

THE COMMAND LINE

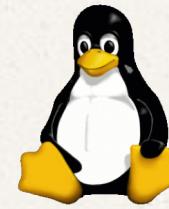
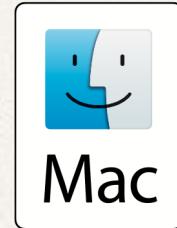
a.k.a The terminal

a.k.a. ‘My worst nightmare’ (but really?)



Goals for this session:

- What is the command line interface?
- Learn fundamental commands of a UNIX operating system
 - Basis for Mac and Linux operating systems

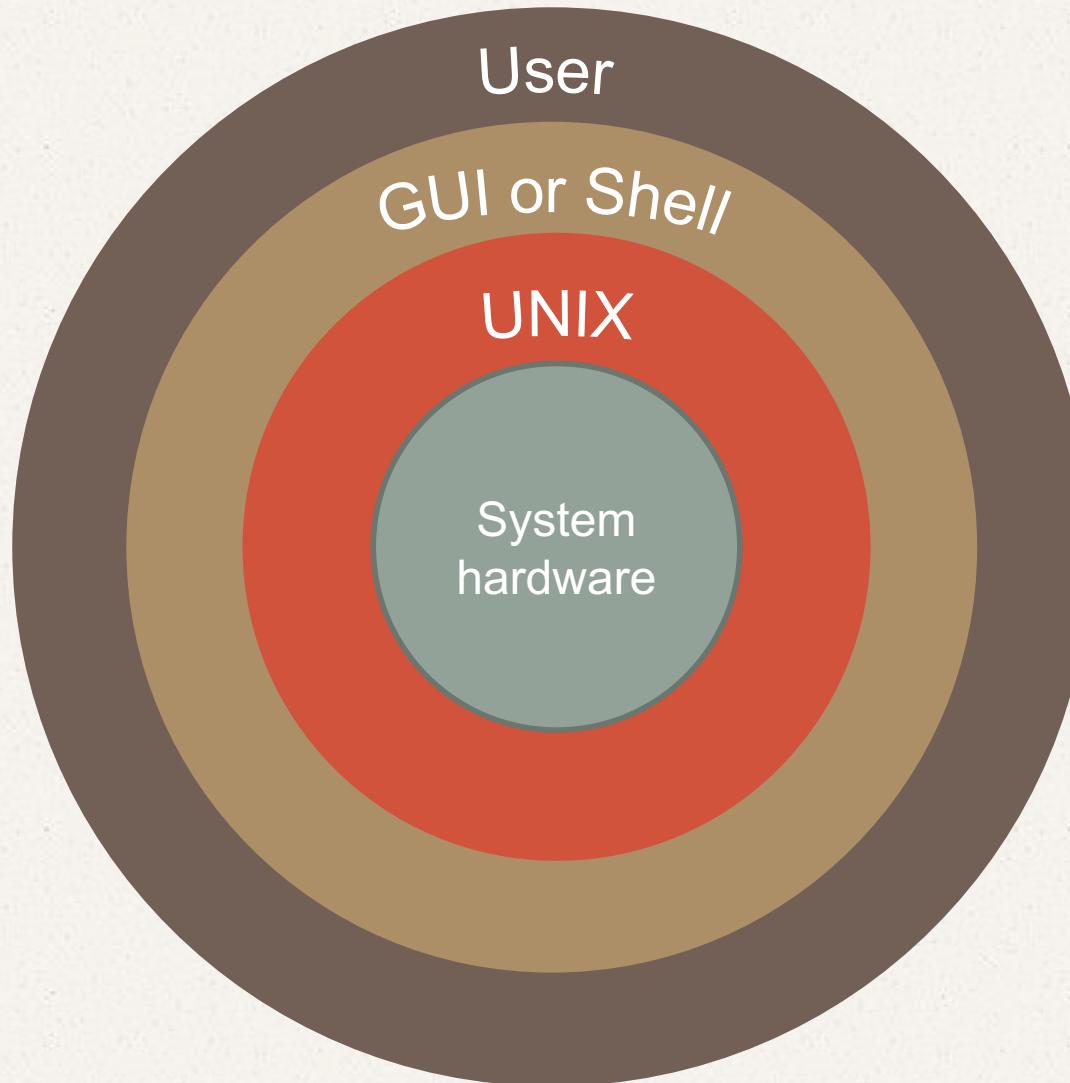


What is UNIX

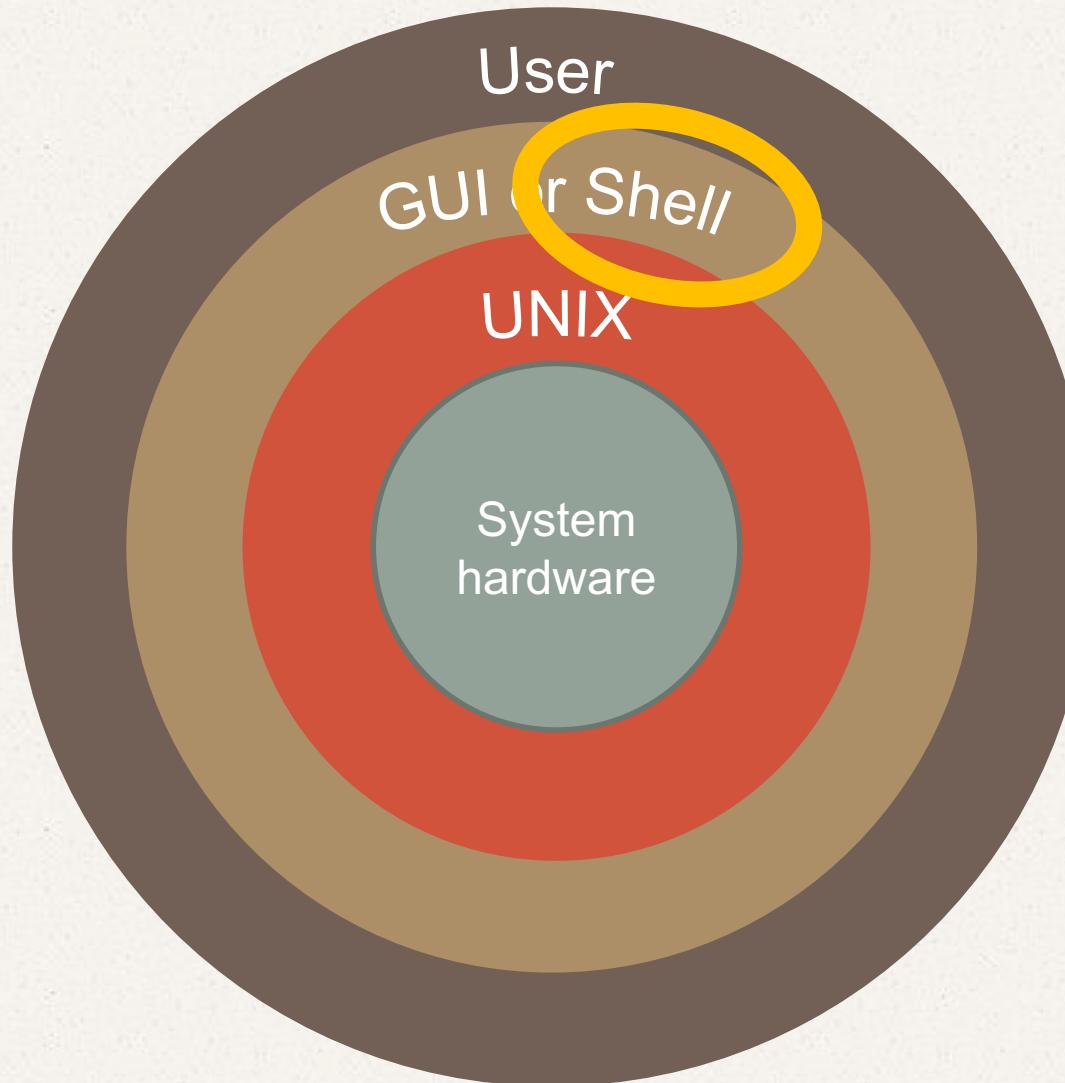
- An operating system
 - Developed in the 1960's by AT&T
 - Flexible and stable
 - Allows users to
 - Run Programs
 - Manage Resources
 - Access the folders and files
 - Communicate with other computer systems



