

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

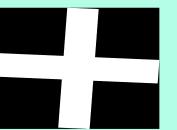
With Great Power...

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!



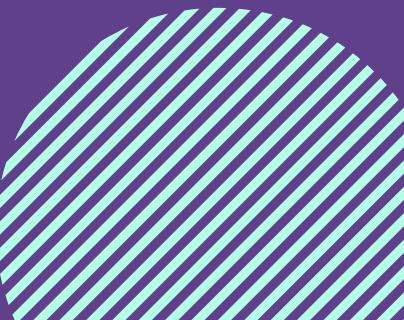
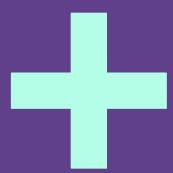
Confusing Terminology

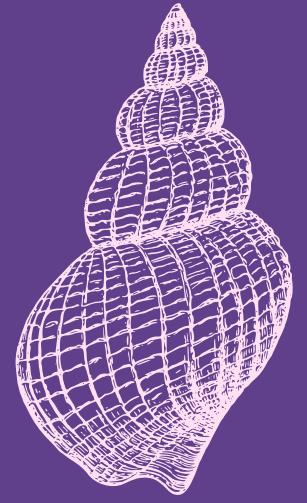
Terminal?
Shell?
Command Line?
Console?
Bash?



Terminal

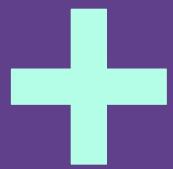
A TEXT-BASED INTERFACE TO YOUR COMPUTER.
ORIGINALLY A PHYSICAL OBJECT, BUT NOW WE
USE SOFTWARE TERMINALS





shell

THE PROGRAM RUNNING ON THE TERMINAL.



A QUICK ANALOGY!



TERMINAL

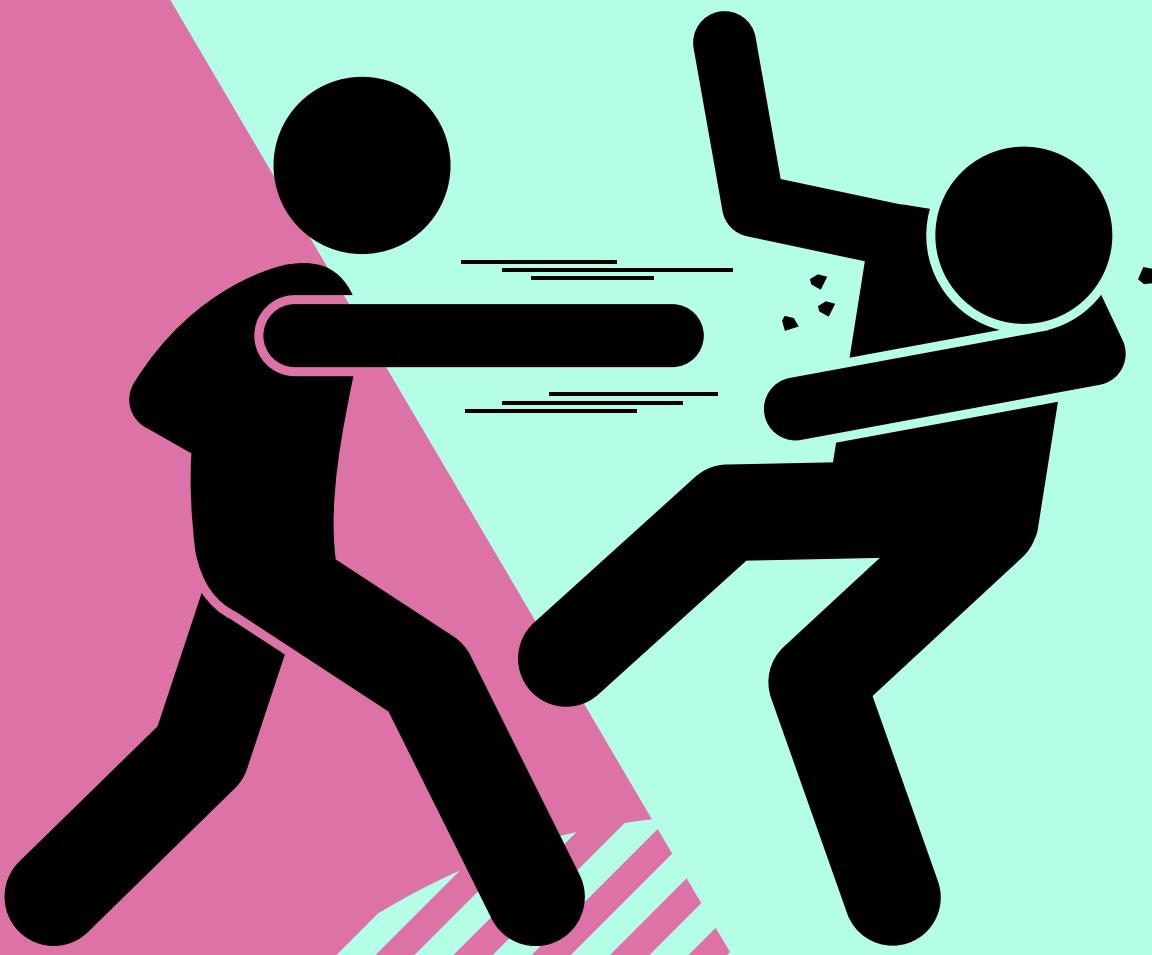
In this stupid analogy, the
ATM is the terminal

