Browsing directories with the Linux terminal

Learning Objectives

After finishing this reading, you will be able to:

- Describe what a Linux terminal is used for
- Use the `pwd` and `ls` commands to browse directories in your Linux file system

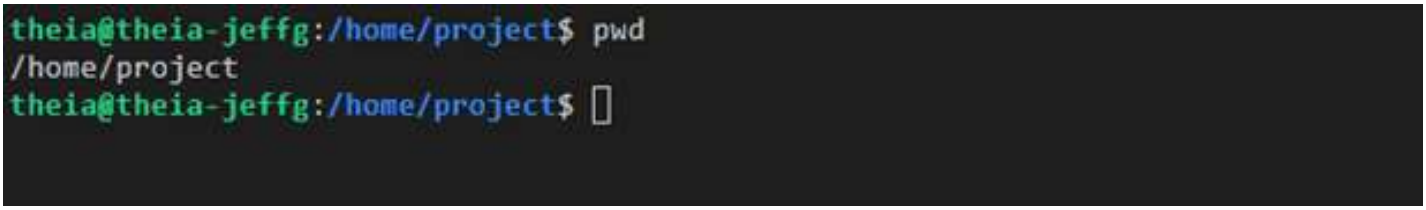
The Linux terminal

You can interact with the Linux shell by entering commands into the **Linux terminal**, which is also commonly referred to as the **command line** or the **command prompt**.

In this case, the **present working directory** is `/home/project`, as indicated by the blue text. The dollar sign `$` following it is called the command prompt.

Recall that a **terminal window** is a simple user interface that allows you to run any commands that you would like, simply by typing the command on your keyboard and hitting `Enter`. Many commands will respond by returning some sort of output, which by default appears as text in your terminal window.

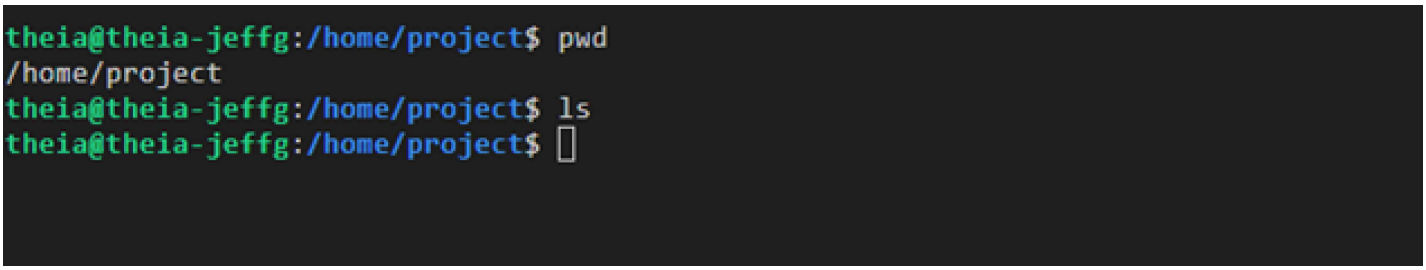
Let's see how this works using a couple of the most common Linux commands, the `pwd` and `ls` commands:



Here we've entered the `pwd` command, which prints the **path name** for our present working directory on the next line. You can see that the command prints what we expected, which is the path to the present working directory, `/home/project`. Notice also that the command prompt shows up again on the following line, awaiting your next command.

Great! Now, how do you see what's inside your present working directory?

You can use the `ls` command to list the contents of the directory you are currently working in. At the moment, the `/home/project` directory is brand new and doesn't contain anything yet, so entering the `ls` command will return nothing:



Being a conservative program, `ls` won't bother with printing a blank line to express that there is nothing to list.

Let's see if we can find a directory that already contains content. You can list the contents of any directory with the `ls` command by specifying the directory name you'd like to explore.

For example, `ls /home` lists the contents of the `/home` directory:

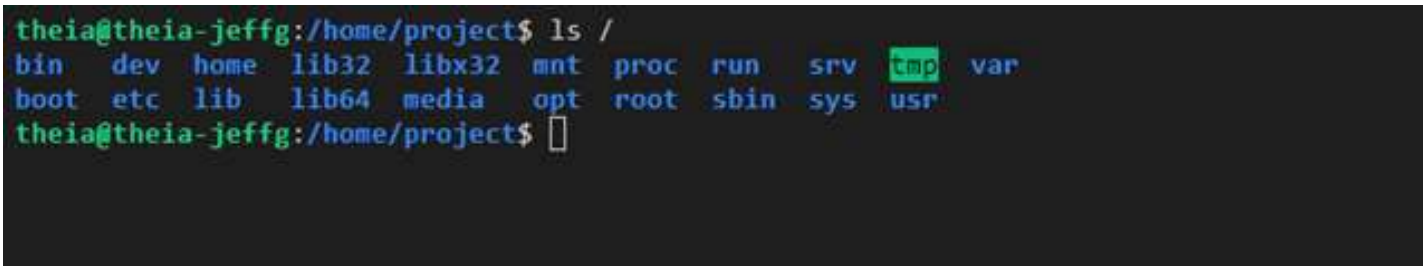
You can see that the directory `/home` contains two objects, namely `project` and `theia`.

> **Tip:** Think of a directory as a folder that contains files and subdirectories. In this case, `project` and `theia` are subdirectories of `/home`. Subdirectories can contain additional files and subdirectories. You'll learn more about exploring subdirectories in later labs.

Notice the naming convention for a directory's path: `/home/project` indicates that the `project` directory is a **subdirectory** of `/home`. The path for the `theia` subdirectory would similarly be `/home/theia`.

Like a tree, your Linux file system has a **root directory** (`/`, called "slash") from which your entire Linux file system branches out.

One important subdirectory of your root directory is `home`. You can see this for yourself by entering `ls /` to list the contents of `/`:



Summary

Congratulations! In this reading, you learned that:

- You can interact with the Linux shell by entering commands into the Linux terminal
- The `pwd` command prints the path name to the present working directory
- The `ls` command lists the contents of a directory

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