

TERMINAL



SETUP



Mac

Open up the built-in terminal app

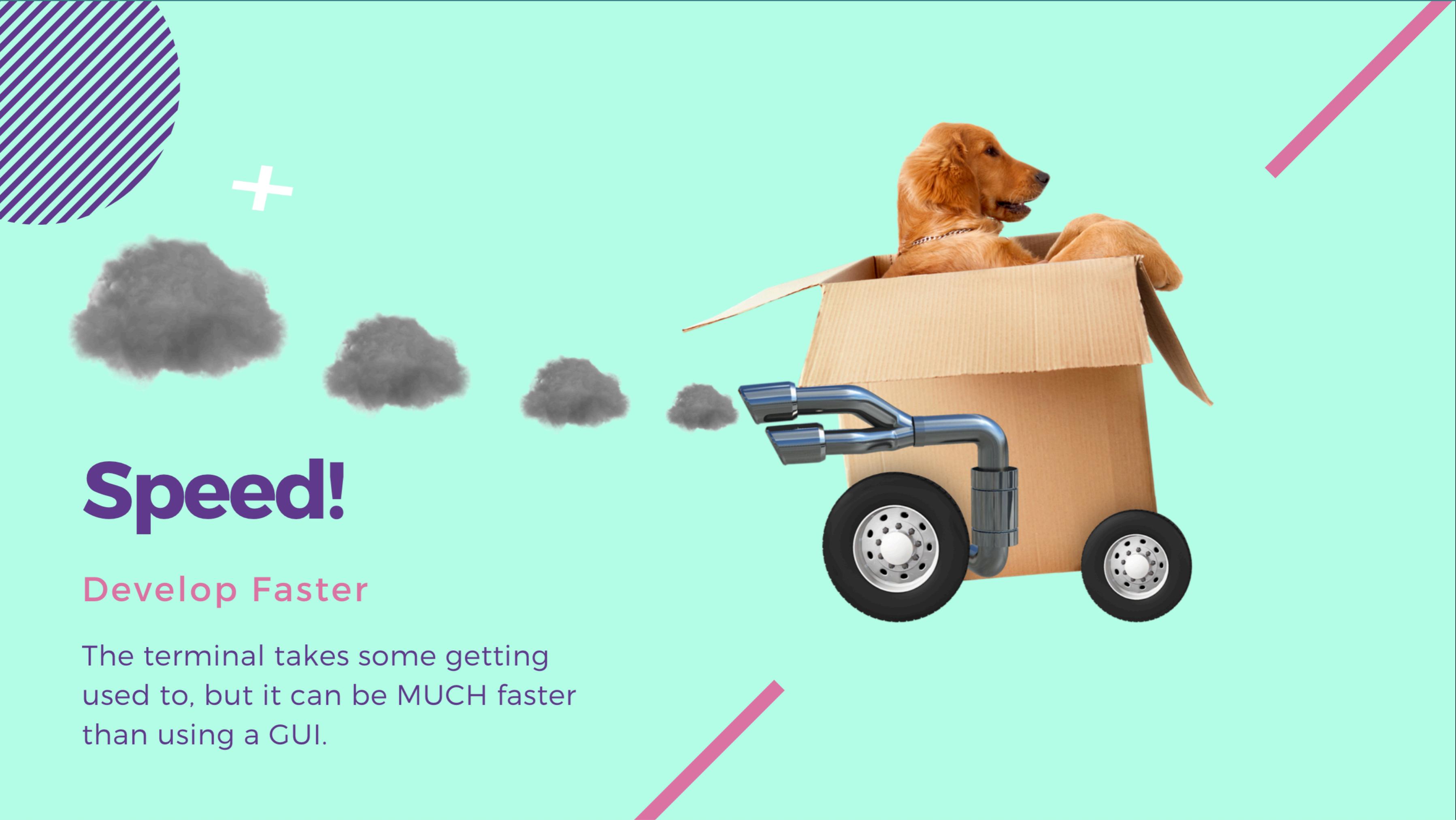
PC

Enable Windows Subsystem
(follow the linked tutorial)

WHY

DO YOU NEED TO KNOW THIS?





Speed!