SHELL

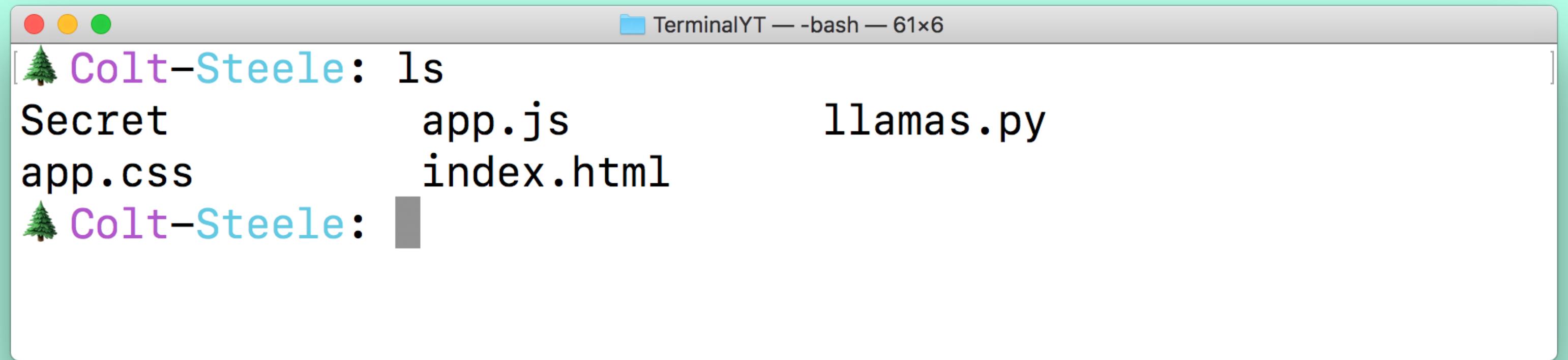
The software running on the
ATM is the shell

