

# 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?



**Develop Faster**

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



# Speed!



# Access

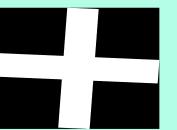
**With Great Power...**

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!



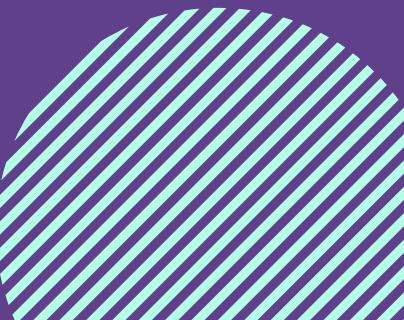
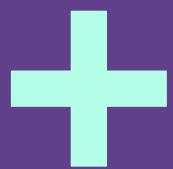
# Confusing Terminology

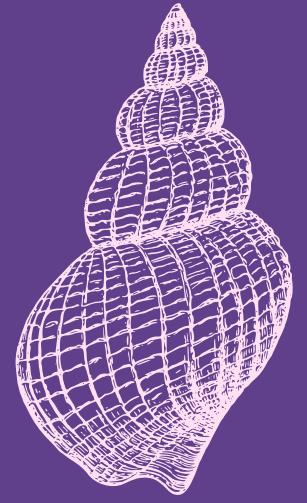
Terminal?  
Shell?  
Command Line?  
Console?  
Bash?



# Terminal

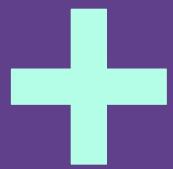
A TEXT-BASED INTERFACE TO YOUR COMPUTER.  
ORIGINALLY A PHYSICAL OBJECT, BUT NOW WE  
USE SOFTWARE TERMINALS





# shell

THE PROGRAM RUNNING ON THE TERMINAL.



# A QUICK ANALOGY!



**TERMINAL**

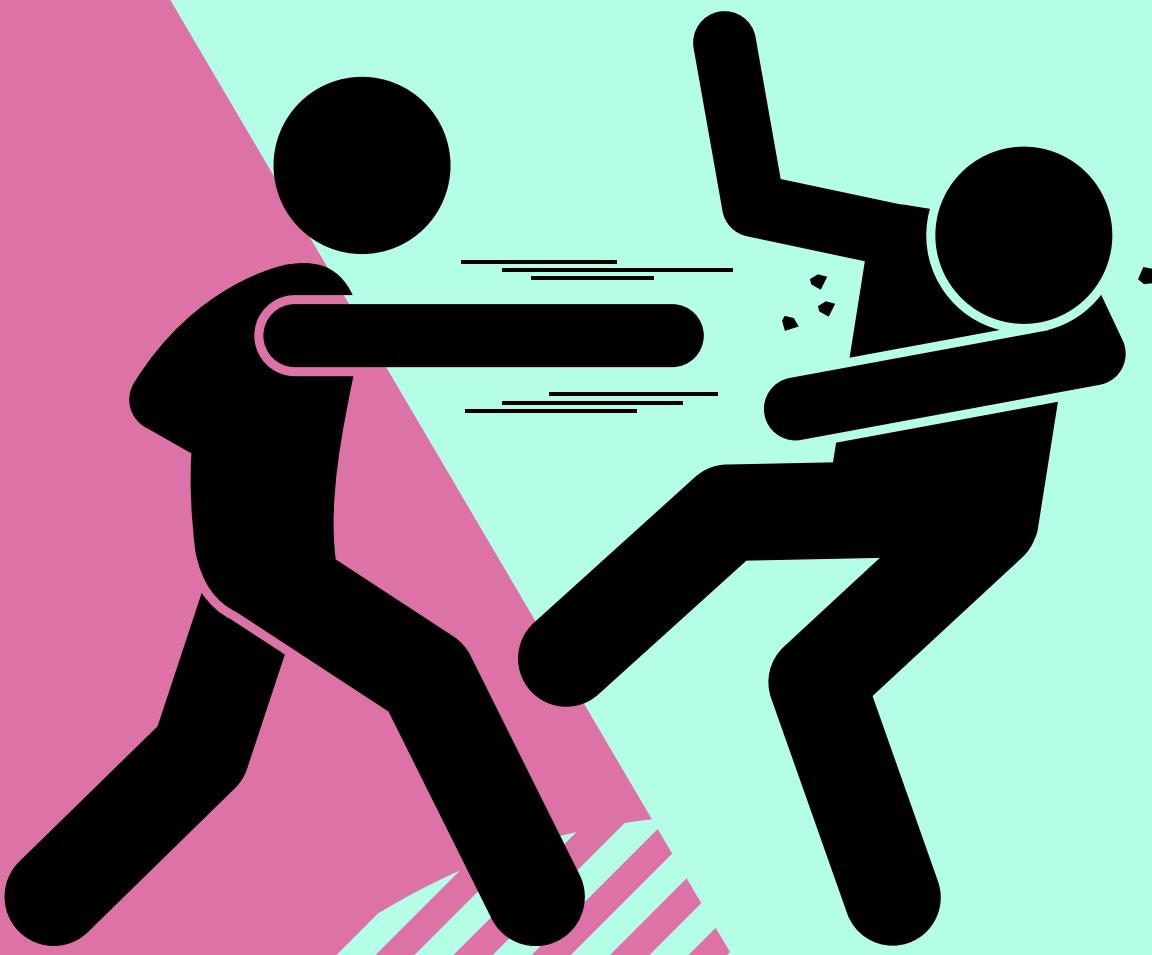
In this stupid analogy, the  
ATM is the terminal