UNIX



UNIX



The SHELL (terminal)

- The shell interprets text commands the user types and manages their execution
 - The shell communicates with the core operating system called the **kernel**
 - The most popular shells are: bash (default), tcsh, csh, korn
 - The differences are generally subtle
 - For this tutorial, we are using bash
- WARNING: Shell commands are **CASE SENSITIVE!**
 - So “cat” and “Cat” are two different things



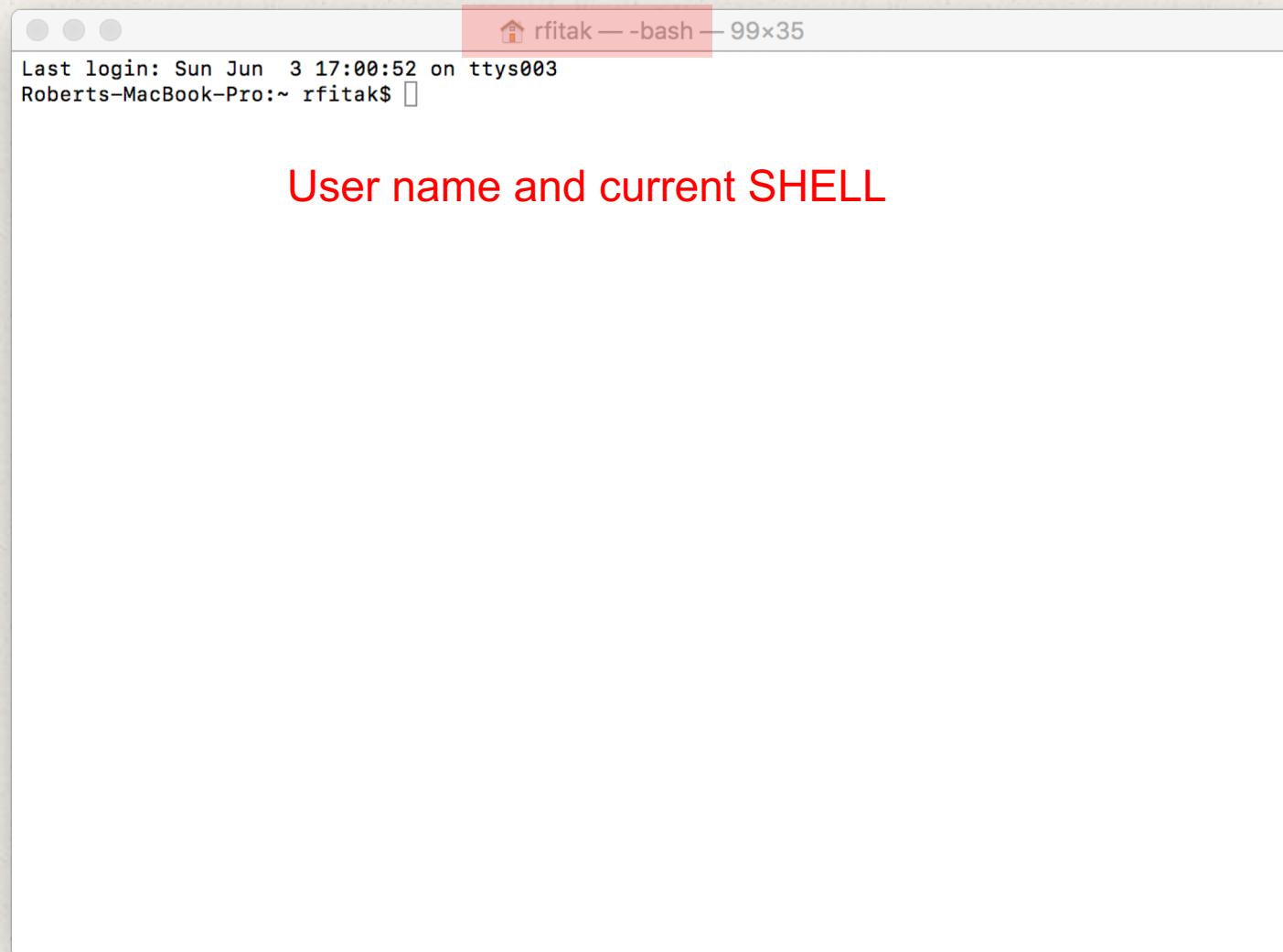
The terminal



```
Last login: Sun Jun 3 17:00:52 on ttys003
Roberts-MacBook-Pro:~ rfitak$
```



