CEIS106
LINUX FINAL PRESENTATION

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INTRODUCTION

- Learned the operation system of Linux
- Understanding Filesystem Hierarchy
- Understanding Linux Shell Scripts

NAVIGATE THE LINUX FILE SYSTEM TREE

1. What is the *pwd* command an acronym for? What about the *cd* command?

Answer here:

pwd – print working directory and it shows you where you are currently located in the file structure

cd – change directory, and it changes to a new directory location.

2. Explain the differences between a relative path and an absolute/full path in Linux.

Answer here:

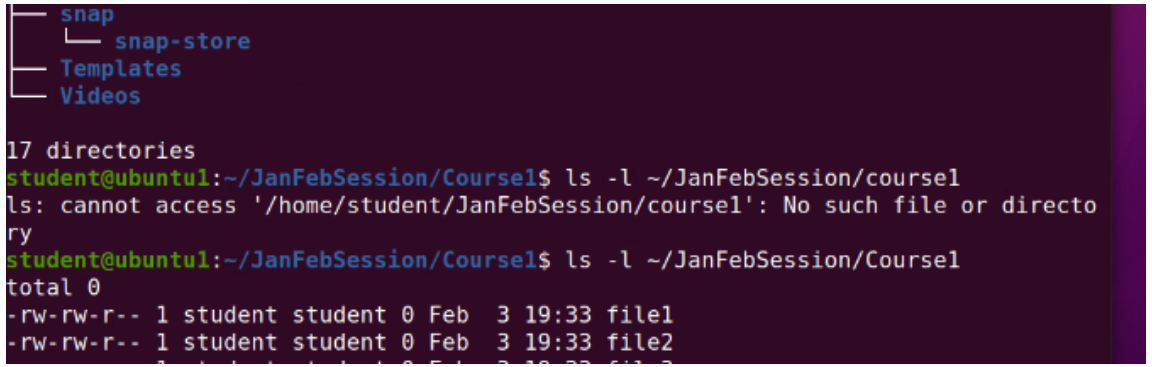
Relative path is based on your current location

Absolute path starts at the top of the directory tree called the root

References:

1. Project Assistance video

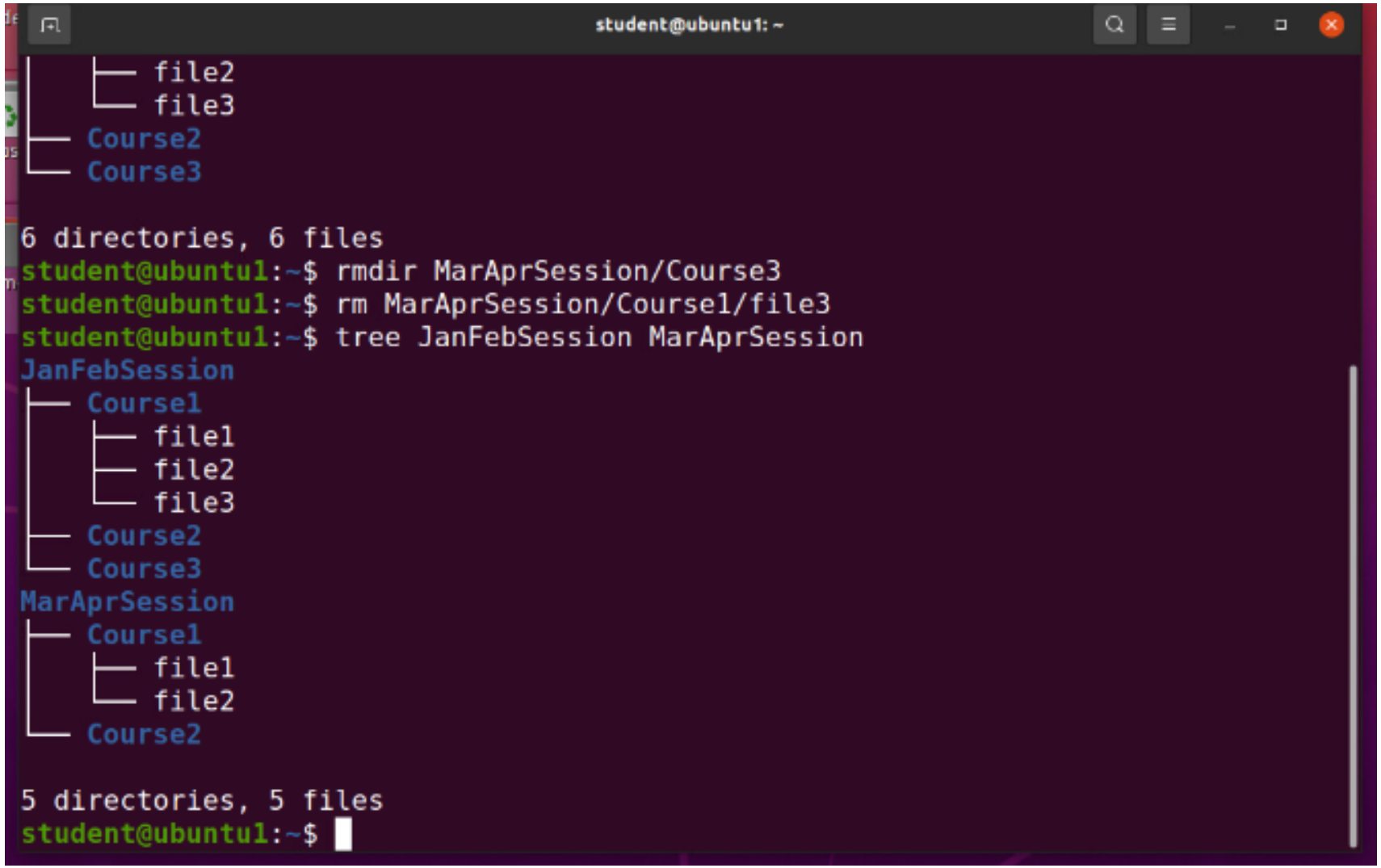
CREATE DIRECTORIES AND FILES



- Image shows directories and files

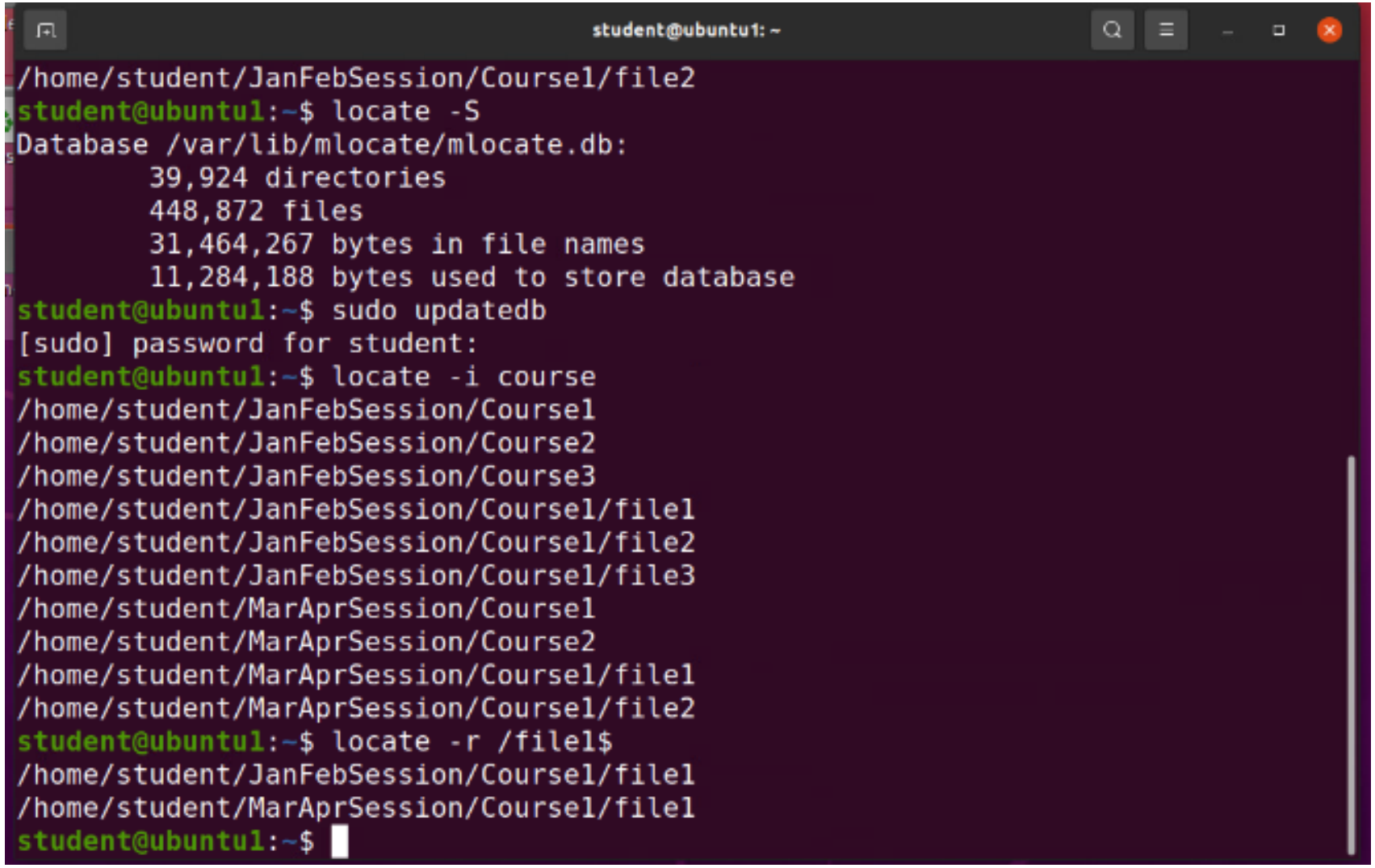
COPY AND REMOVE DIRECTORIES AND FILES

How directories/files are copied and removed.



LOCATE DIRECTORIES AND FILES

Where files were located in the directory.



CREATE A SHELL SCRIPT

1. What are the file permissions of the script?

Answer here:

rw- --owner can read and write but cannot execute.

rw- --group can read and write but cannot execute.

r- - --everyone else can only read the file, but not write or execute.

2. What's the name of the user-defined variable in the script?

Answer here:

--text

3. Which redirection meta-character is used in the script? What does it do?

Answer here:

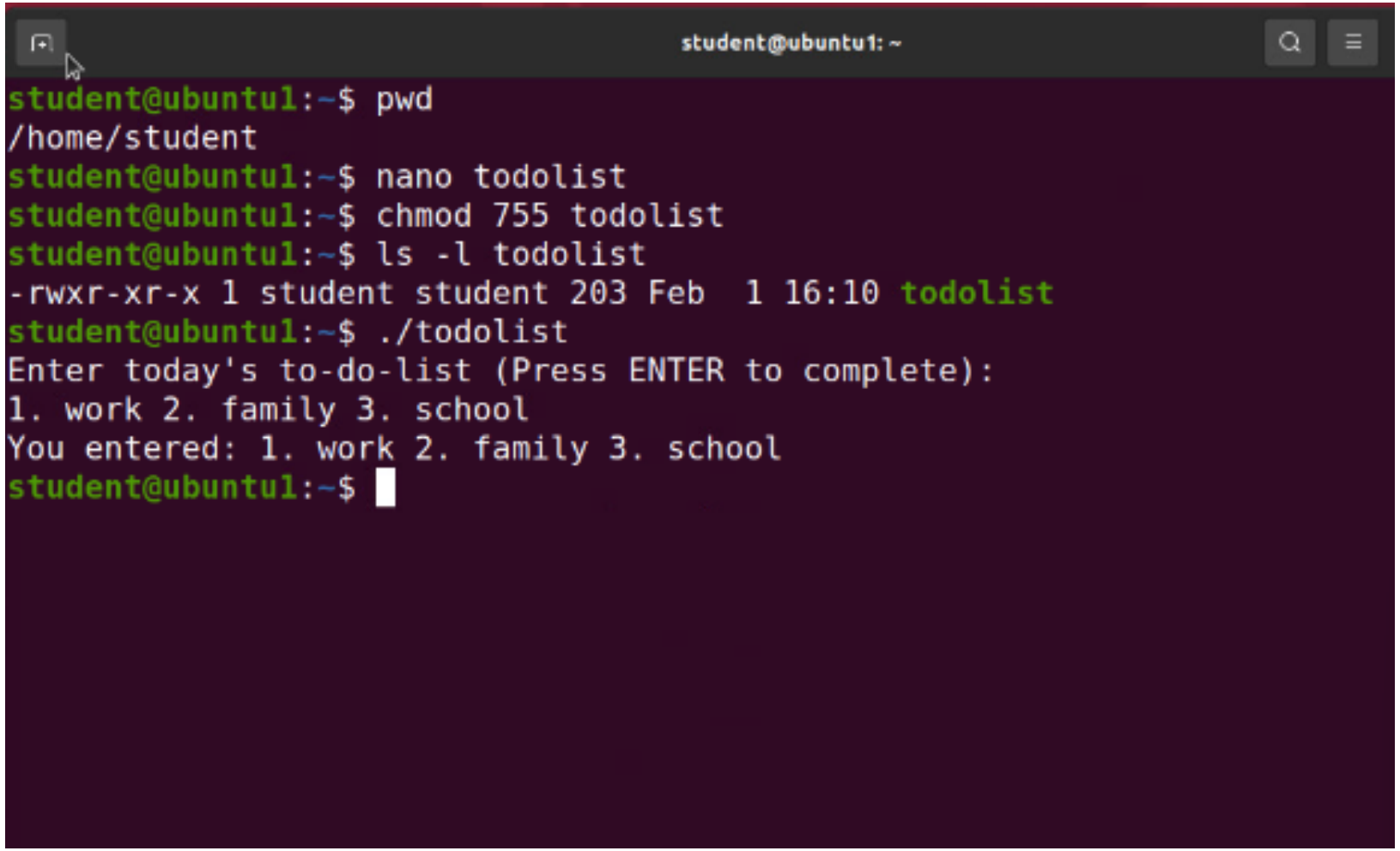
>> --appends the information to the end of the file