BASH

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



L
S



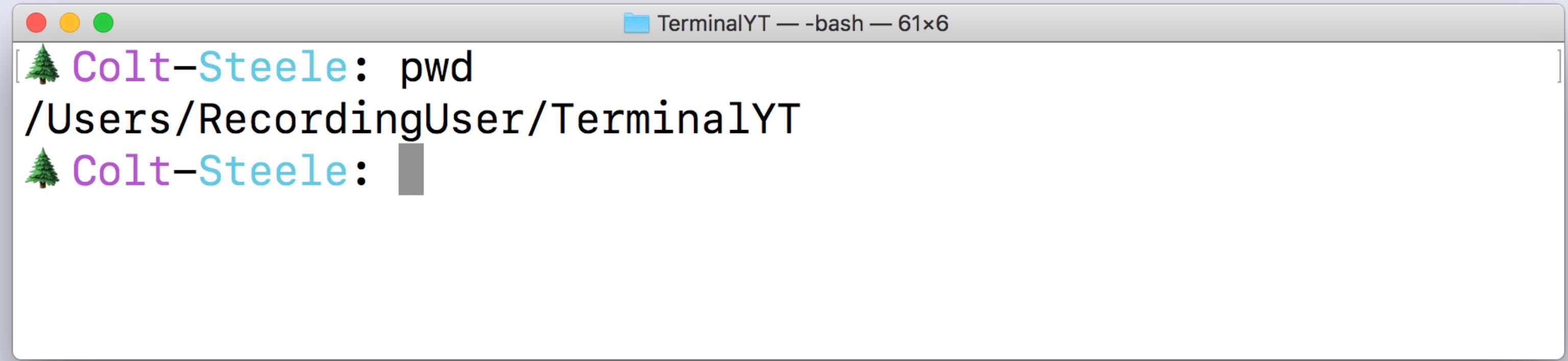
A screenshot of a macOS terminal window titled "TerminalYT — -bash — 61x6". The window shows the command "ls" being run in a directory named "Colt-Steele". The output of the command is a list of files: "Secret", "app.css", "app.js", "index.html", and "llamas.py". The terminal window has a light gray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