The terminal

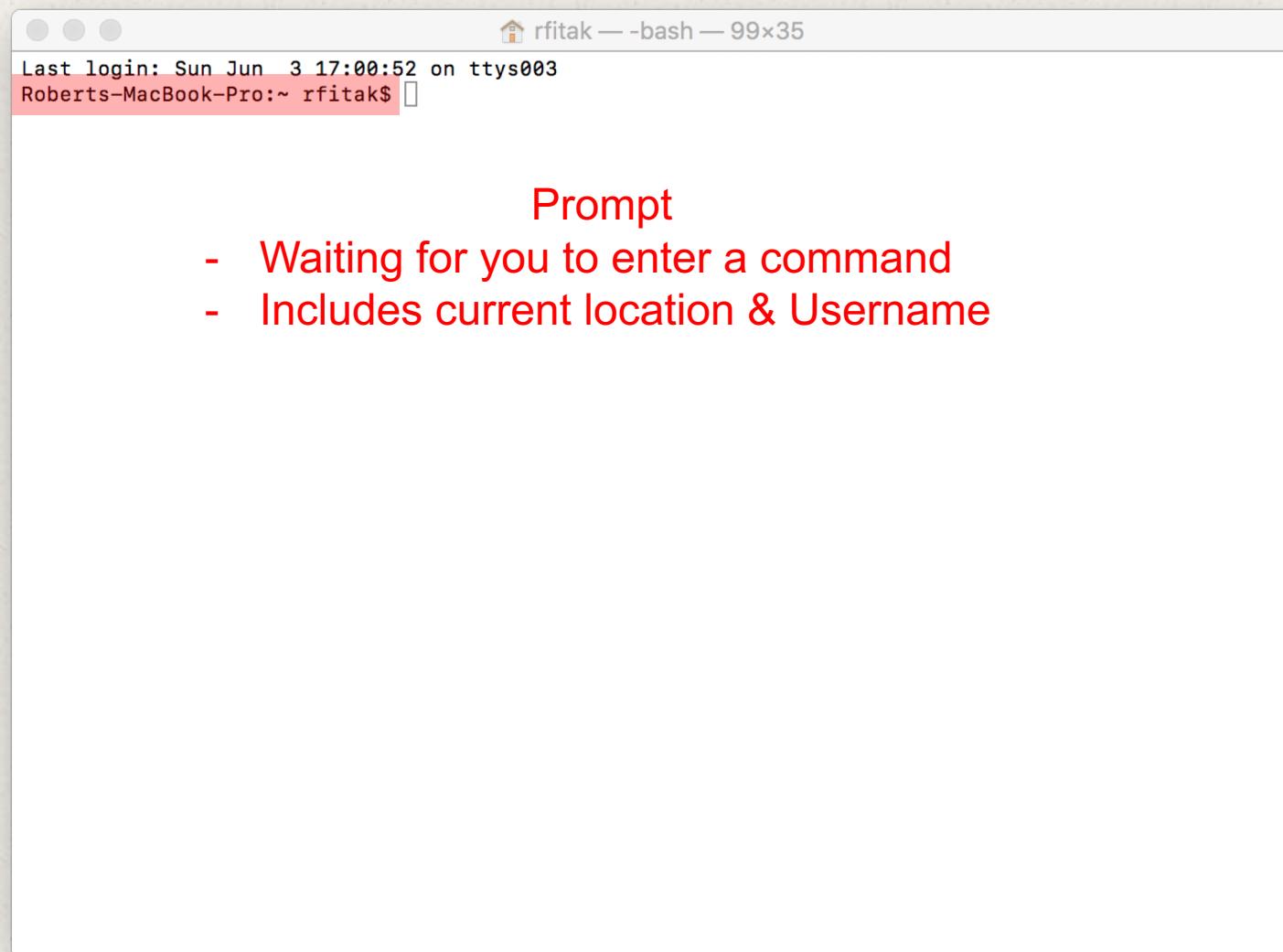


Last login: Sun Jun 3 17:00:52 on ttys003
Roberts-MacBook-Pro:~ rfitak\$

User name and current SHELL



The terminal



Prompt

- Waiting for you to enter a command
- Includes current location & Username



The terminal

```
Last login: Sun Jun 3 17:00:52 on ttys003
Roberts-MacBook-Pro:~ rfitak$
```