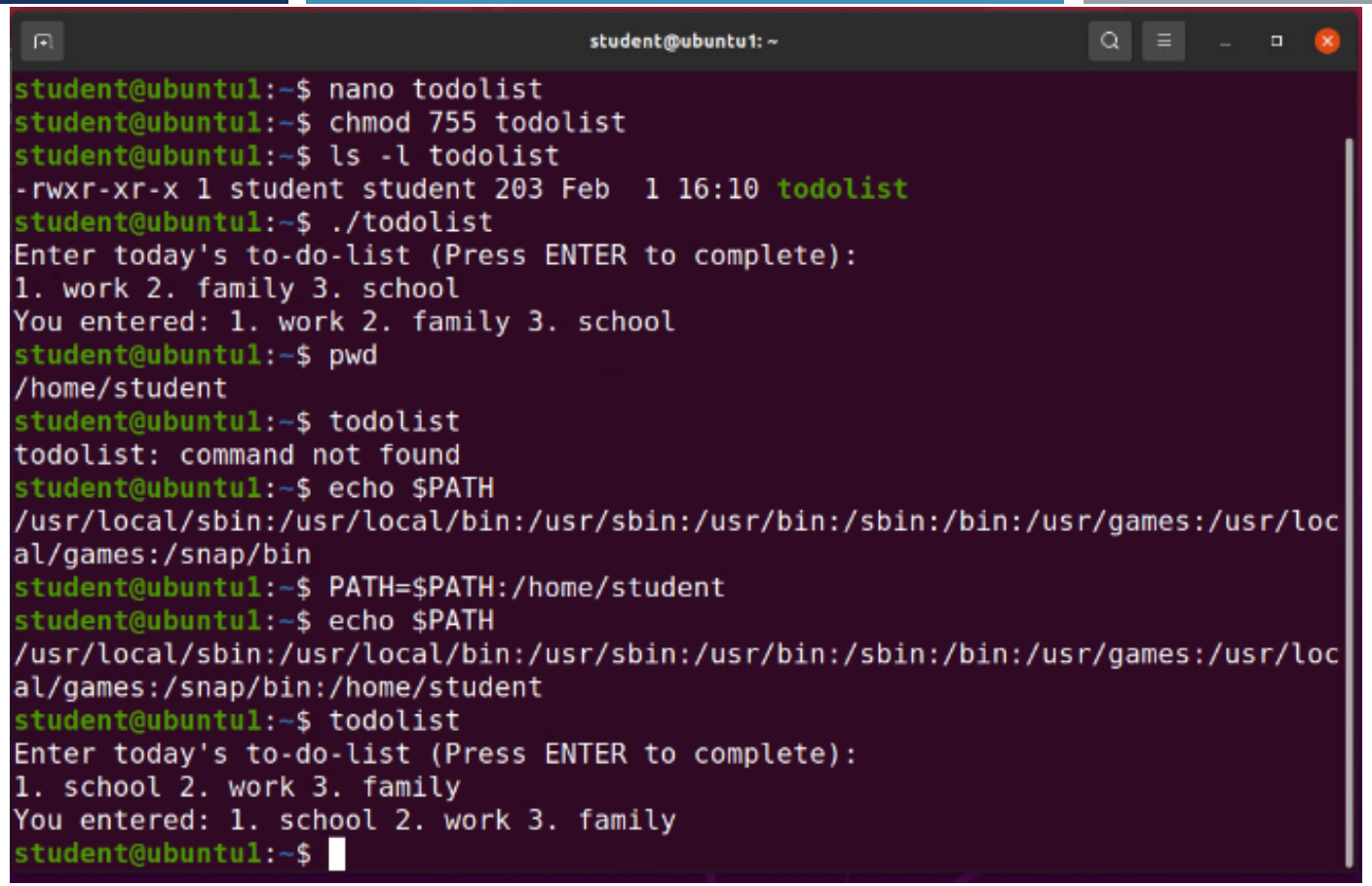
References:

1. Project assistance video

CHANGE SCRIPT FILE PERMISSIONS

screenshot of the output.





