a3.png
│   │   ├── [anand anand ] lab3_game.png
│   │   ├── [anand anand ] lab3q2.png
│   │   ├── [anand anand ] lab3q3.png
│   │   ├── [anand anand ] picture1.png
│   │   ├── [anand anand ] picture2.png
│   │   ├── [anand anand ] picture3.png
│   │   ├── [anand anand ] Question 3 lab3.png
│   │   ├── [anand anand ] question42lab3.png
│   │   ├── [anand anand ] question4lab3.png
│   │   ├── [anand anand ] question 51 lab3.png
│   │   ├── [anand anand ] question52lab3.png
│   │   ├── [anand anand ] question53lab3.png
│   │   └── [anand anand ] virtualbox.png
│   ├── [anand anand ] labs
│   │   ├── [anand anand ] lab1.md
│   │   ├── [anand anand ] lab1.pdf
│   │   ├── [anand anand ] lab2.md
│   │   ├── [anand anand ] lab2.pdf
│   │   └── [anand anand ] lab3.md
│   ├── [anand anand ] Notes
│   └── [anand anand ] README.md
├── [anand anand ] Desktop
├── [anand anand ] Documents
├── [anand anand ] Downloads
│   ├── [anand anand ] india1.jpg
│   ├── [anand anand ] india2.jpg
│   └── [anand anand ] india3.jpg
├── [anand anand ] Music
├── [anand anand ] Pictures
├── [anand anand ] Public
└── [anand anand ] snap

```

```
└─ [anand anand ] code
   └─ [anand anand ] 75
      └─ [anand anand ] 76
         └─ [anand anand ] common
            └─ [anand anand ] current -> 76
└─ [anand anand ] Templates
└─ [anand anand ] Videos
└─ [anand anand ] website.html

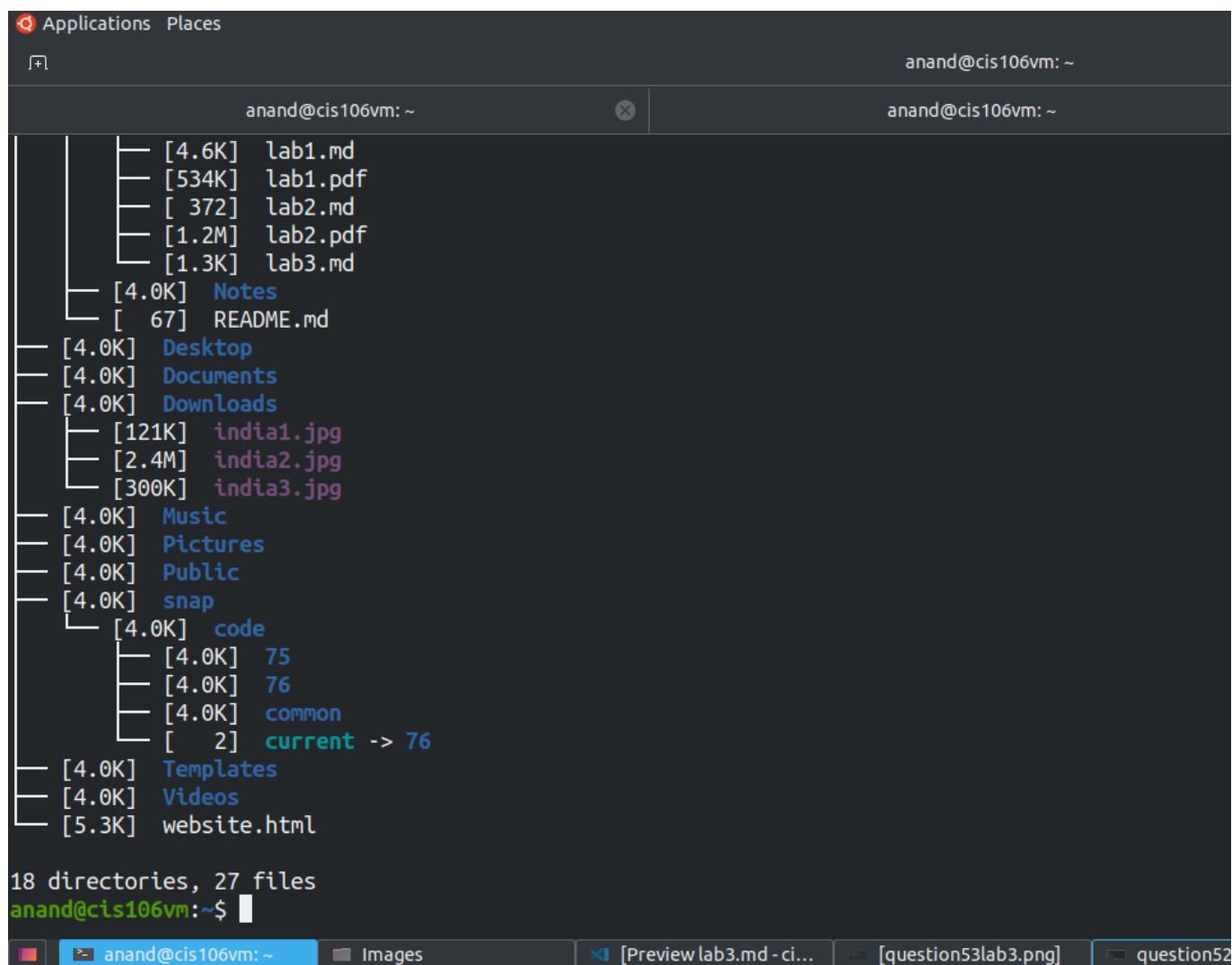
18 directories, 26 files
```

anand@cis106vm: ~ Images [Preview lab3.md - ci... [ques



A terminal window titled 'Applications Places' with a dark background. The terminal shows the output of the command 'tree -sh' in the directory '~'. The output is a tree structure of files and directories. The root directory is 'cis106-fall21' with a size of 4.0K. It contains two subdirectories: 'Images' (4.0K) and 'labs' (4.0K). The 'Images' directory contains 15 files, mostly .png files, with sizes ranging from 35K to 1.2M. The 'labs' directory contains 5 files: lab1.md (4.6K), lab1.pdf (534K), lab2.md (372), lab2.pdf (1.2M), and lab3.md (1.3K). The terminal window has a title bar with 'anand@cis106vm: ~' and a tab bar at the bottom with several open tabs, including 'anand@cis106vm: ~', 'Images', '[Preview lab3.md - ci...', '[question53lab3.png]', and 'question52l'.