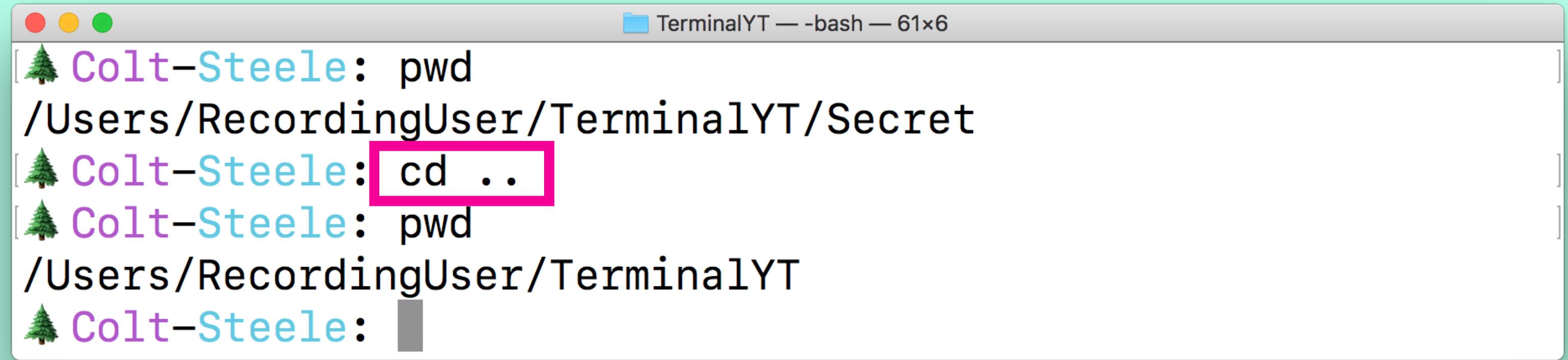
C
D

```
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:

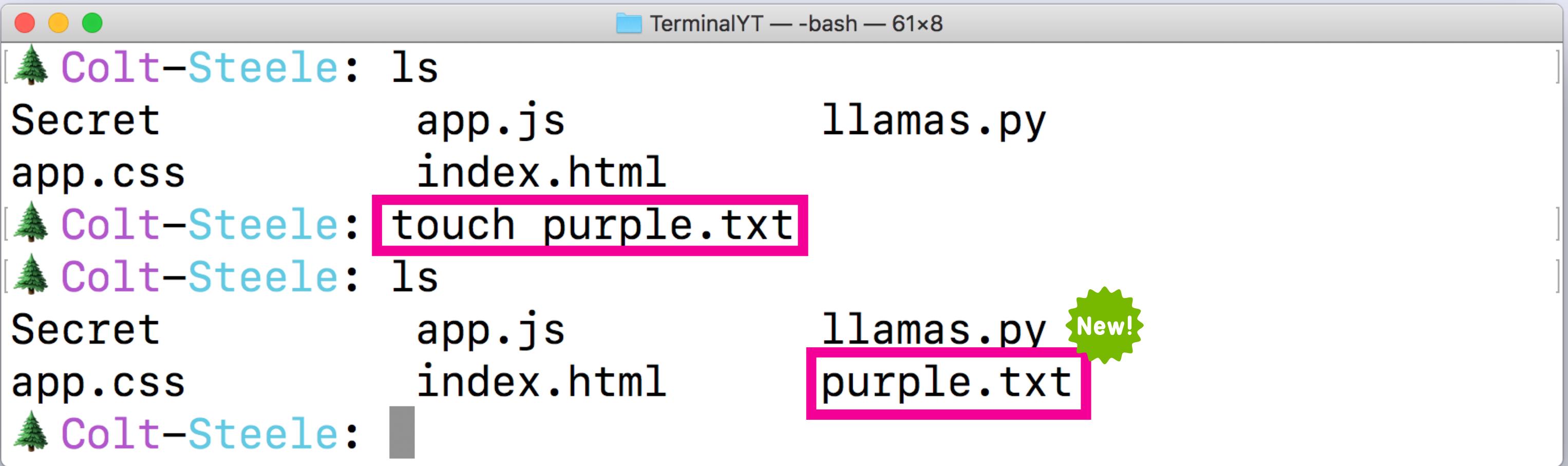
```
[Colt-Steele: pwd  
/Users/RecordingUser/TerminalYT/Secret  
[Colt-Steele: cd ..  