**SHELL**

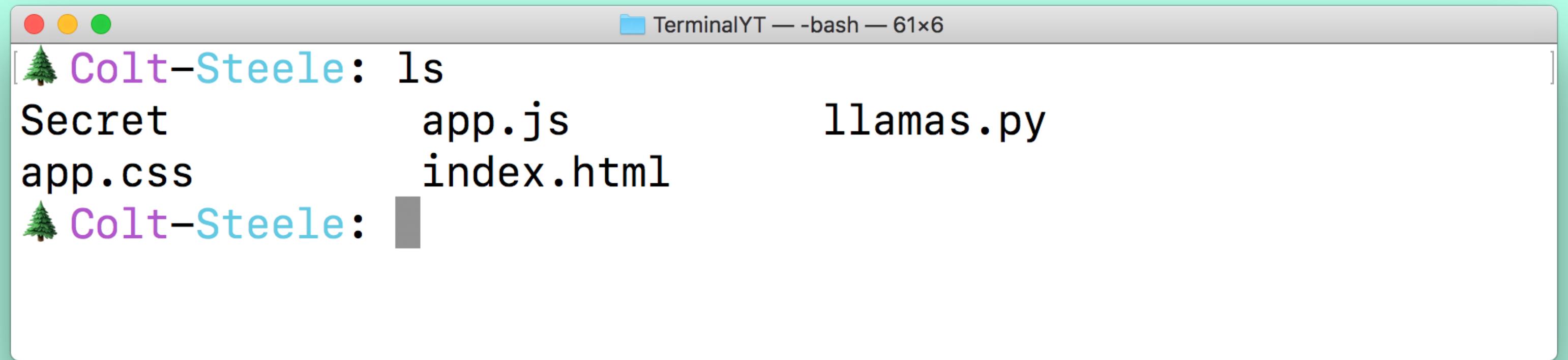
The software running on the  
ATM is the shell