Commands get typed here

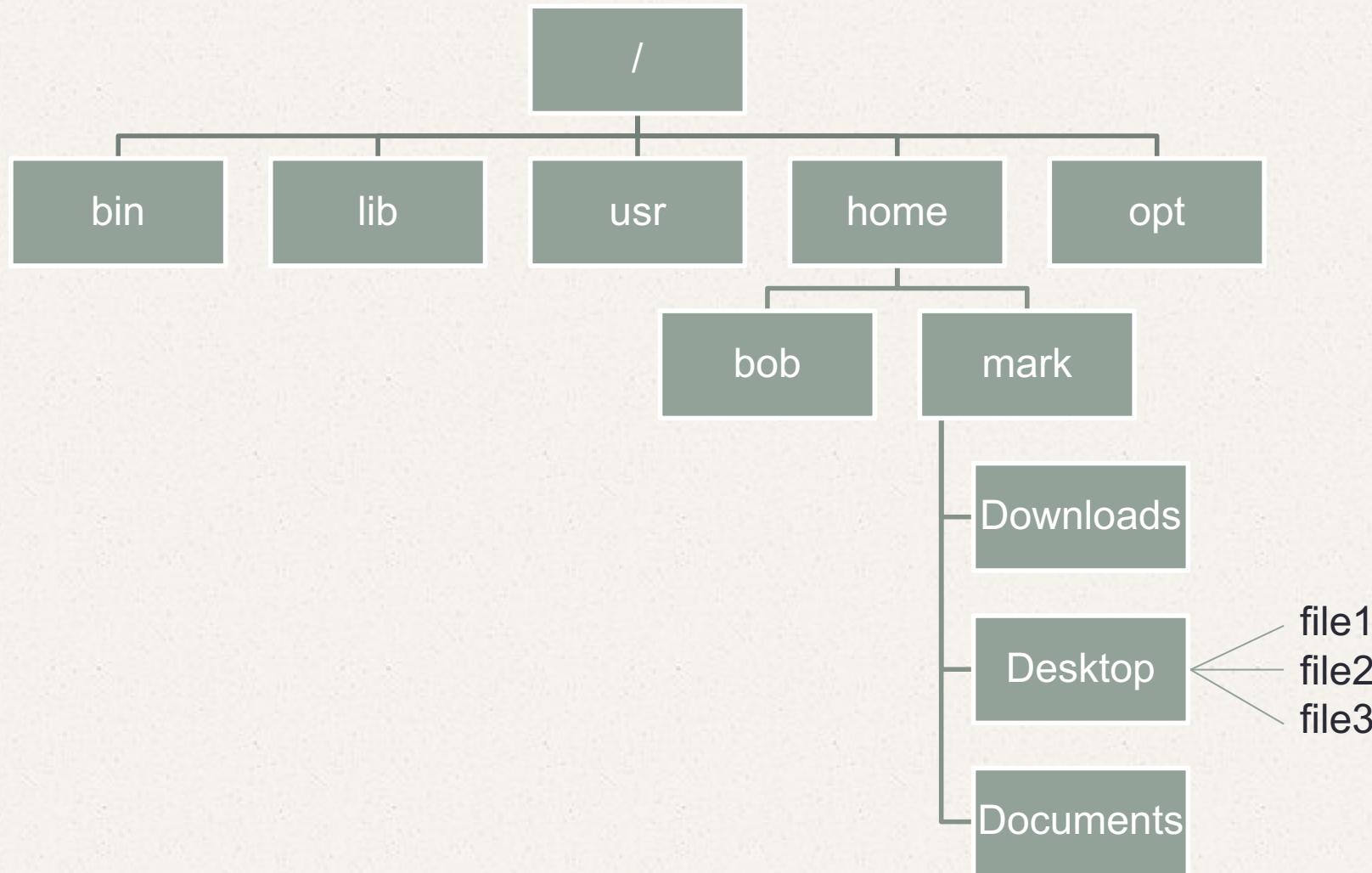


Commands

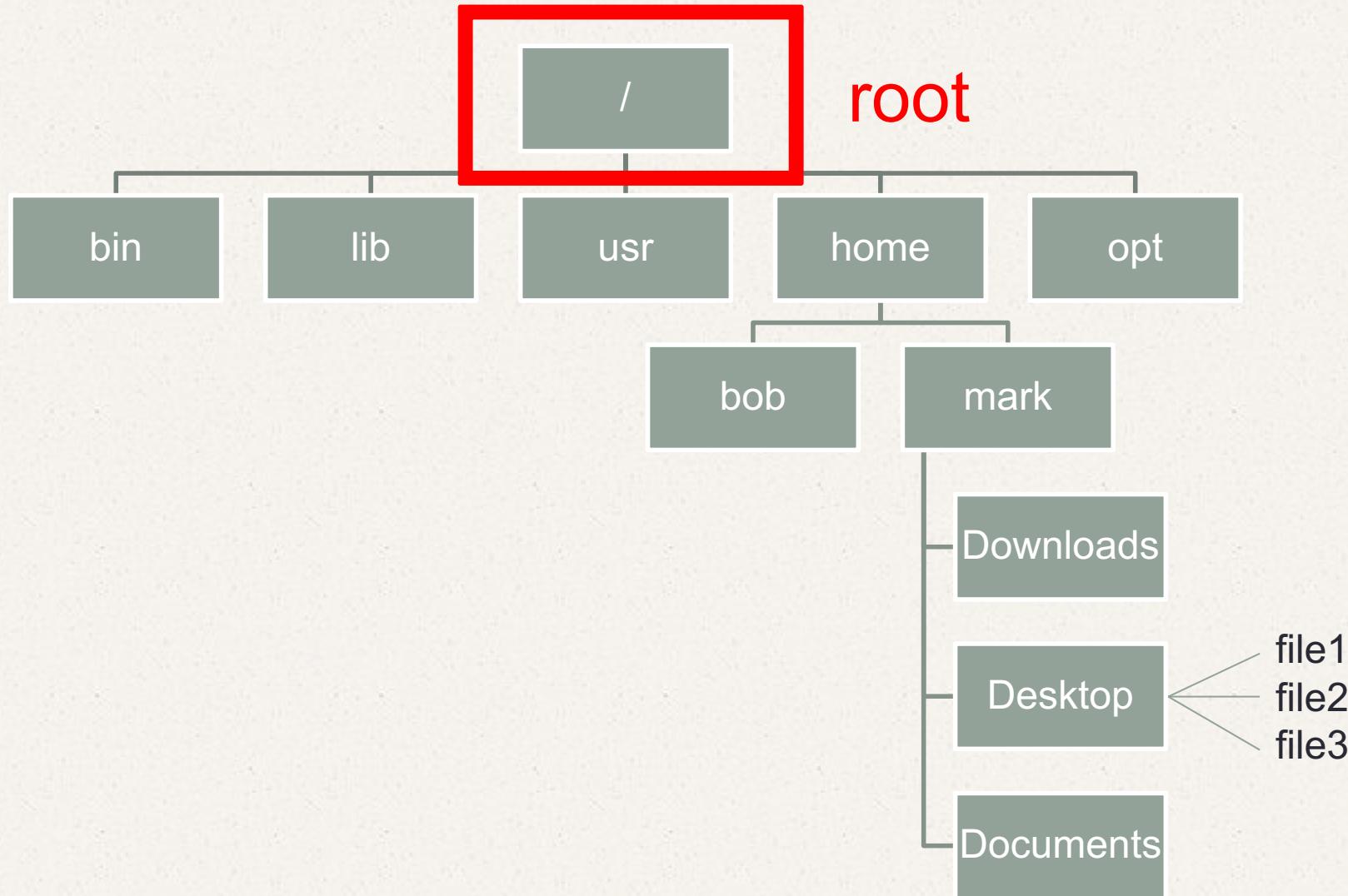
- UNIX commands can be very simple one word commands, or have many additional arguments (a.k.a. parameters).
- In general, a UNIX command has the following form:
command options(s) filename(s)
- The *command* is the name of the program that we are going to execute.
- The *options* modify the way the command works. Options are typically indicated by one or two hyphens: e.g. **-a** or **--input**.
- The *filename* is the last argument for many UNIX commands.