Develop Faster

The terminal takes some getting used to, but it can be MUCH faster than using a GUI.

Access

With Great Power...

The terminal provides a "mainline" into the heart of our computer, giving us access to areas we normally don't interact with.



Tools!

Many of the tools we need are installed and used via the command line. We don't have much of a choice!



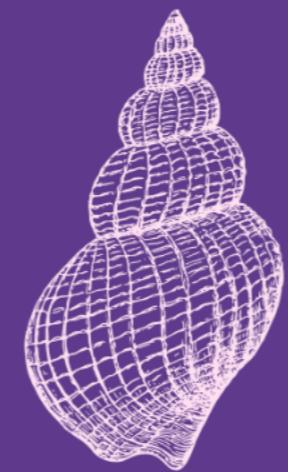
Confusing Terminology

Terminal?
Shell?
Command Line?
Console?
Bash?



Terminal

A TEXT-BASED INTERFACE TO YOUR COMPUTER.
ORIGINALLY A PHYSICAL OBJECT, BUT NOW WE
USE SOFTWARE TERMINALS



shell

THE PROGRAM RUNNING ON THE TERMINAL.



A QUICK ANALOGY!



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TERMINAL

In this stupid analogy, the ATM is the terminal

SHELL

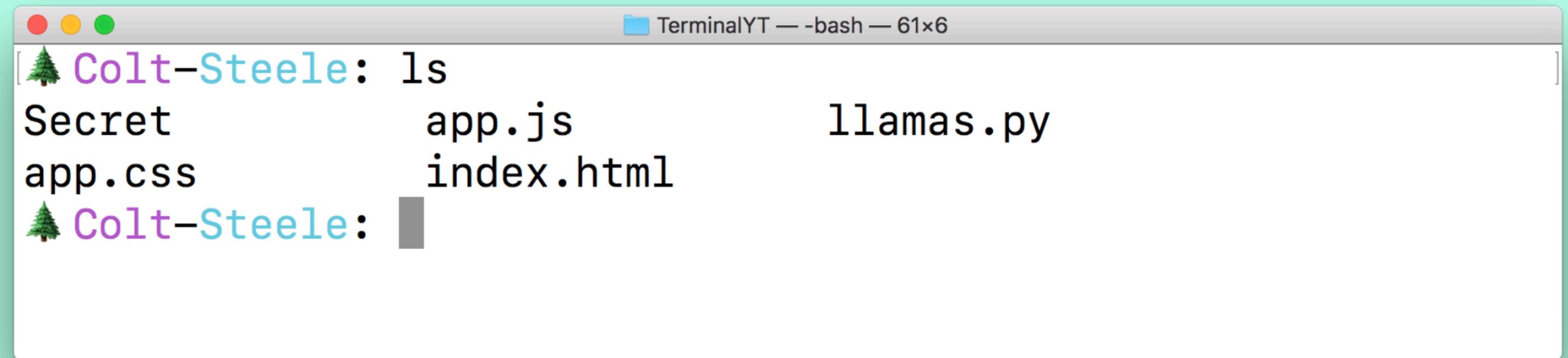
The software running on the ATM is the shell

BASH

ONE OF THE MOST POPULAR SHELLS
(AND THE DEFAULT ON A MAC)