# BASH

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



L  
S



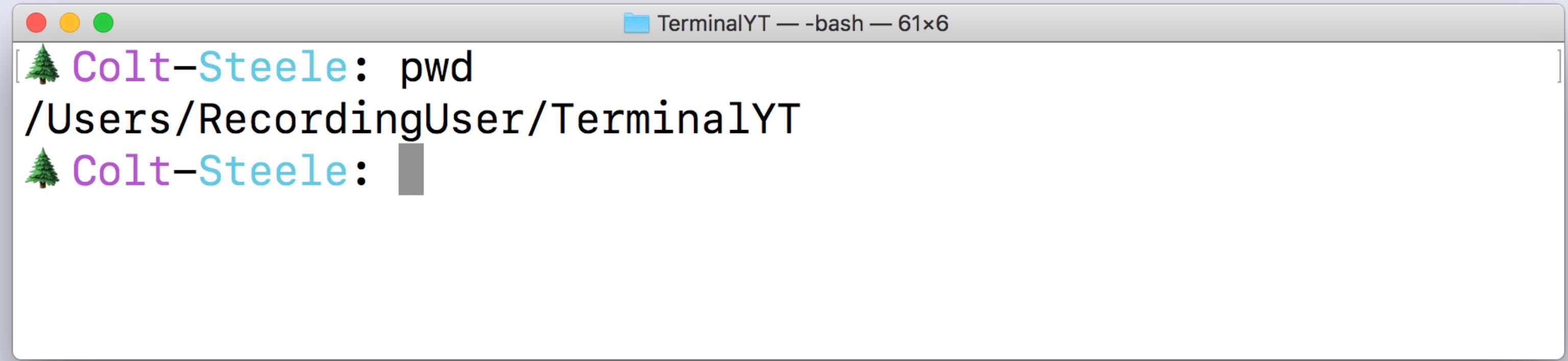
A screenshot of a macOS terminal window titled "TerminalYT — -bash — 61x6". The window shows the command "ls" being run in a directory named "Colt-Steele". The output of the command is a list of files: "Secret", "app.css", "app.js", "index.html", and "llamas.py". The terminal window has a light gray background and a dark gray title bar.

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

List

Use `/s` to list the contents of your current directory

P  
W  
D



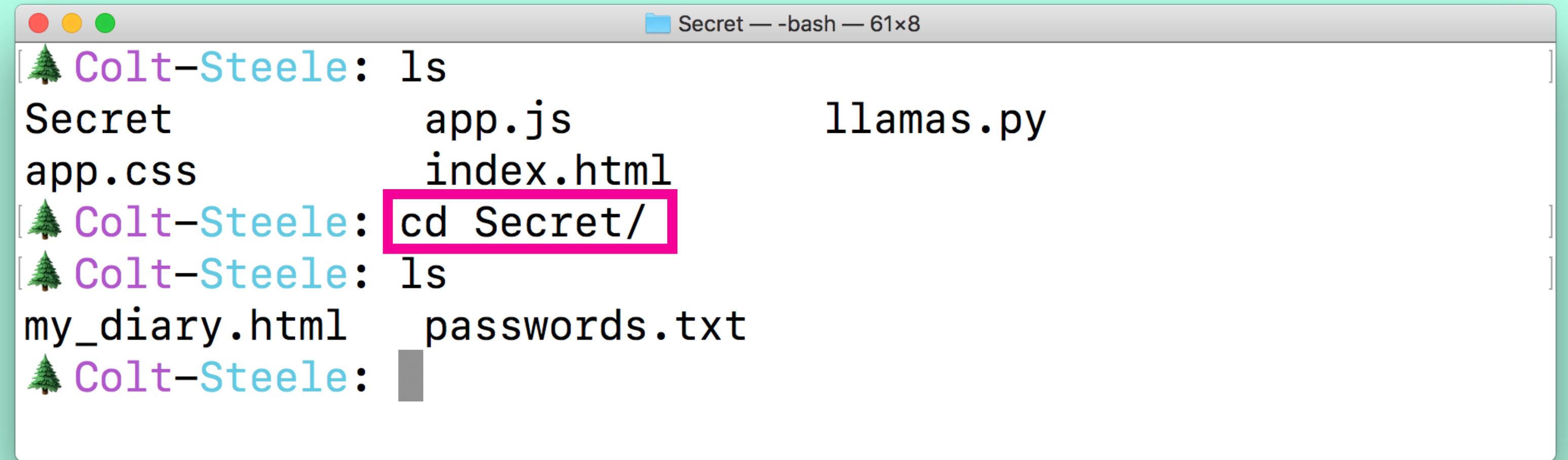
A screenshot of a macOS Terminal window titled "TerminalYT — bash — 61x6". The window shows the user's home directory: "/Users/RecordingUser/TerminalYT". The terminal prompt is "Colt-Steele:" followed by a cursor. The window has a standard OS X title bar with red, yellow, and green buttons.