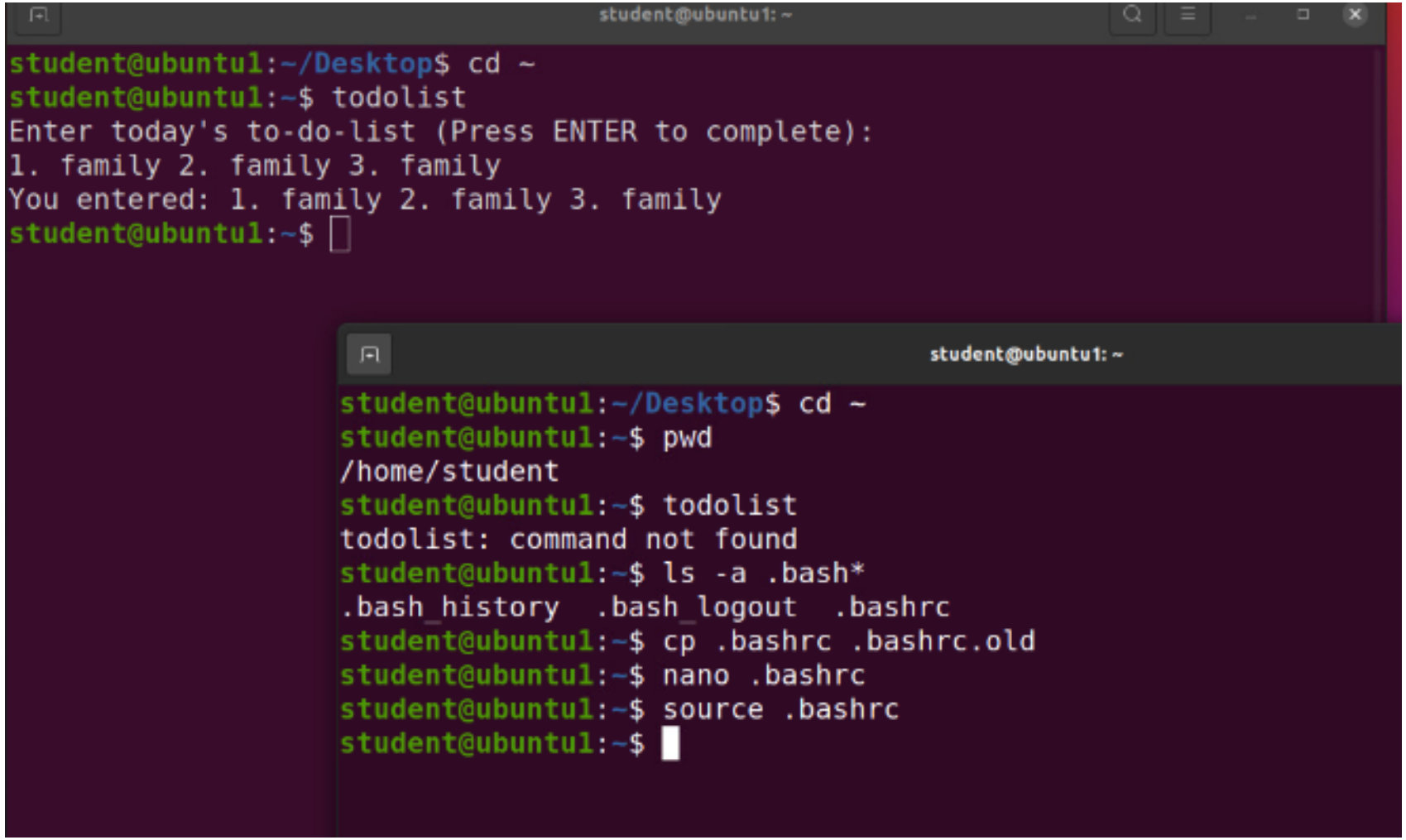
SET THE PATH VARIABLE

The out put.

MAKE THE PATH VARIABLE PERMANENT

Running the *todolist* script before and after making the PATH variable permanent.

A screenshot of both Terminal windows.



ADD USERS AND GROUPS IN CLI

1. What does the *–m* option in the useradd command do?

Answer here: Creates a home directory for the user

2. What does the *-3* option in the tail command do?

Answer here: This tells tail comment how many lines to show

3. Which line of the */etc/group* file lists members of the "students" group? Copy it here.

Answer here:

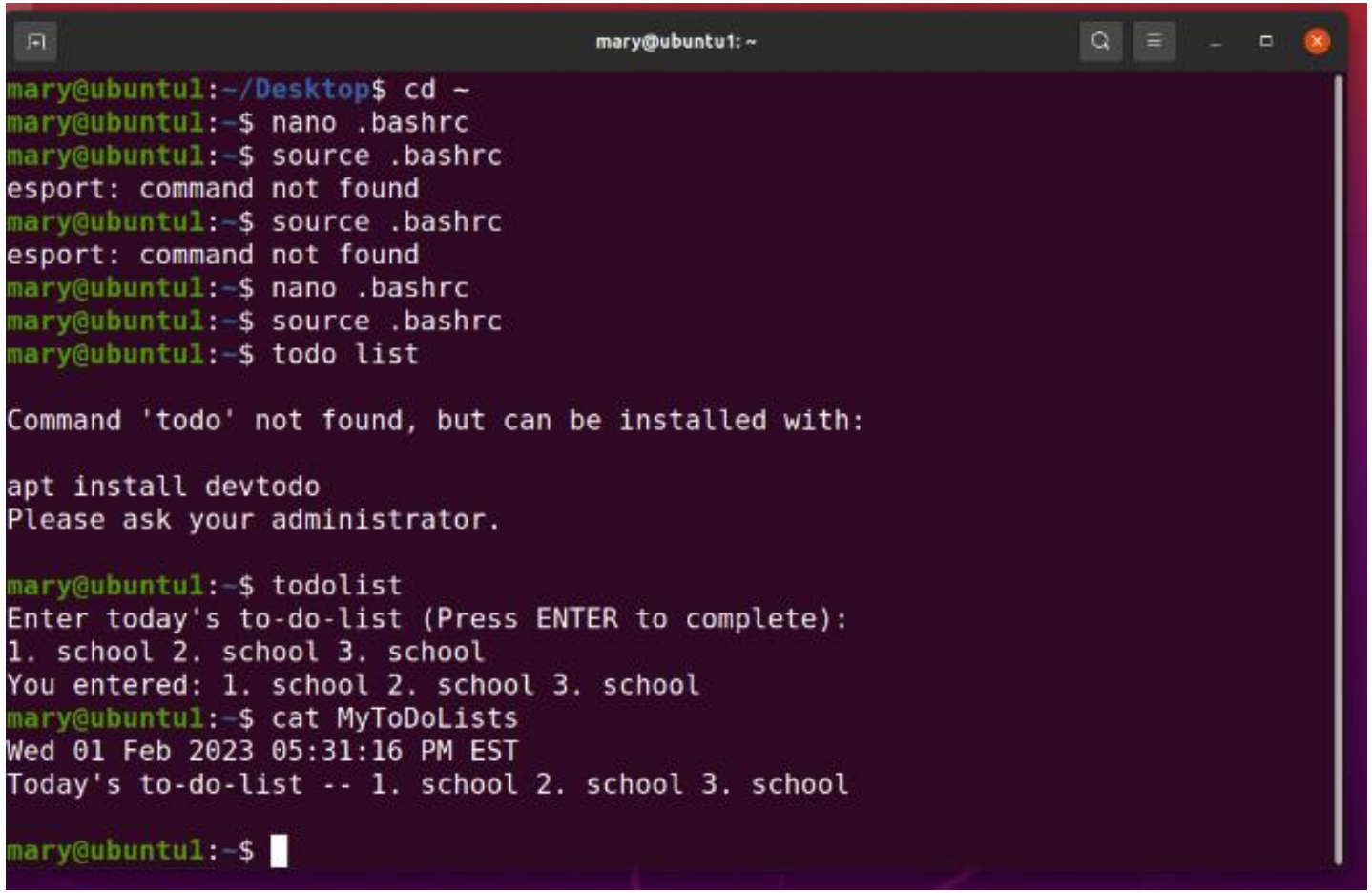
```
students:x:1002:student,mary
```

References:

1. Project assistance video
2.

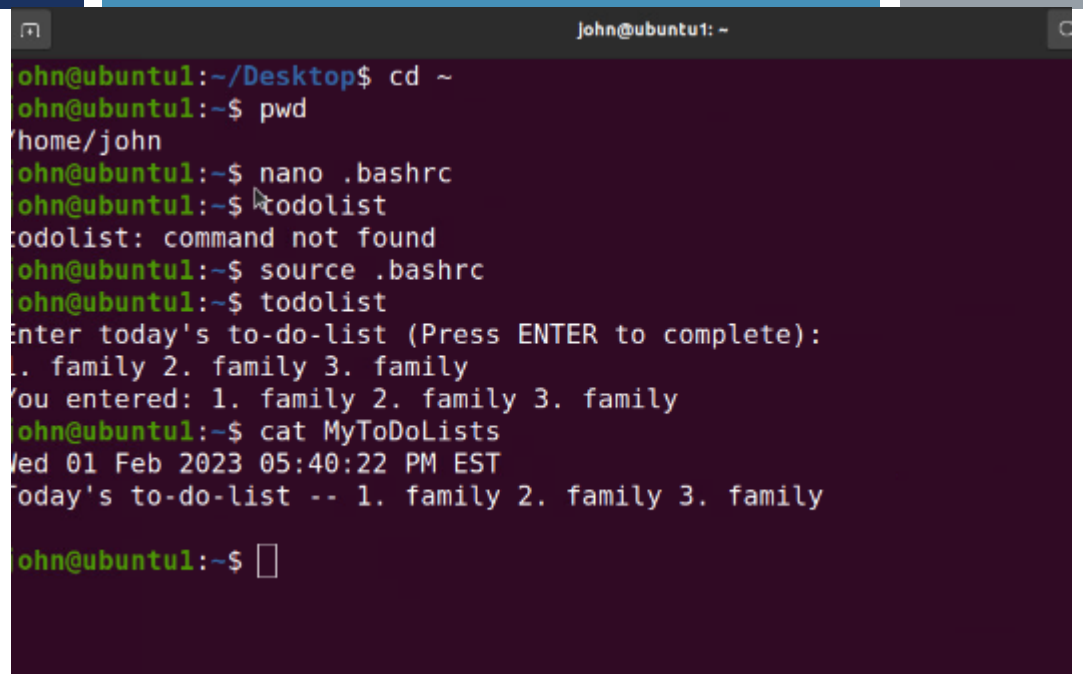
TEST USER AND GROUP SETTINGS

Take a screenshot of the output in Step 6.



ADD USERS IN GUI

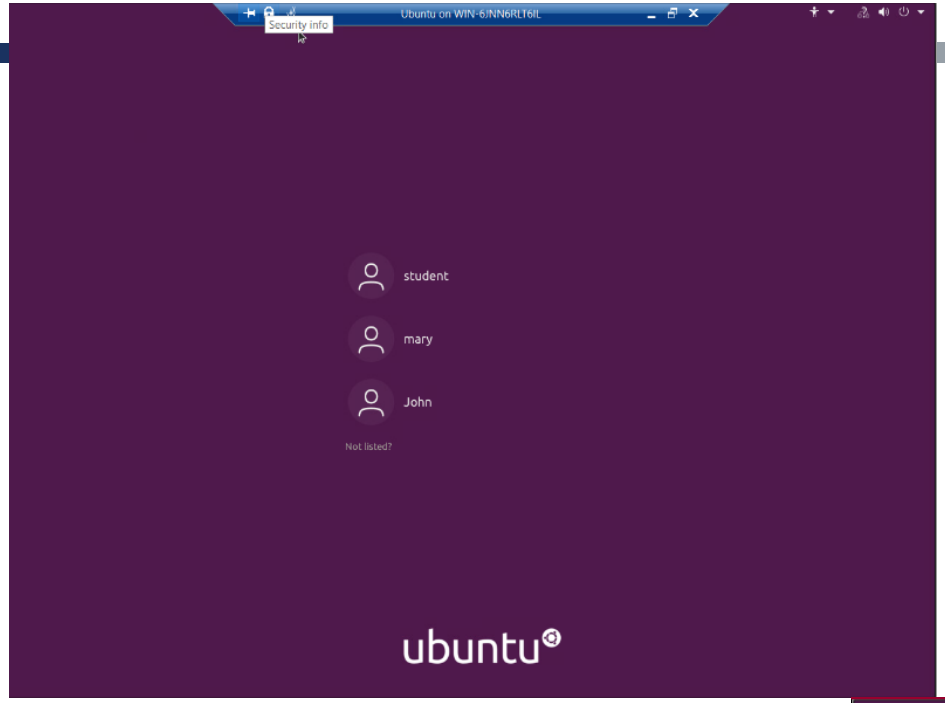
Take a screenshot of the output in Step 9.