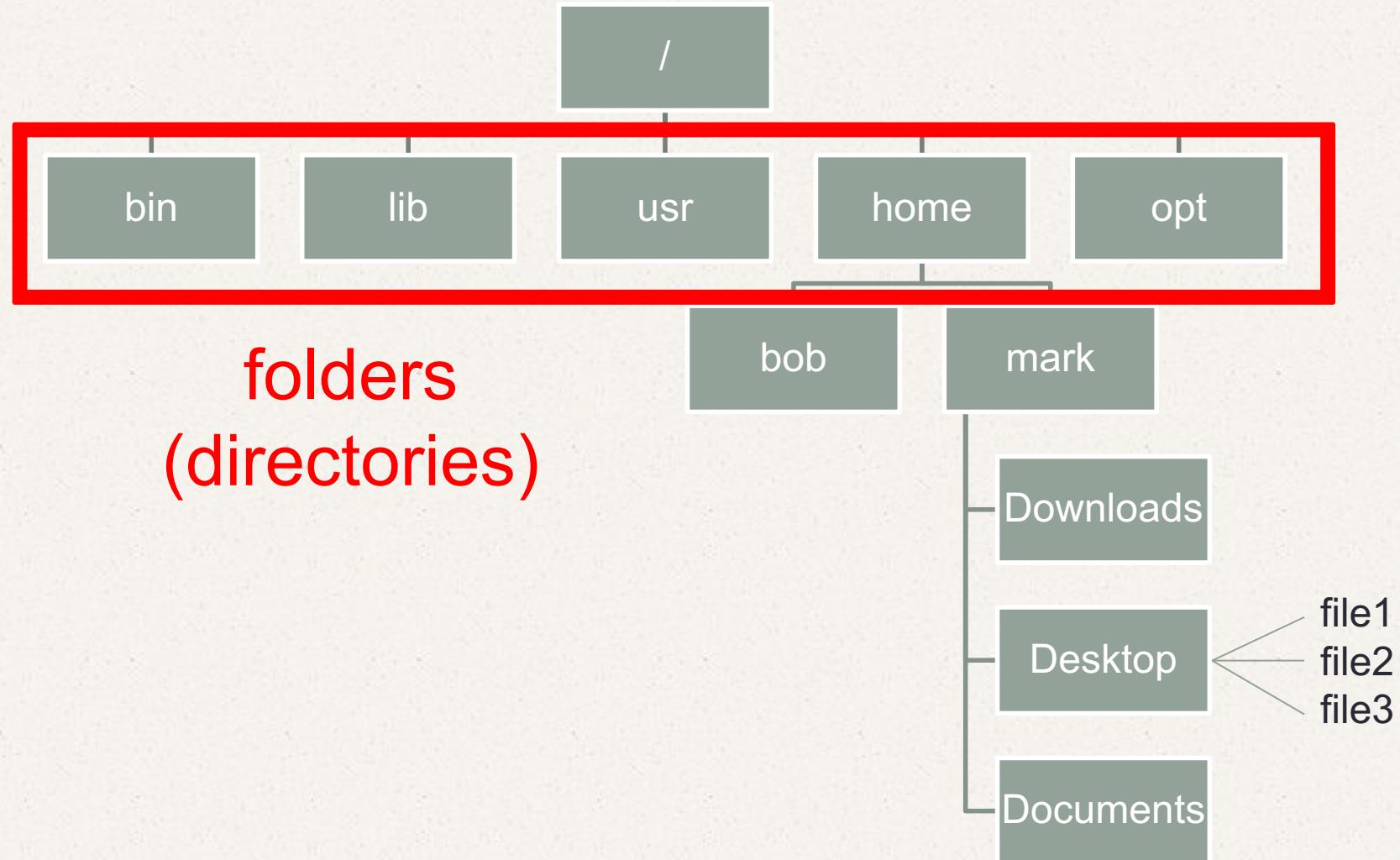
The file system



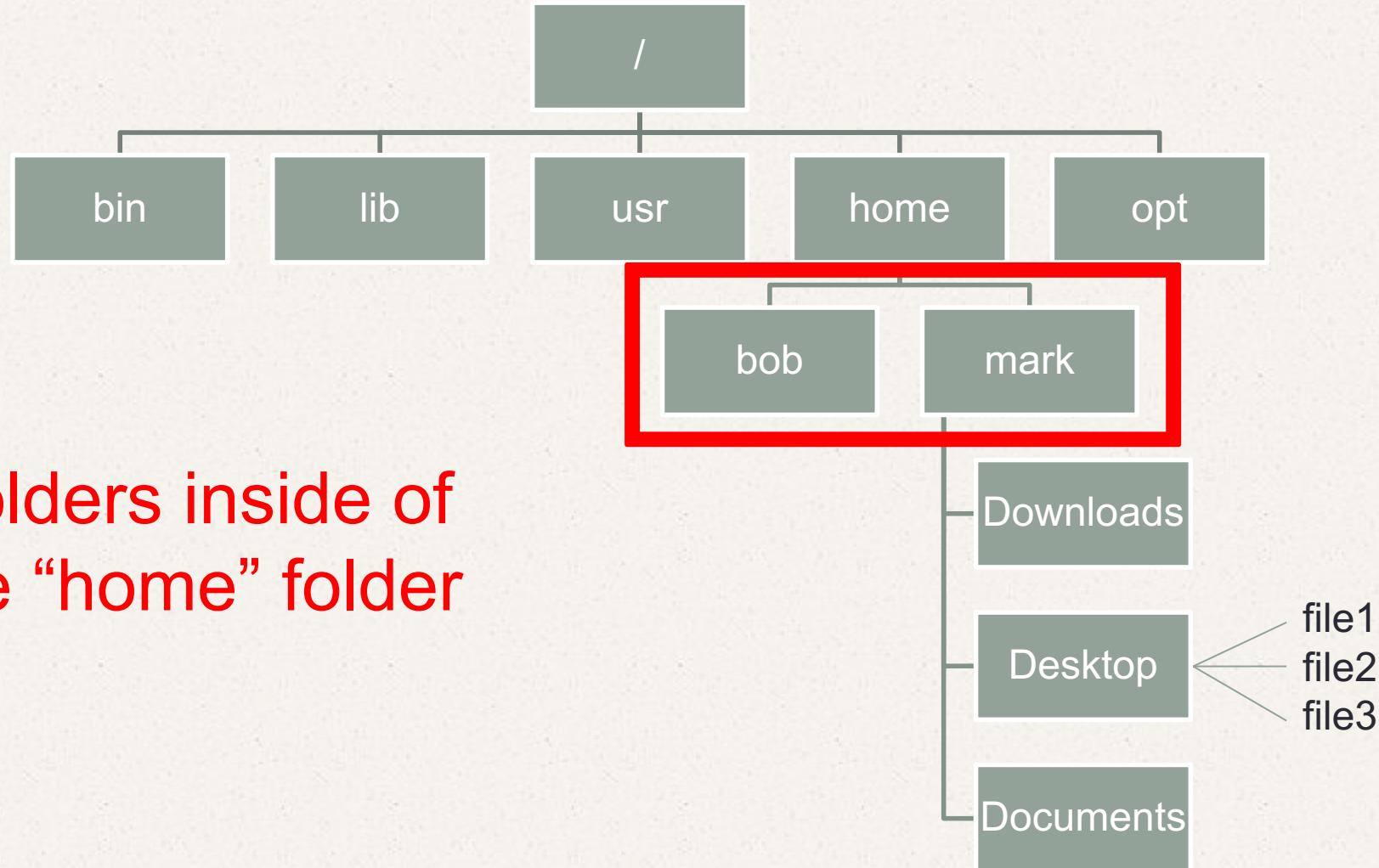
The file system



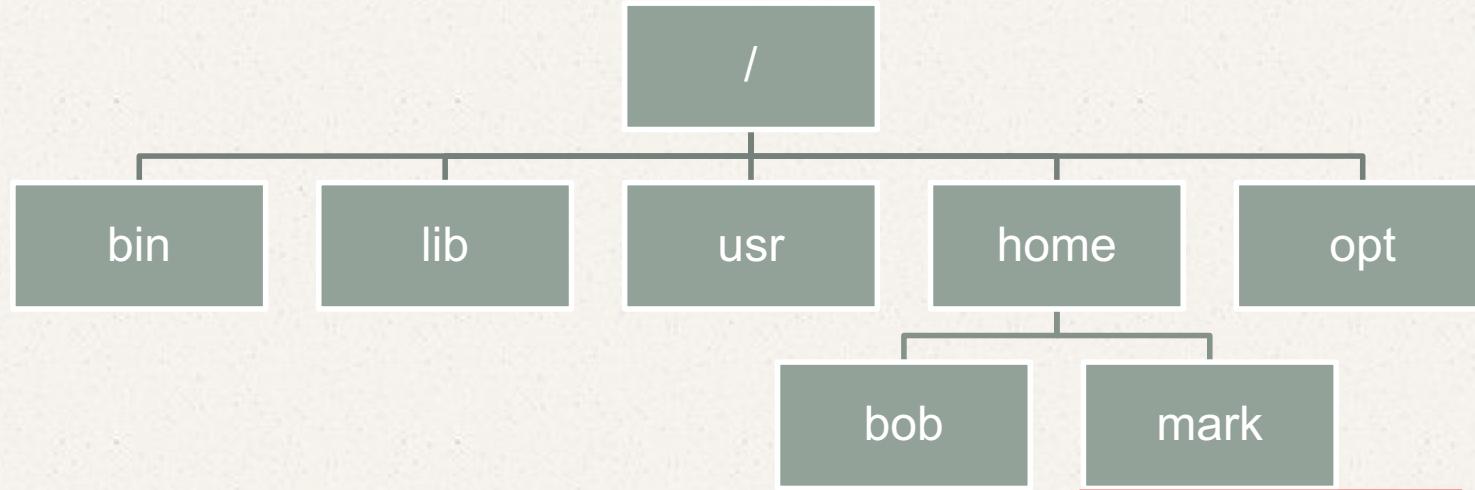