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

## Print Working Directory

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

C  
D

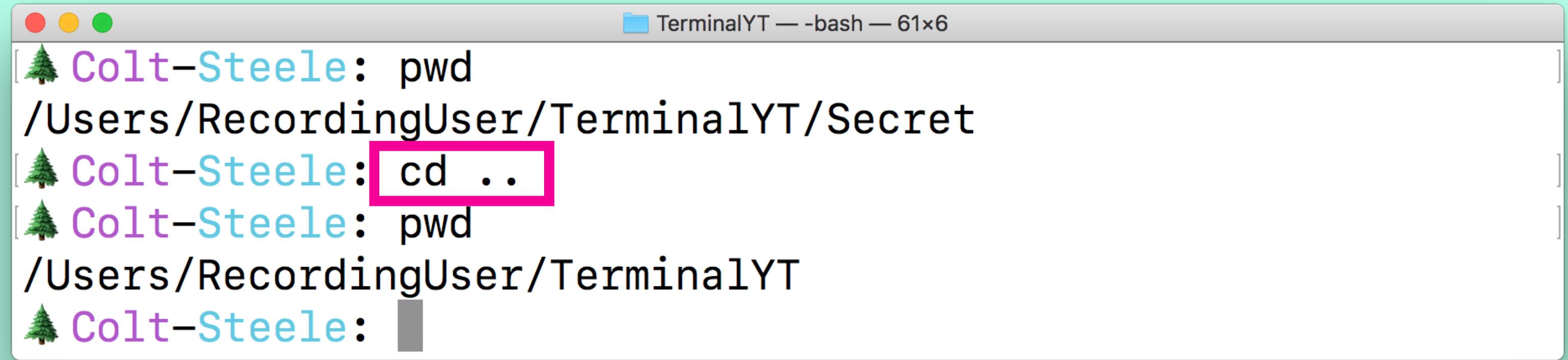


```
[Colt-Steele: ls
Secret          app.js           llamas.py
app.css         index.html
[Colt-Steele: cd Secret/
[Colt-Steele: ls
my_diary.html  passwords.txt
[Colt-Steele:
```