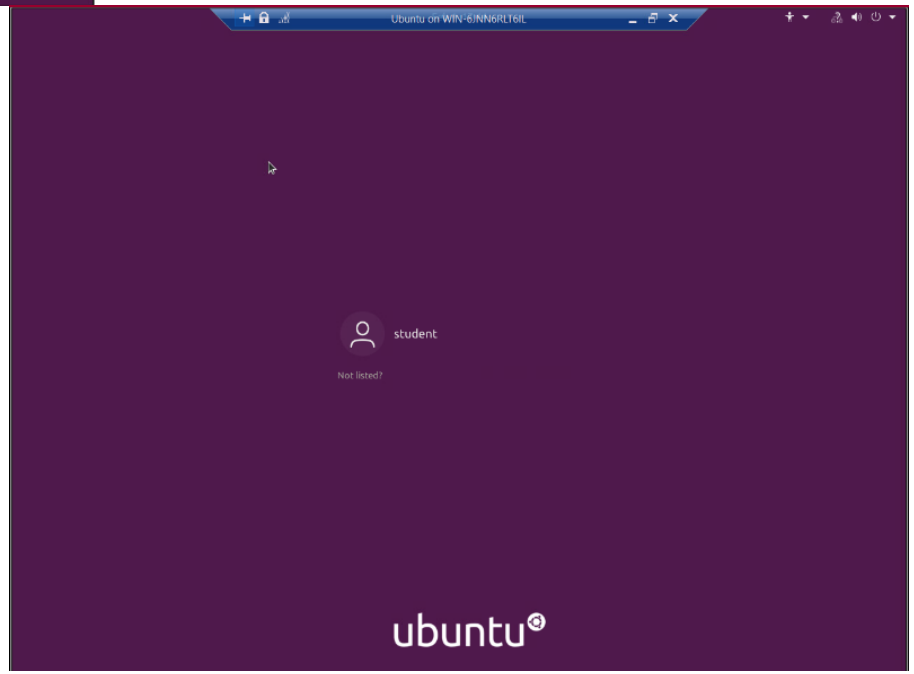


~~REMOVE~~ USERS AND GROUPS

Take a screenshot of the log on page with three user accounts.

Take a screenshot of the log on page with only your user account (i.e., student).





DISCOVER HOST IP CONFIGURATIONS

1. What is the IP address of your Ubuntu machine?

Answer here: 192.168.1.107

2. What is the IP address of its default gateway?

Answer here: 192.168.1.1

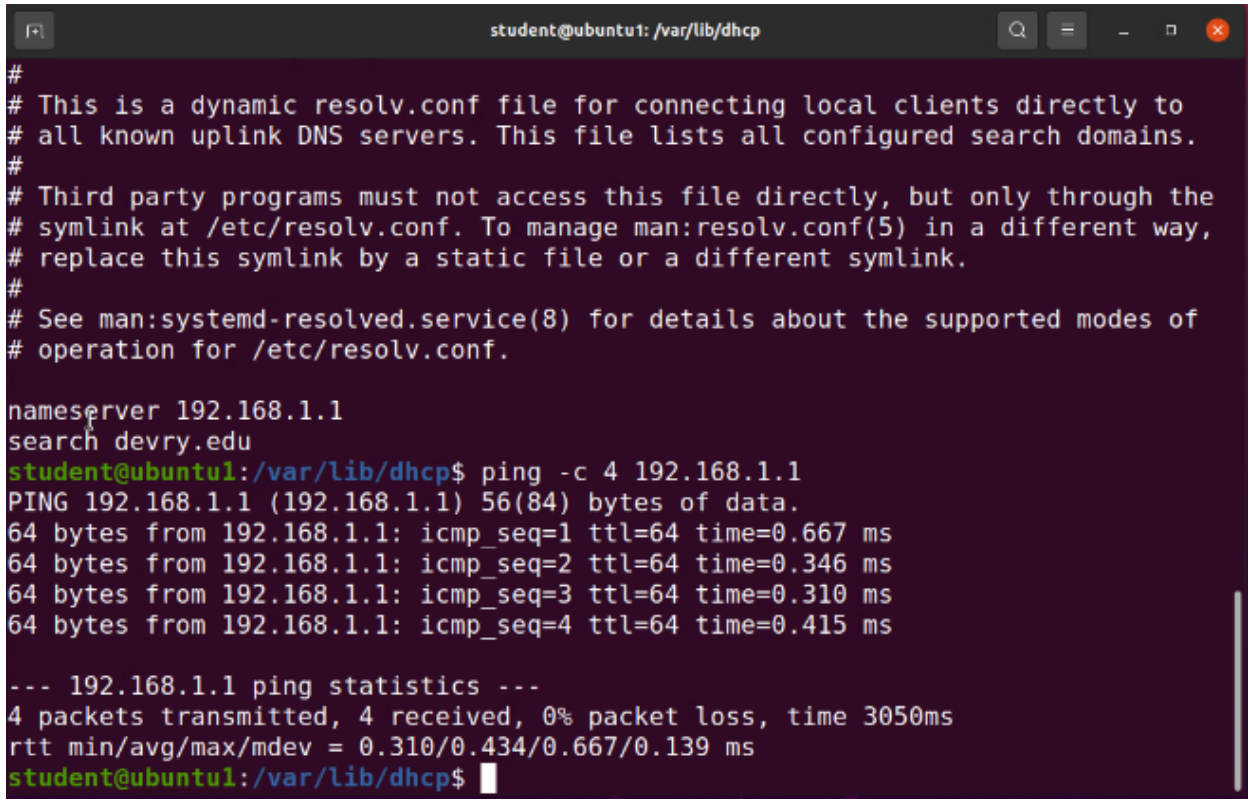
3. What is the IP address of its DHCP server?

Answer here: 192.168.1.1

4. What is the IP address of its DNS server?

Answer here: 192.168.1.1

Take a screenshot of the output in Step 6.



MANAGE NETWORK INTERFACES

1. Which DHCP message is shown in the output of the **sudo dhclient –v –r eth0** command? [hint: the message name is in uppercase.]

Answer here: DCHPRELEASE

2. Which four DHCP messages are shown in the output of the **sudo dhclient –v eth0** command? [hint: the message names are in uppercase.]