[Colt-Steele: pwd  
/Users/RecordingUser/TerminalYT  
[Colt-Steele: ]
```

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

`cd ..`

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

t o u c h

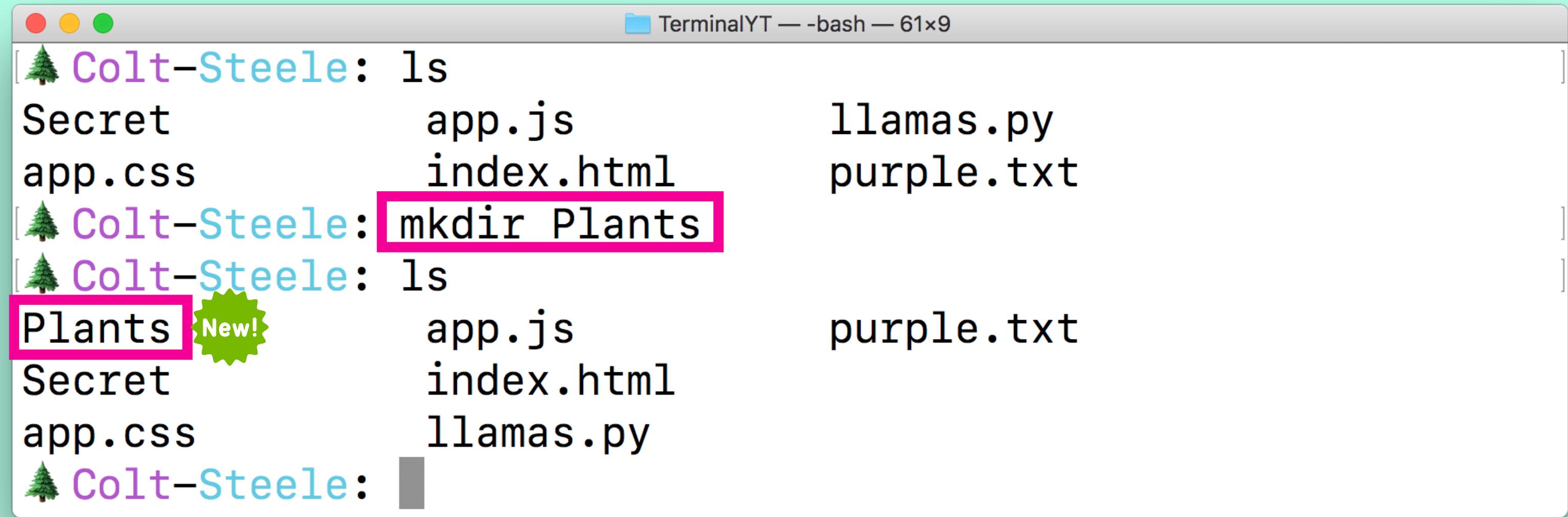