```
18 directories, 26 files
anand@cis106vm:~$ tree -sh
.
├── [4.0K] cis106-fall21
│   ├── [4.0K] Images
│   │   ├── [172K] a1.png
│   │   ├── [272K] a2.png
│   │   ├── [ 78K] a3.png
│   │   ├── [160K] lab3 game.png
│   │   ├── [ 43K] lab3picture4.png
│   │   ├── [ 69K] lab3q2.png
│   │   ├── [ 35K] lab3q3.png
│   │   ├── [424K] picture1.png
│   │   ├── [1.2M] picture2.png
│   │   ├── [215K] picture3.png
│   │   ├── [140K] Question 3 lab3.png
│   │   ├── [ 54K] question42lab3.png
│   │   ├── [ 84K] question4lab3.png
│   │   ├── [159K] question 51 lab3.png
│   │   ├── [143K] question52lab3.png
│   │   ├── [ 56K] question53lab3.png
│   │   └── [153K] virtualbox.png
│   └── [4.0K] labs
│       ├── [4.6K] lab1.md
│       ├── [534K] lab1.pdf
│       ├── [ 372] lab2.md
│       ├── [1.2M] lab2.pdf
│       └── [1.3K] lab3.md
```

The image shows a terminal window with a dark background. At the top, there's a header bar with 'Applications' and 'Places' on the left, and 'anand@cis106vm: ~' on the right. Below this, there's a tab bar with two tabs, both labeled 'anand@cis106vm: ~'. The main area of the terminal displays a file listing with columns for file size and name. The files are listed as follows:

- [4.6K] lab1.md
- [534K] lab1.pdf
- [372] lab2.md
- [1.2M] lab2.pdf
- [1.3K] lab3.md
- [4.0K] Notes
- [67] README.md
- [4.0K] Desktop
- [4.0K] Documents
- [4.0K] Downloads
- [121K] india1.jpg
- [2.4M] india2.jpg
- [300K] india3.jpg
- [4.0K] Music
- [4.0K] Pictures
- [4.0K] Public
- [4.0K] snap
- [4.0K] code
 - [4.0K] 75
 - [4.0K] 76
 - [4.0K] common
 - [2] current -> 76
- [4.0K] Templates
- [4.0K] Videos
- [5.3K] website.html

Below the file listing, it says '18 directories, 27 files'. The prompt 'anand@cis106vm:~\$' is visible at the bottom left. At the very bottom, there's a taskbar with several icons and window titles: a terminal icon, 'anand@cis106vm: ~', an 'Images' icon, '[Preview lab3.md - ci...', '[question53lab3.png]', and 'question52'.