L S

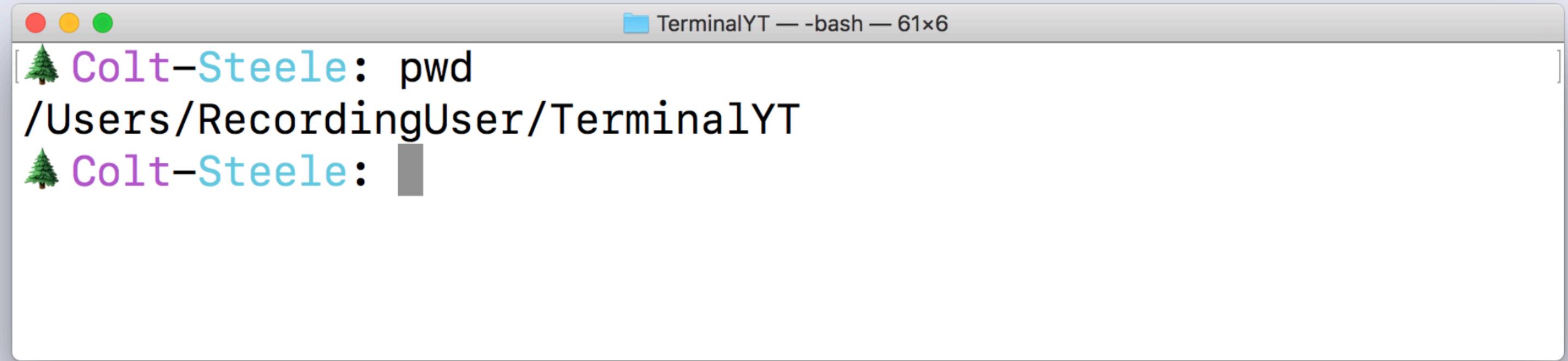


```
Colt-Steеле: ls
Secret          app.js          llamas.py
app.css         index.html
Colt-Steèle: [
```

List

Use `ls` to list the contents of your current directory

P
W
D

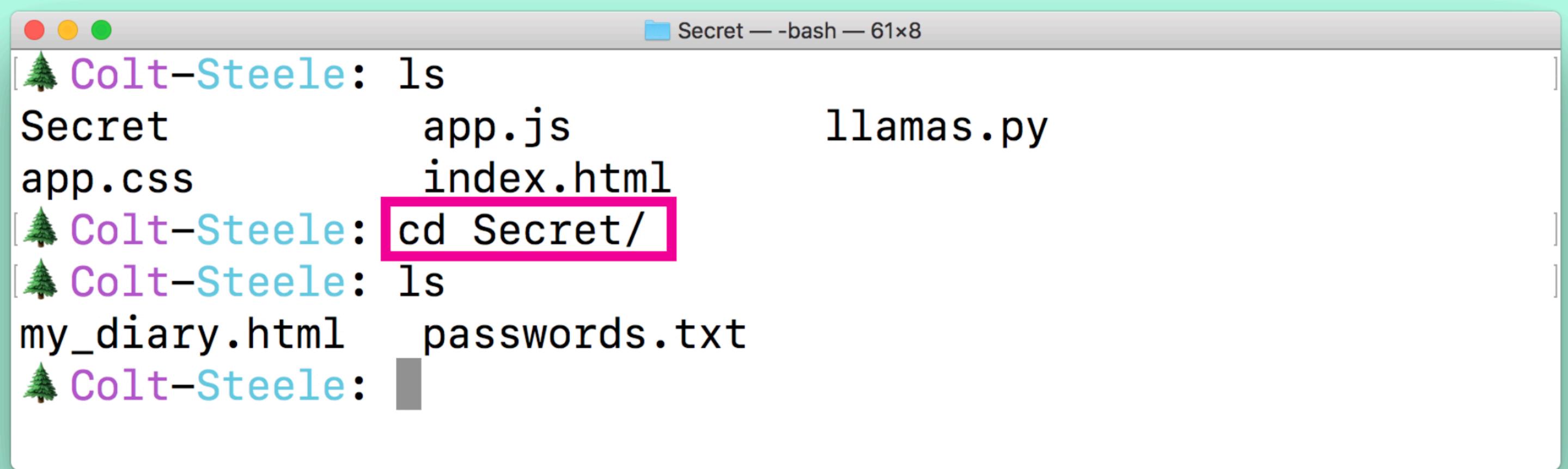


```
[Colt-Steele: pwd
/Users/RecordingUser/TerminalYT
Colt-Steele: ]
```

Print Working Directory

Prints the path to the working directory
(where you currently are)