Answer here: DHCPDISCOVER, DHCPOFFER , DHCPPREQUEST, DHCPPACK

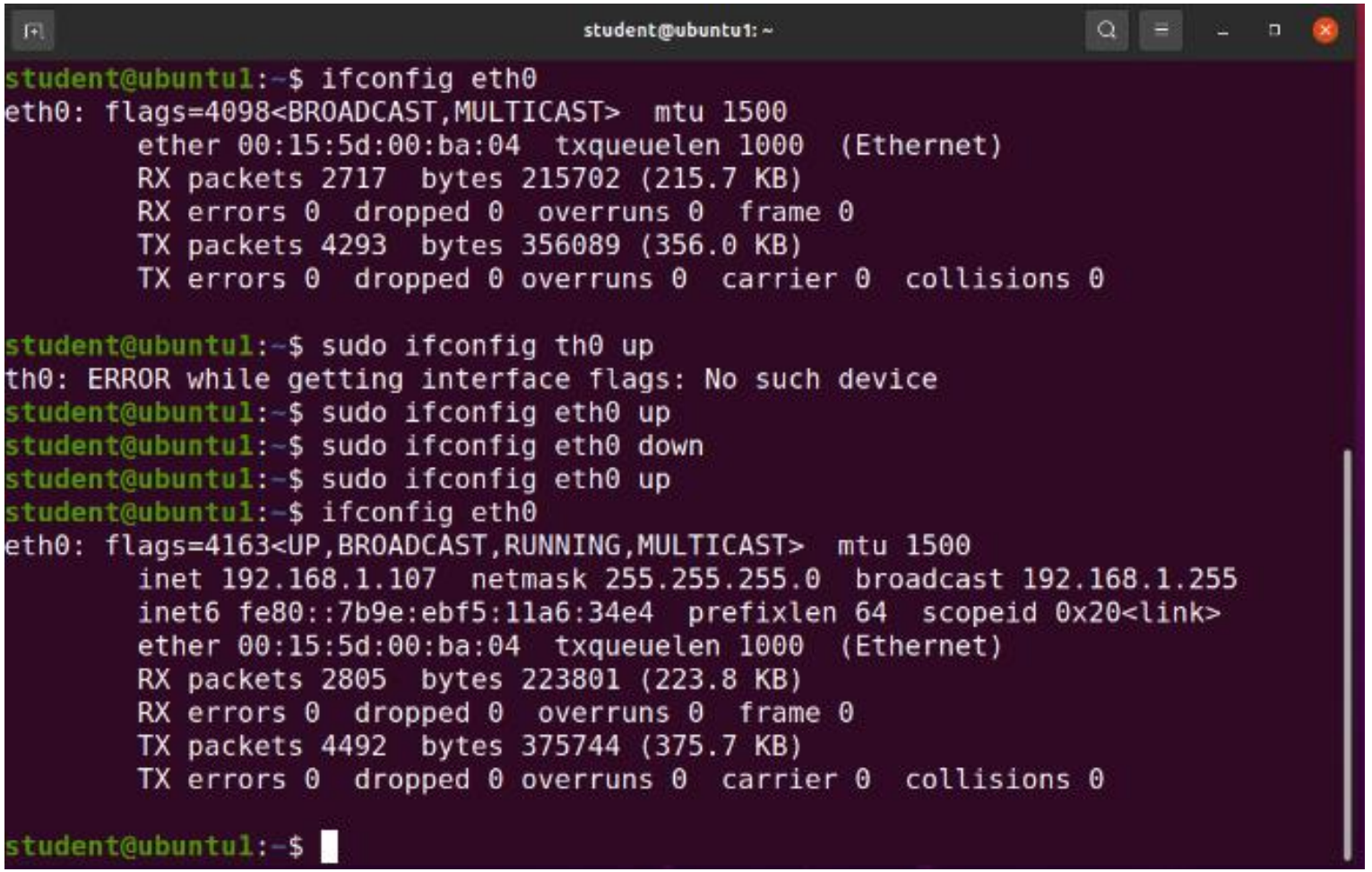
References:

1. Project video assistance

2.

USE NETWORK UTILITIES

Take a screenshot of the output in Step 5.



MONITOR LINUX PROCESSES

1. What is the default action of the *15 SIGTERM* kill signal?

Answer here: kill the highlighted process

2. In the System Monitor window, click on % *CPU* to sort the processes by CPU load. Which process shows the highest percentage of CPU usage?

Answer here: gnome-shell (GUI)

References:

1. Project assistances video

2.

MONITOR USER ACTIVITIES

Issue the **sudo accton on** command to turn on GNC accounting. Run the **sudo updatedb** command. Enter **lastcomm updatedb** to check if the *updatedb* command was executed before. Remember to turn off GNC accounting (**sudo accton off**) after answering the questions.

1. What flag value is displayed in the output?

Answer here: S- super user

2. Why is the name of the user who ran the processes shown as root, not student?

Answer here: super user- since we typed sudo in front of the command

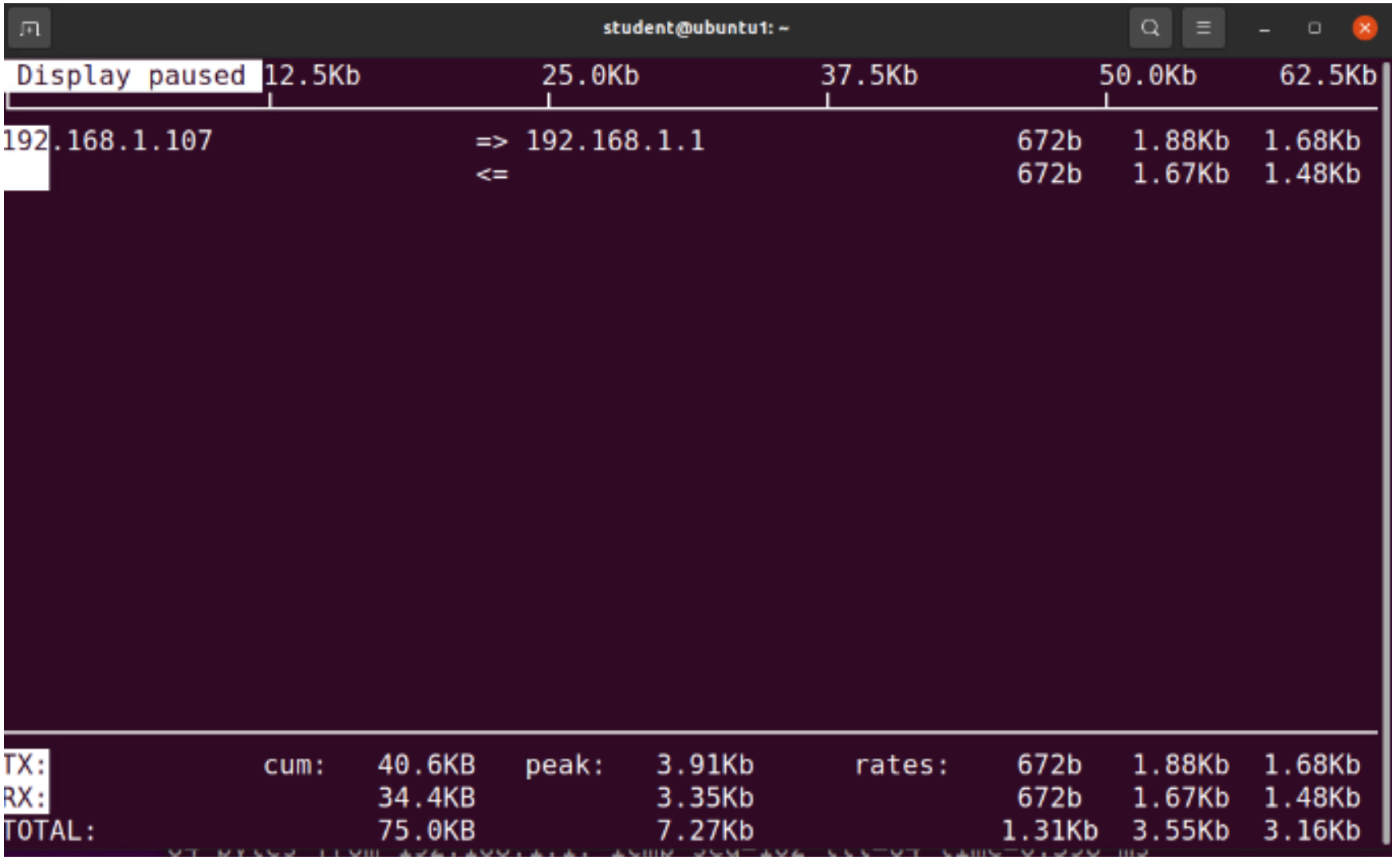
References:

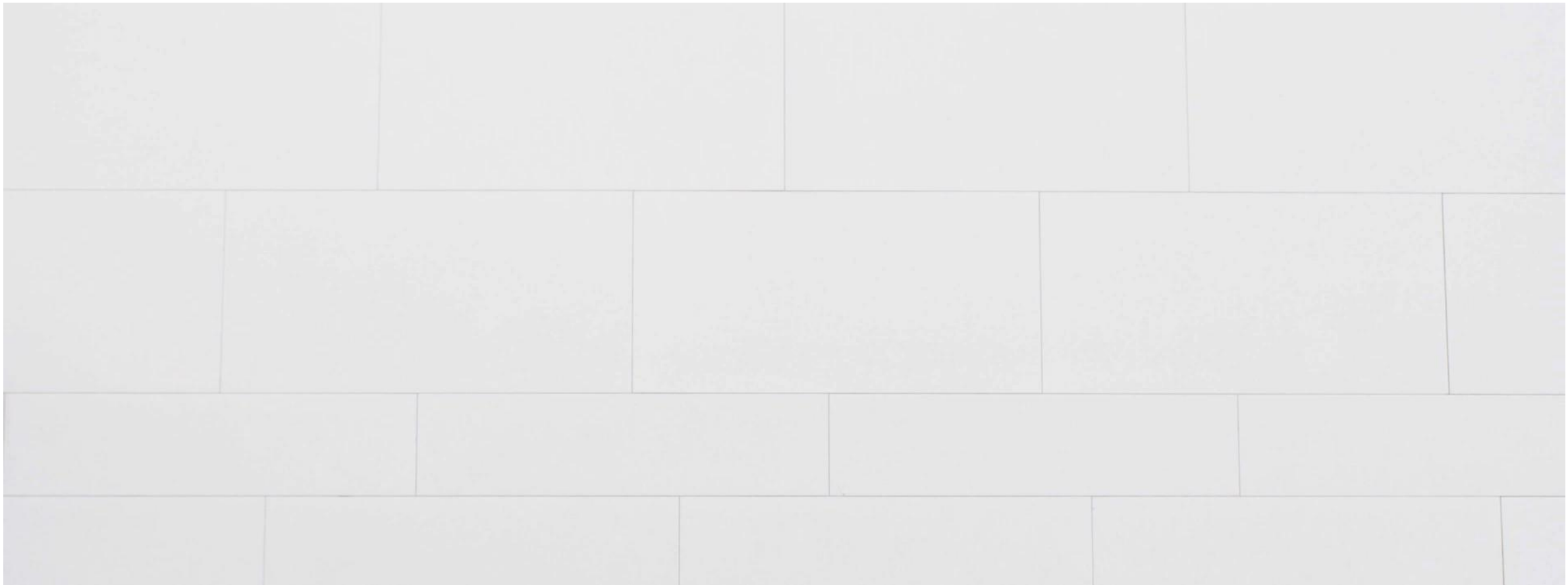
1. Project assistance video

2.

MONITOR NETWORK BANDWIDTH USAGE

Take a screenshot of the output in Step 4.

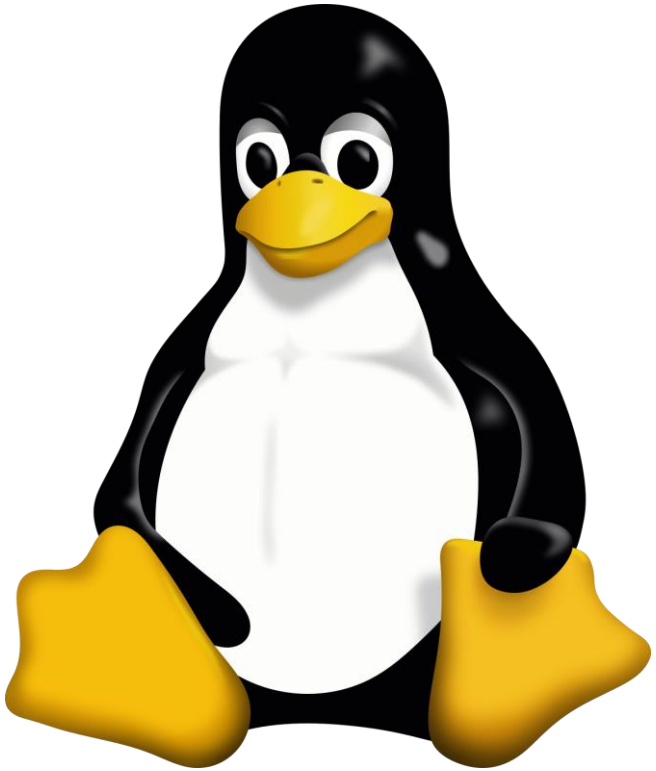




CAREER SKILLS

Knowing Linux is ideal for individuals that see themselves working for a large organization as many of them use this system. Furthermore, this course has shown me the steps to prepare for the Linux certification.

PROJECT CHALLENGES



- I enjoyed conducting this course project. A challenge I faced a lot was wrongfully placing the file in the wrong directory. when stumbling into a problem my best command was "~" or the command "clear". Making sure I did not continue in the wrong direction. Finally, not often did I run into problems, but knowing the command and how to get in the right direction allowed me to complete this project correctly.