```
[Colt-Steele: ls
Secret          app.js        llamas.py
app.css         index.html
[Colt-Steele: touch purple.txt
[Colt-Steele: ls
Secret          app.js        llamas.py New!
app.css         index.html
purple.txt
[Colt-Steele:
```

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:

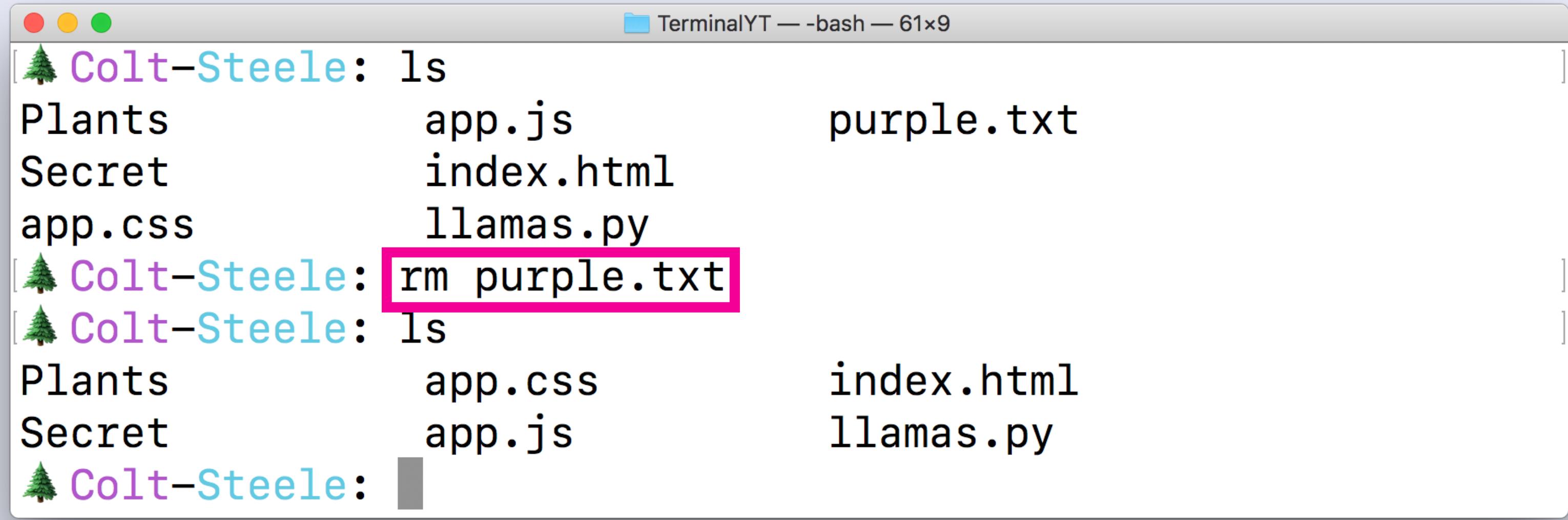
```
[Colt-Steele: ls
Secret          app.js
app.css         index.html
llamas.py
purple.txt
[Colt-Steele: mkdir Plants
[Colt-Steele: ls
Plants [New!]  app.js
Secret          index.html
app.css         llamas.py
purple.txt
[Colt-Steele: ]
```

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

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 a file directory with files: Plants, Secret, app.css, app.js, index.html, llamas.py, and purple.txt. The user runs the command "ls" to list the files. Then, the user runs the command "rm purple.txt", which is highlighted with a pink rectangle. Finally, the user runs another "ls" command, which shows the files Plants, Secret, app.css, app.js, index.html, and llamas.py, indicating that the file "purple.txt" has been removed.

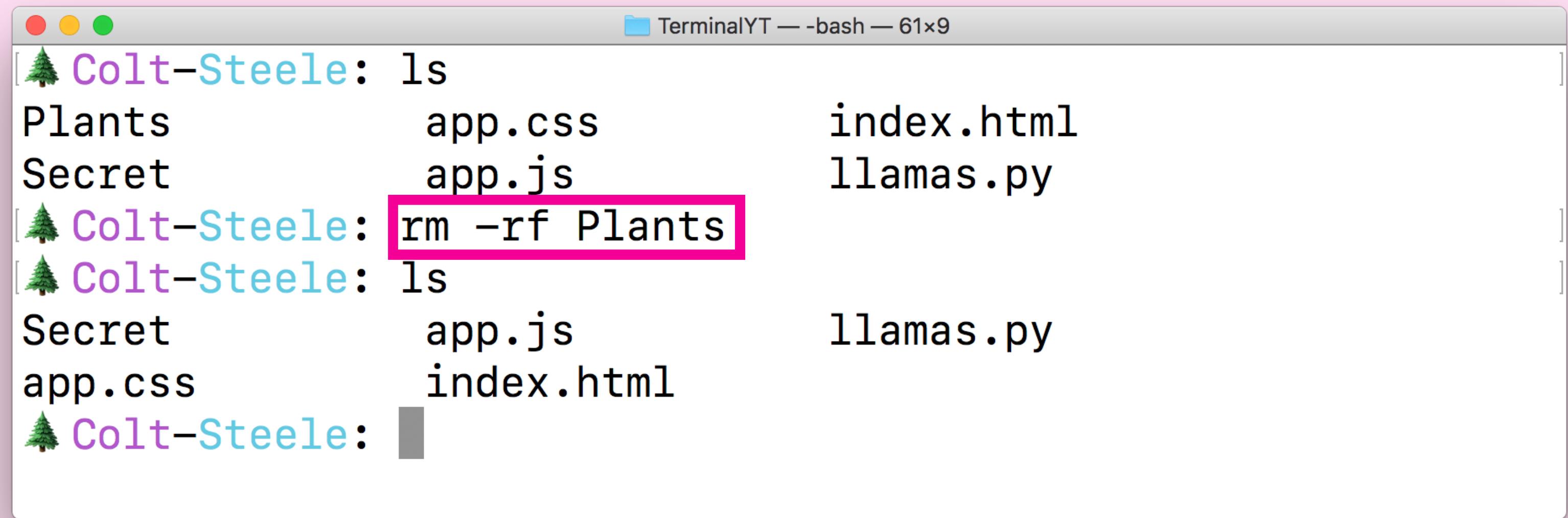
```
[Colt-Steele: ls
Plants           app.js          purple.txt
Secret          index.html
app.css         llamas.py
[Colt-Steele: rm purple.txt
[Colt-Steele: ls
Plants           app.css        index.html
Secret          app.js          llamas.py
[Colt-Steele:
```

rm



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

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)