C
D

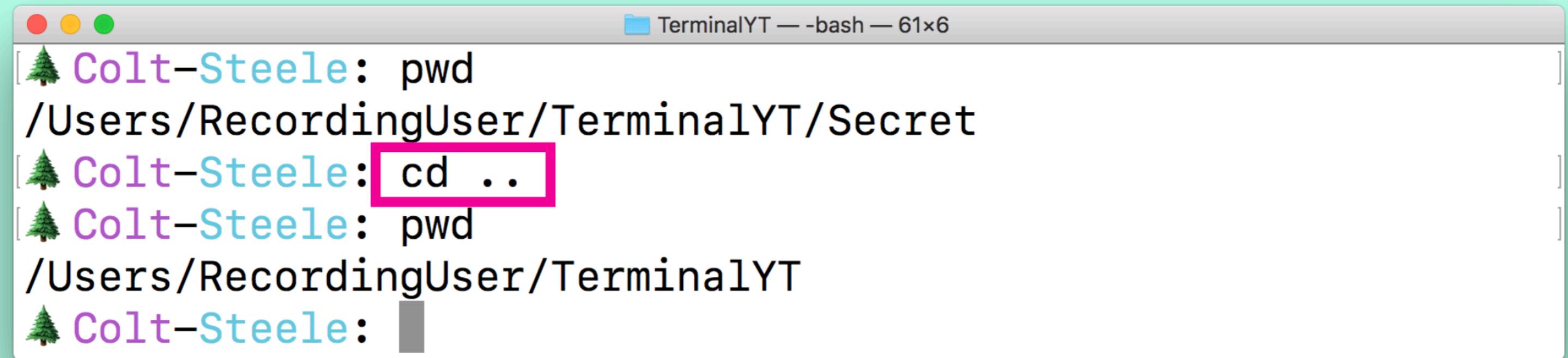


```
Colt-Steele: ls
Secret          app.js          llamas.py
app.css         index.html
[Colt-Steele: cd Secret/
[Colt-Steele: ls
my_diary.html  passwords.txt
Colt-Steele:
```

Change Directory

Use `cd` to change and move between folders

C
D



A screenshot of a macOS Terminal window titled "TerminalYT — -bash — 61x6". The window shows the following command history:

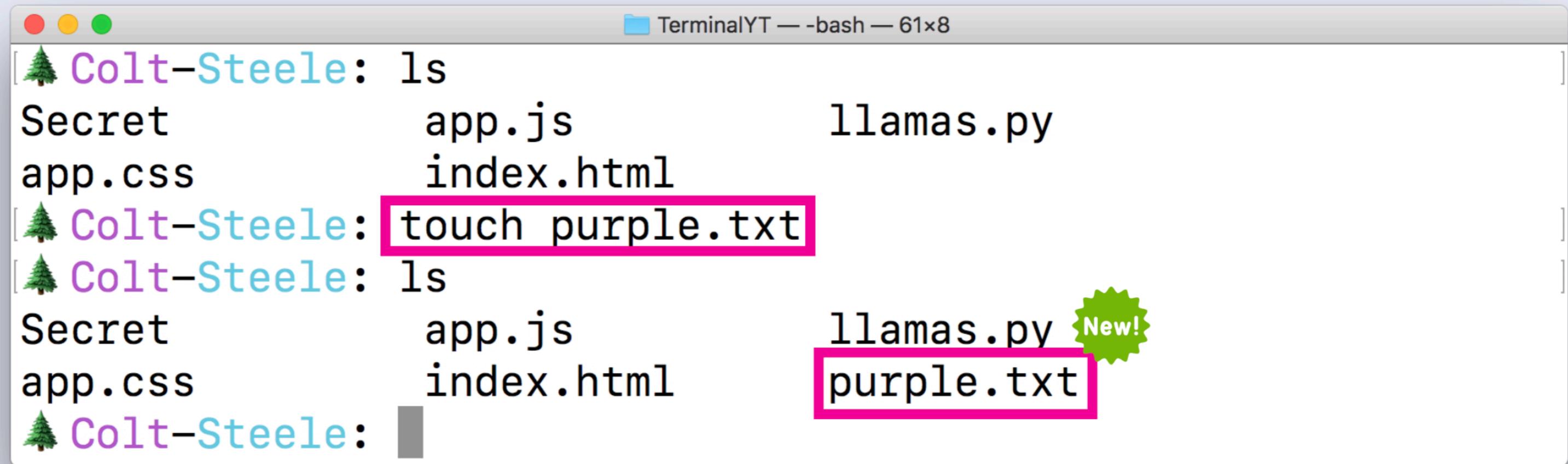
```
[Colt-Steele: pwd  
/Users/RecordingUser/TerminalYT/Secret  
[Colt-Steele: cd ..  
[Colt-Steele: pwd  
/Users/RecordingUser/TerminalYT  
[Colt-Steele: ]
```

The command `cd ..` is highlighted with a red box.

cd ..