## 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:

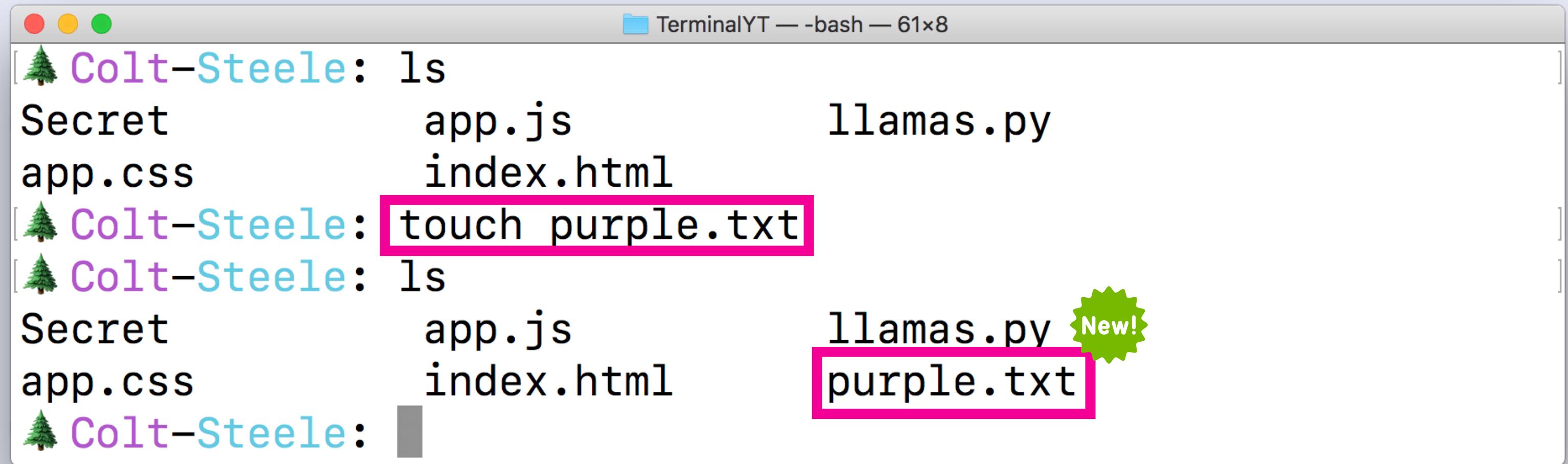
```
[Colt-Steele: pwd  
/Users/RecordingUser/TerminalYT/Secret  
[Colt-Steele: cd ..  
[Colt-Steele: pwd  
/Users/RecordingUser/TerminalYT  
[Colt-Steele: ]
```

The command `cd ..` is highlighted with a pink rectangular box.

`cd ..`

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

# t o u c h

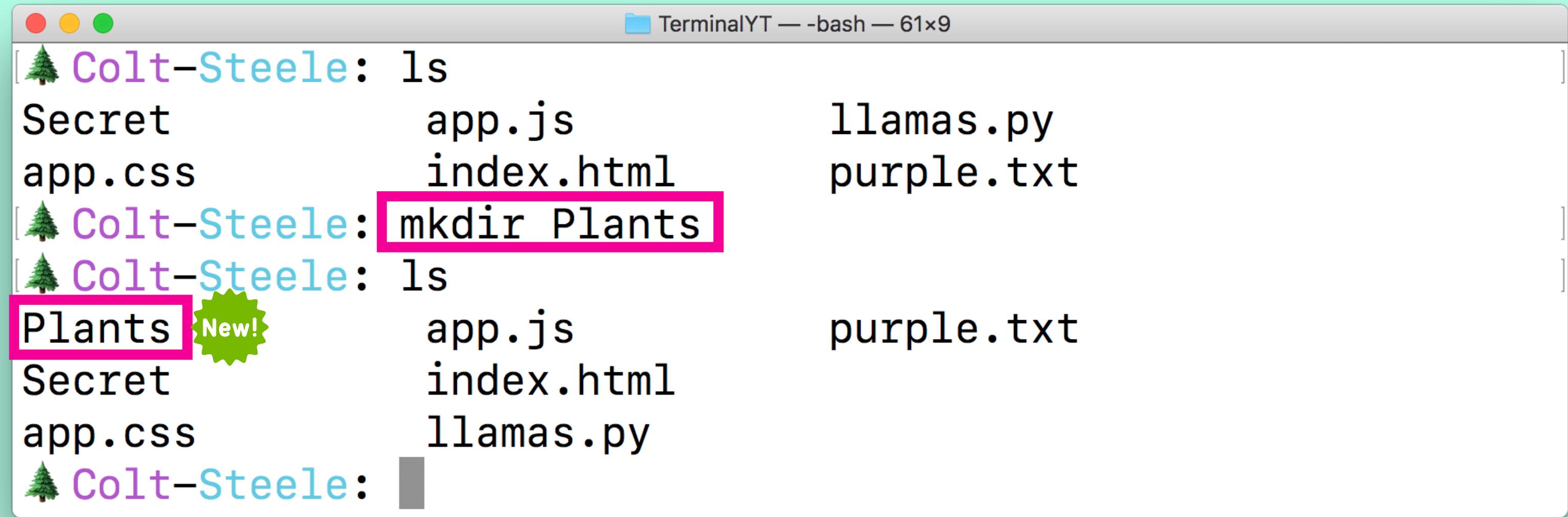


```
[Colt-Steele: ls
Secret          app.js        llamas.py
app.css         index.html
[Colt-Steele: touch purple.txt
[Colt-Steele: ls
Secret          app.js        llamas.py New!
app.css         index.html
purple.txt
[Colt-Steele: ]
```