The file system



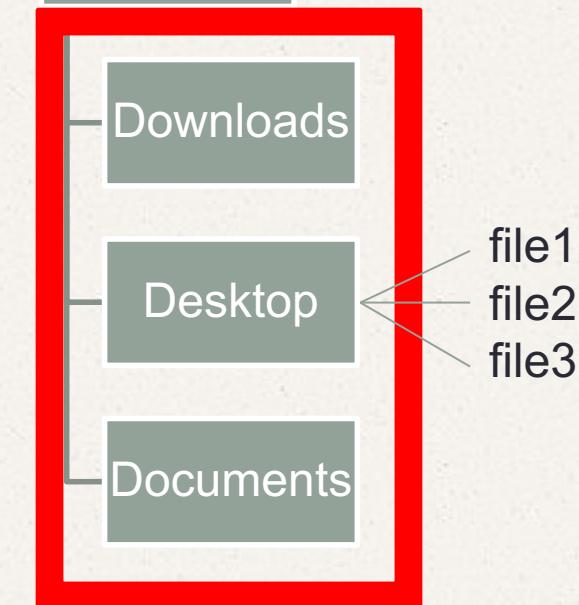
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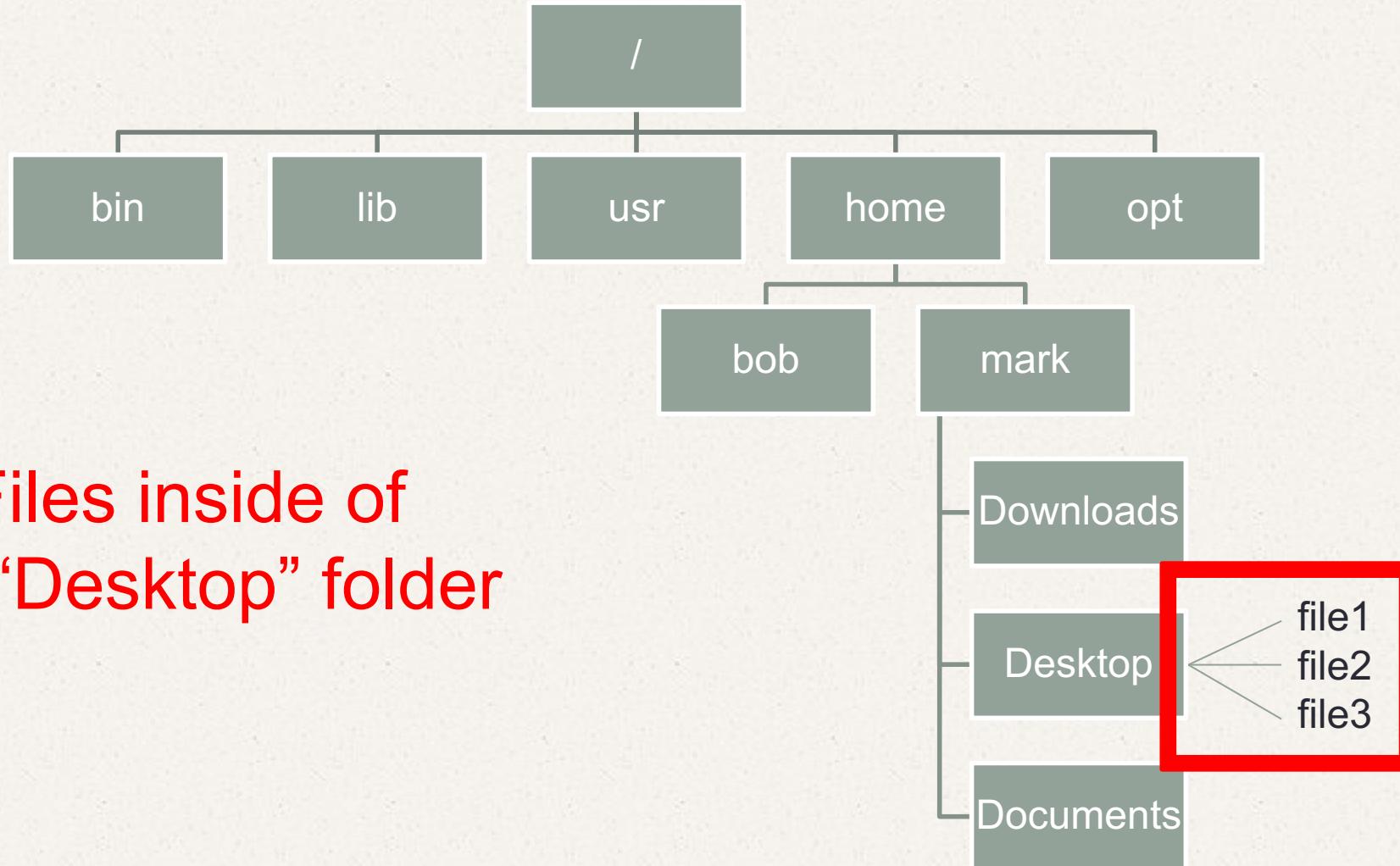
The file system