Use `cd ..` to "back up" one directory

touch



A screenshot of a macOS Terminal window titled "TerminalYT — -bash — 61x8". The window shows the following sequence of commands and file listing:

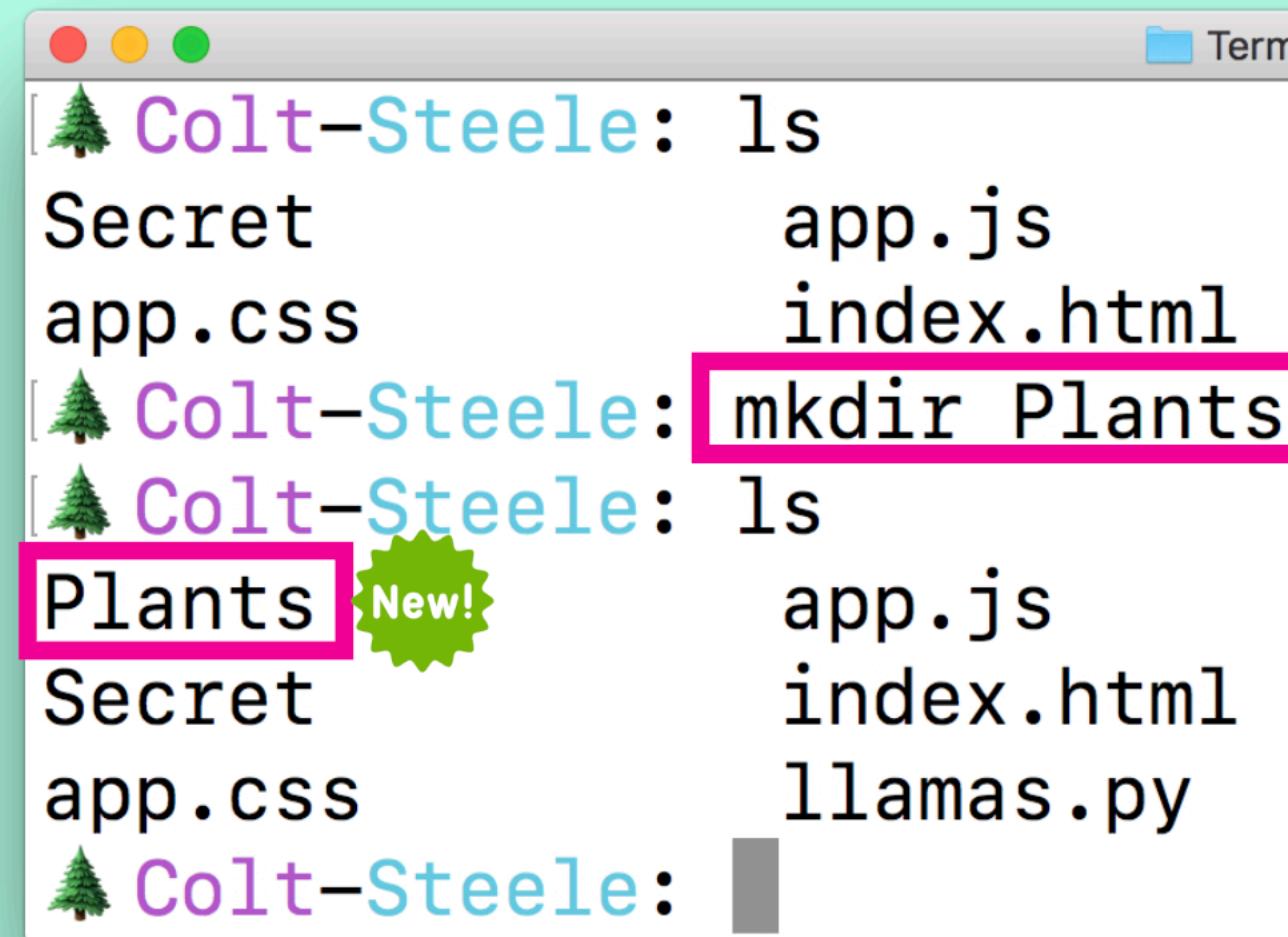
```
[Colt-Steele: ls
Secret          app.js          llamas.py
app.css         index.html
[Colt-Steele: touch purple.txt
[Colt-Steele: ls
Secret          app.js          llamas.py
app.css         index.html
[Colt-Steele: ]
```