## 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 sequence of commands and outputs:

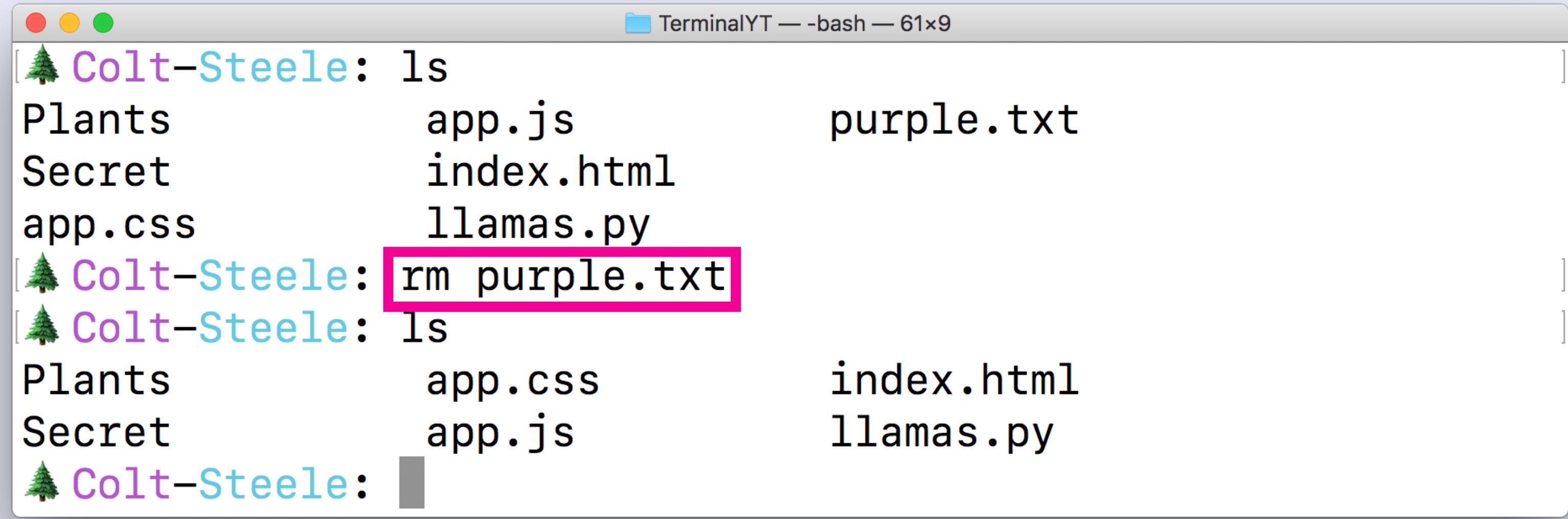
```
[Colt-Steele: ls
Secret          app.js
app.css         index.html
llamas.py
purple.txt
[Colt-Steele: mkdir Plants
[Colt-Steele: ls
Plants [New!]
Secret          app.js
index.html
llamas.py
purple.txt
[Colt-Steele: ]
```

The "mkdir Plants" command is highlighted with a pink rectangle. The "Plants" directory is also highlighted with a pink rectangle and has a green "New!" badge next to it.

