Post-Lab Questions and Answers:

1. Describe the two main methods for obtaining a connection to the Raspberry Pi.

The two main methods for connecting to the Raspberry Pi are through Wi-Fi (Wireless Network) or an ethernet cable. Connecting to a wireless network can be done by configuring the Pi by editing the wpa_supplicant.conf file or using a preconfigured network. If the Wifi configuration fails connecting to the Pi can be done by directly connecting it to a laptop using an Ethernet cable.

2. What is Git, and why might it be useful for managing software in a project?

Git is a version control system that tracks changes to files and allows multiple users to collaborate on a project. It is useful for managing software because it provides a history of changes, the ability to revert to previous versions, facilitates collaboration by allowing team members to work on the same codebase without overwriting each other's work, and it supports branching and merging, enabling parallel development and experimentation.

3. Describe the commands for adding, committing, and pushing changes in a local repository to GitHub. If the push is successful, you would see updates on your remote repository. If your push command is rejected, it is likely because your local repository is behind the remote repository or when your teammate changes the code remotely without updating on your local files, what is the command you need to update your outdated local repository?

The commands for managing changes in a Git repository include git add . (for adding changes), git commit -m "Your commit message" (for committing changes), and git push (for pushing changes). git add . adds all modified and new files to the staging area. git commit -m "Your commit message" saves the changes in the local repository with a descriptive message. git push uploads the committed changes to the remote repository. If the push is rejected because the local repository is behind the remote repository the following command can be used to update the local repository: git pull. This command fetches and merges the changes from the remote repository into the local branch.

Learning Linux Command Line
Understand user roles and sudo

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Multiuser Environment

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Access the repository to easily follow along, practice, and experiment with your own tools.

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2. Python Basics

● Building Hello World
9m 5s video

✓ Variables and expressions
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✓ Conditional structures
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✓ Loops
9m 28s video

✓ Classes
10m 30s video

✓ Importing and using modules
2m 22s video

○ Using exceptions
5m 10s video

</> Code Challenge: Palindromes
8m practice

Learning Python
Importing and using modules

🔖 555,360 ＋ ↗

👥 2,009 active

```
2  #
3
4
5  # TODO: import the math module, which contains features for working with ma
6  import math
7
8  # TODO: the math module contains lots of pre-built functions
9  print("The sqaure root of 16 is",math.sqrt(16))
10
11 # TODO: in addition to functions, some modules contain useful constants
12 print("Pi is", math.pi)
13
14 # TODO: try some of the math functions for yourself here:
15
```

All right, so, once again, let's run this,

▶ 1:51 / 2:22　　2x CC ⚙ 🔇 ⛶

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Technology Industry Veteran

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Texas A&M University

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1. The Basics of Working on GitHub

✓ What is Git?
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✓ What is GitHub?
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○ Exploring GitHub
7m 25s video

✓ The GitHub workflow: Idea to commit
4m 15s video

✓ The GitHub workflow: Pull request to production
3m 20s video

○ Get started with GitHub Learning Lab
2m 44s video

2. Working Locally with the Command Line

Learning GitHub (2019)
The GitHub workflow: Idea to commit

🔖 22,344 ＋

Local Repository　⟷　GitHub

when they pull it down locally to work on it.

▶ 0:20 / 4:15　　2x CC ⚙ 🔇 ⛶

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