The command `touch purple.txt` is highlighted with a pink box. The resulting file `purple.txt` is also highlighted with a pink box and has a green "New!" badge with a white exclamation mark.

Touch

Use `touch` to create a file (or multiple)
Yes, the name is weird...

m
k
d
i
r



A screenshot of a macOS terminal window titled "TerminalYT — bash — 61x9". The window shows the following command sequence:

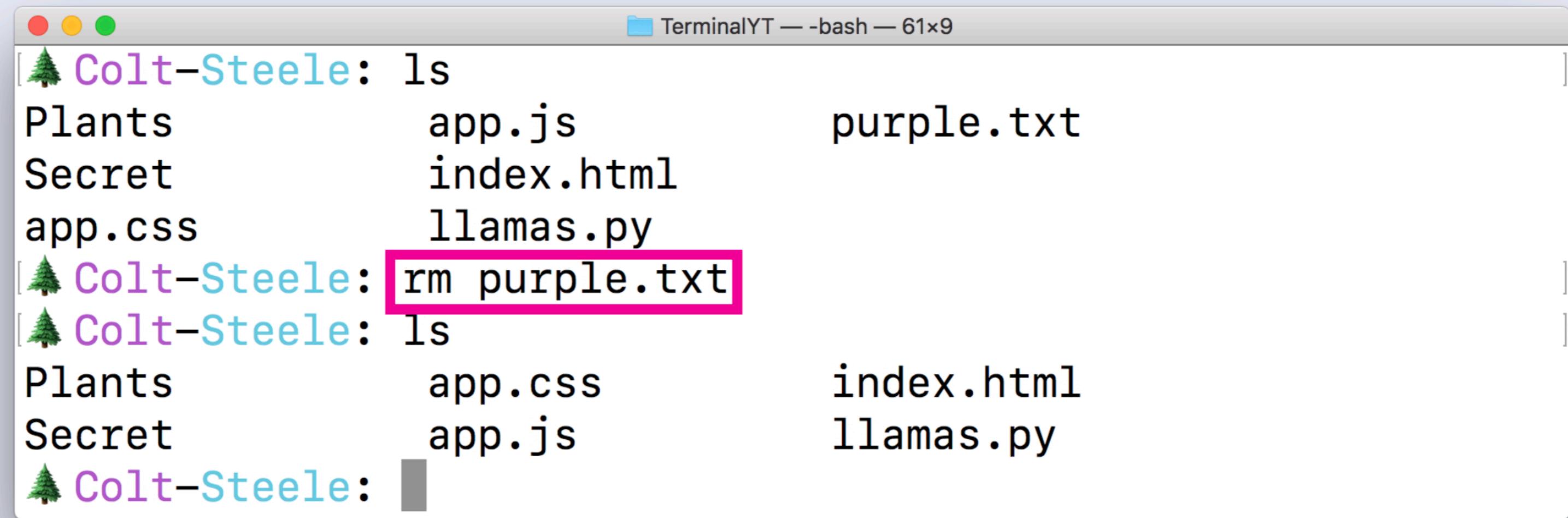
```
[Colt-Steele: ls
Secret          app.js
app.css         index.html
[Colt-Steele: mkdir Plants
[Colt-Steele: ls
Plants [New!]
Secret          app.js
app.css         index.html
llamas.py
[Colt-Steele: ]
```

The "mkdir Plants" command is highlighted with a pink box. The "Plants" directory is also highlighted with a pink box and has a green "New!" badge. The "Plants" directory is also highlighted with a pink box and has a green "New!" badge.

mkdir (make directory)

mkdir will create a new directory
(or directories)

rm



A screenshot of a Mac OS X terminal window titled "TerminalYT — bash — 61x9". The window shows a file directory with a tree icon. The user "Colt-Steele" runs an "ls" command, listing files: Plants, Secret, app.css, app.js, index.html, and llamas.py. The user then runs the command "rm purple.txt", which is highlighted with a pink rectangle. After the deletion, the user runs another "ls" command, and the "purple.txt" file is no longer listed, indicating it has been permanently removed.