## mkdir (make directory)

mkdir will create a new directory  
(or directories)

rm



A screenshot of a macOS Terminal window titled "TerminalYT — bash — 61x9". The window shows the following sequence of commands and outputs:

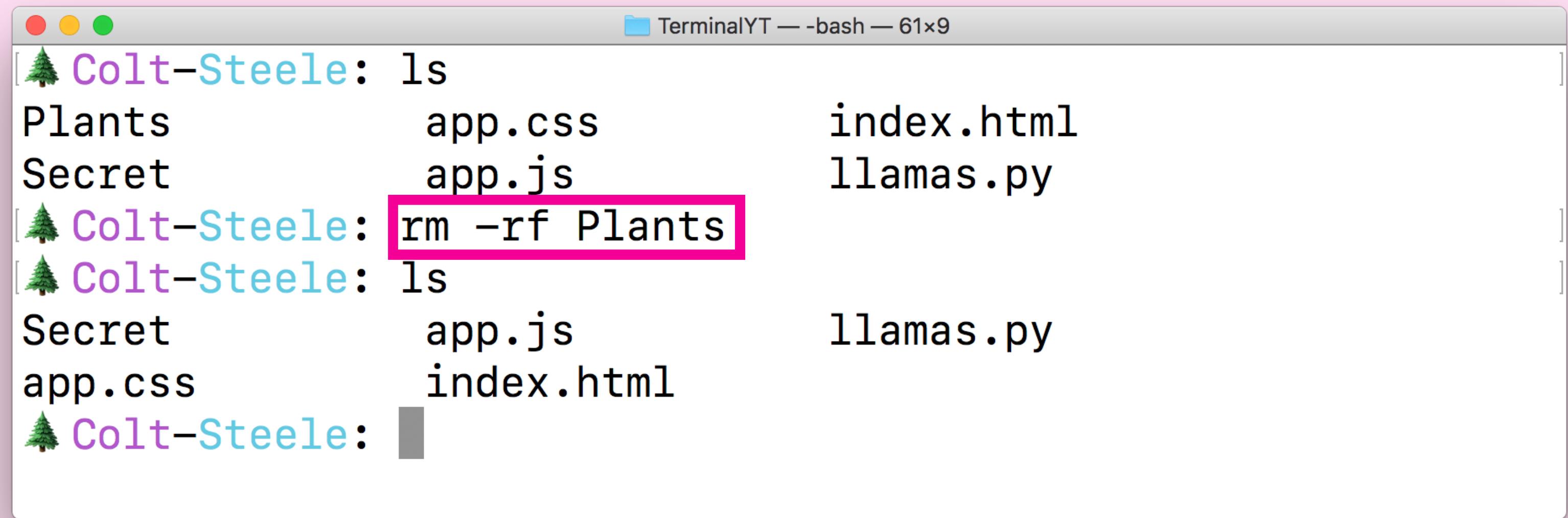
- [Colt-Steele: ls] lists files: Plants, Secret, app.css, app.js, index.html, llamas.py.
- [Colt-Steele: rm purple.txt] The command to delete the file "purple.txt" is highlighted with a pink rectangle.
- [Colt-Steele: ls] lists files again: Plants, Secret, app.css, app.js, index.html, llamas.py. Note that "purple.txt" is missing.

rm



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

r  
m



A screenshot of a macOS Terminal window titled "TerminalYT — bash — 61x9". The window shows the following session:

```
[Colt-Steele: ~] ls
Plants          app.css      index.html
Secret          app.js       llamas.py
[Colt-Steele: ~] rm -rf Plants
[Colt-Steele: ~] ls
Secret          app.js       llamas.py
app.css         index.html
[Colt-Steele: ~]
```

The command `rm -rf Plants` is highlighted with a pink rectangle.

**rm -rf**

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