Tutorial 02 - File systems and files

nano

- a text editor in Unix

- allows creation, viewing, and editing of text files; "Microsoft Word for Unix"

- usage: `nano <path of file>`

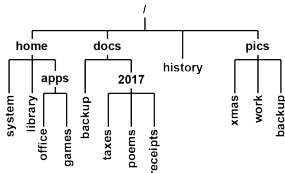# great advice from SWC about directory/file names

1. Don't use whitespaces.

   Whitespaces can make a name more meaningful, but since whitespace is used to break arguments on the command line it is better to avoid them in names of files and directories. Use – or _ instead of whitespace.

2. Don't begin the name with a dash.

3. Stick with letters, numbers, period, dash, and underscore.

   Many other characters have special meanings on the command line.

4. If you need to refer to names of files or directories that have whitespace, you should surround the name in quotes.

absolute and relative paths

- ▶ relative paths get you from one place to another; "if you are in directory x, the 'path' to directory y"

- ▶ absolute paths get you from root to somewhere; this means you can jump to any directory from any directory using an absolute path

Peer teaching `mv` and `cp`

One pair use help and man to learn about `mv`; the other pair do the same for `cp`

Why would you use this function? What arguments are required? What are some optional arguments/flags?

Explain your function to a pair that researched the other function

wildcards

If you want to list a subset of objects in a directory or removea bunch of similarly named files all at once (be careful!), wildcards are super helpful.

* -

? -

wildcards

If you want to list a subset of objects in a directory or remove a bunch of similarly named files all at once (be careful!), wildcards are super helpful.

* - matches zero or more of any character

? - matches exactly one character

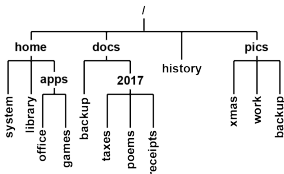What two strings would match all of "boy, toy, joy, coy"?

What string would match all of "boy, toy, joy, coy", but not "ploy, troy, floy"?

What string would match all of "fish, flash, fresh, fuss"?

What string would match all comma-delimited text files (.csv files), but not directories or log files (.log files)?

challenge from lecture

Challenge: Create the left half (home & docs) of this file system.

Add the files one.txt, two.txt, and three.txt to poems, and each file should contain a set of numbered lines counting up to the number in the file name.

Now move two.txt to apps and remove three.txt.

Make a copy of one.txt and call it four.txt. Use nano to edit four.txt to follow the rules above (contains four lines numbered from 1 to 4).

List the files, but not directories in apps. (Hint: think about using a wildcard. . .)

function review

```
ls
cd
pwd
mkdir
nano
rm
mv
cp
```