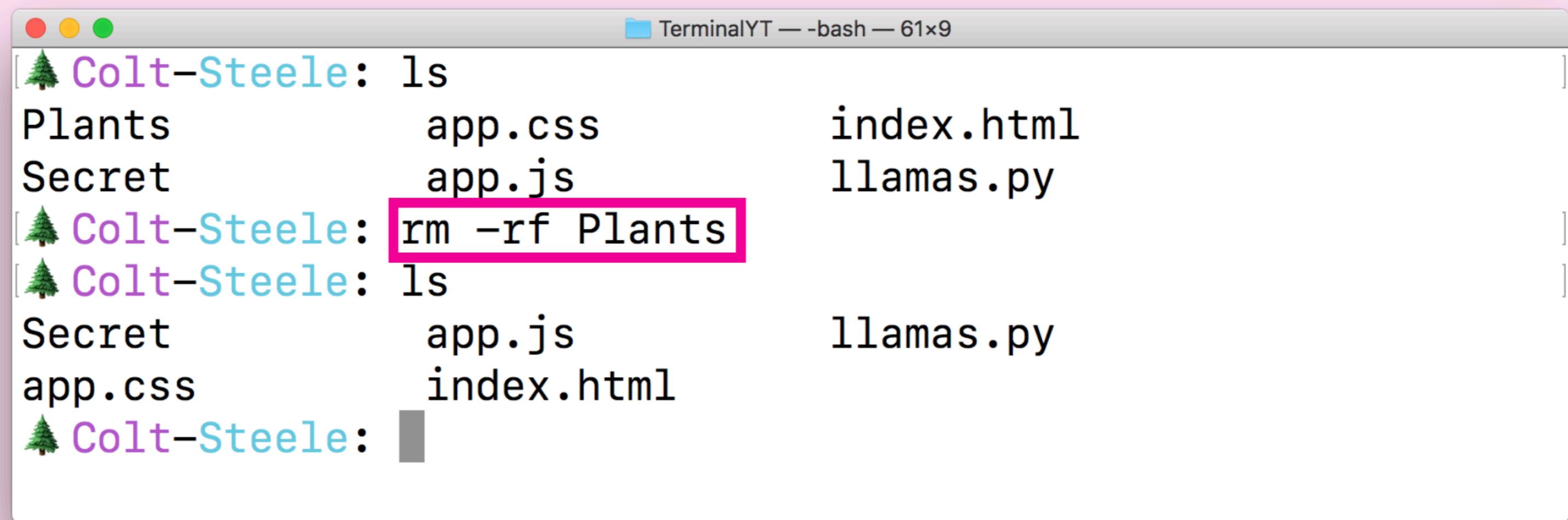
```
[Colt-Steele: ls
Plants           app.js           purple.txt
Secret          index.html
app.css         llamas.py
[Colt-Steele: rm purple.txt
[Colt-Steele: ls
Plants           app.css           index.html
Secret          app.js           llamas.py
[Colt-Steele:
```

rm

+

rm will delete a file or files
It permanently removes them!

rm



Terminal window showing the command `rm -rf Plants` being run in a directory named `Colt-Steele`. The window title is `TerminalYT — -bash — 61x9`. The directory structure is as follows:

- Colt-Steele:
 - Plants
 - Secret
 - app.css
 - app.js
 - index.html
 - llamas.py
- Colt-Steele:
 - rm -rf Plants
- Colt-Steele:
 - Secret
 - app.css
 - app.js
 - index.html
 - llamas.py

rm -rf

use `rm -rf` to delete a directory
(r = recursive, f = force)