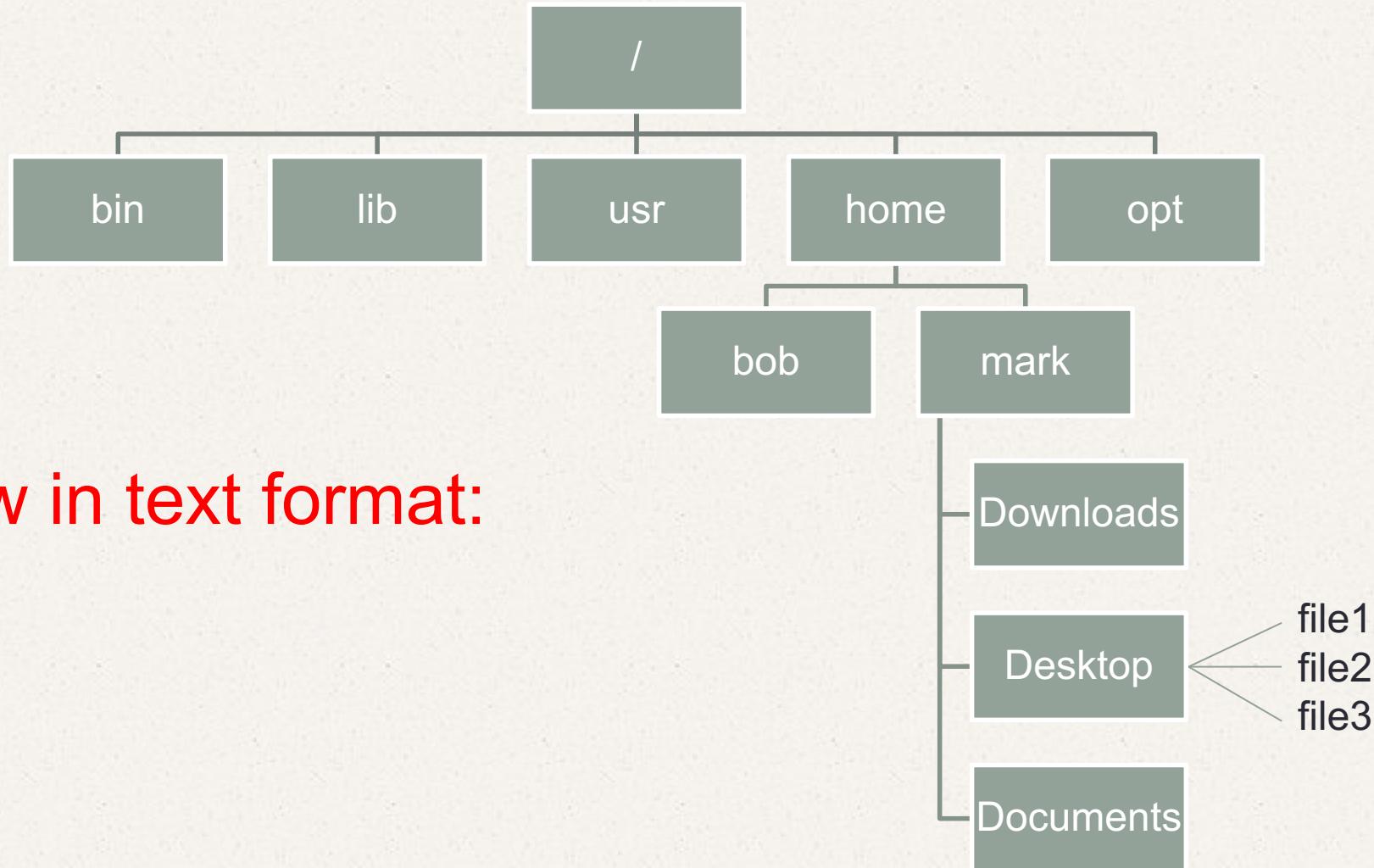
Folders inside of
the “mark” folder



The file system



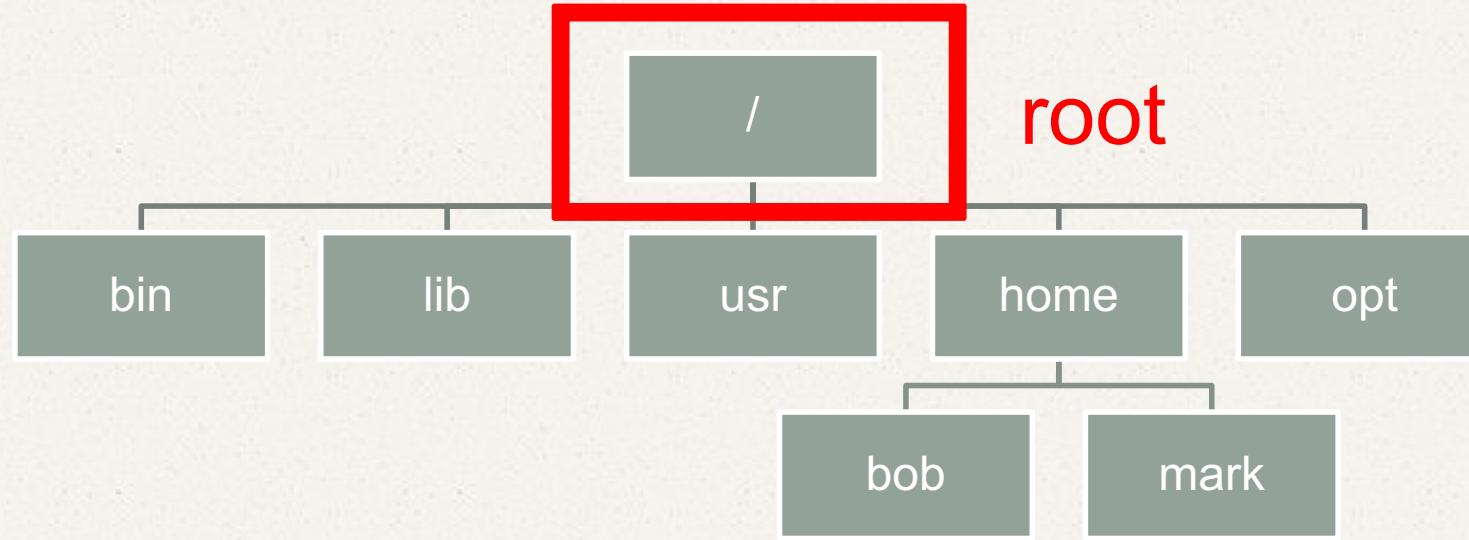
The file system



Now in text format:



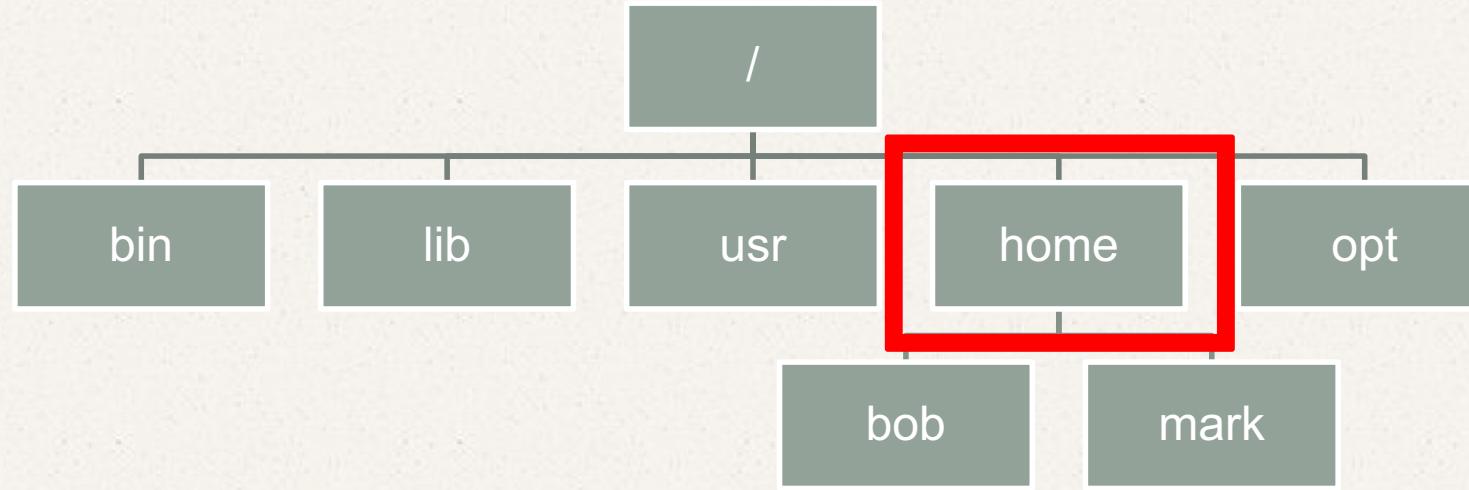
The file system



Now in text format:

```
/
```

The file system

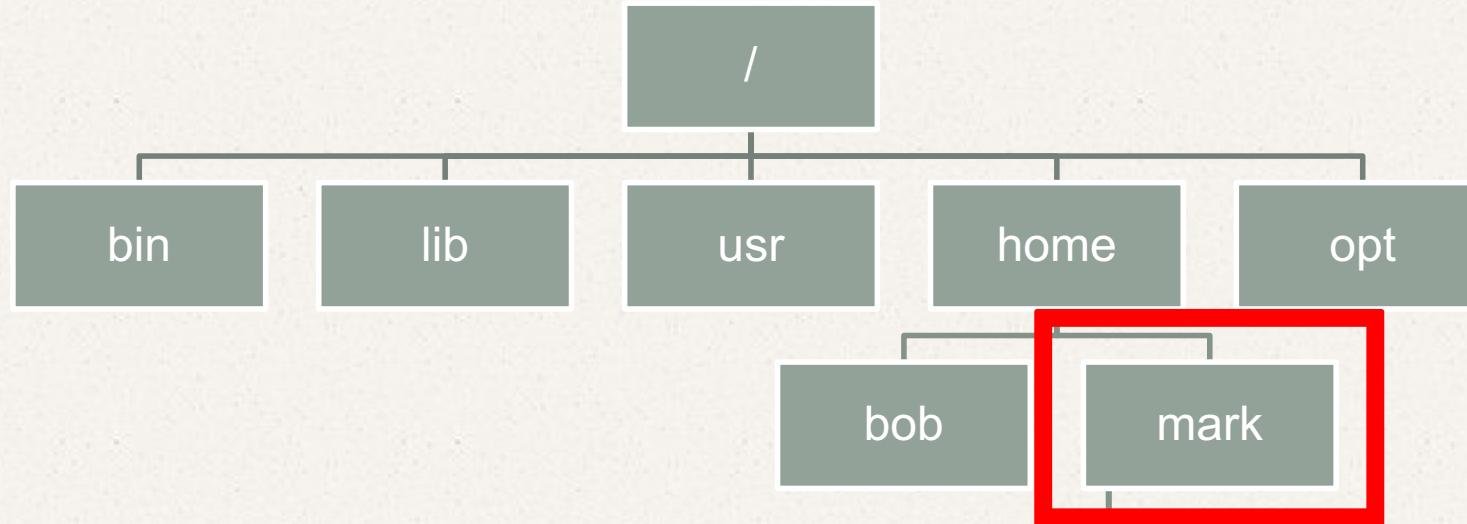


Now in text format:

/home



The file system

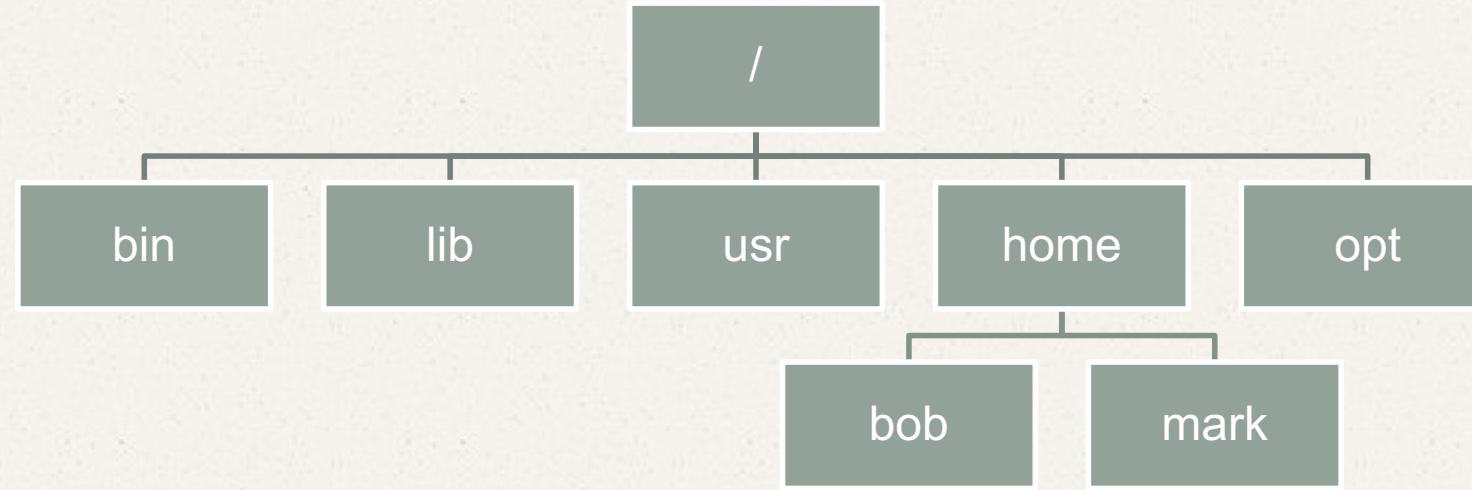


Now in text format:

/home/mark



The file system

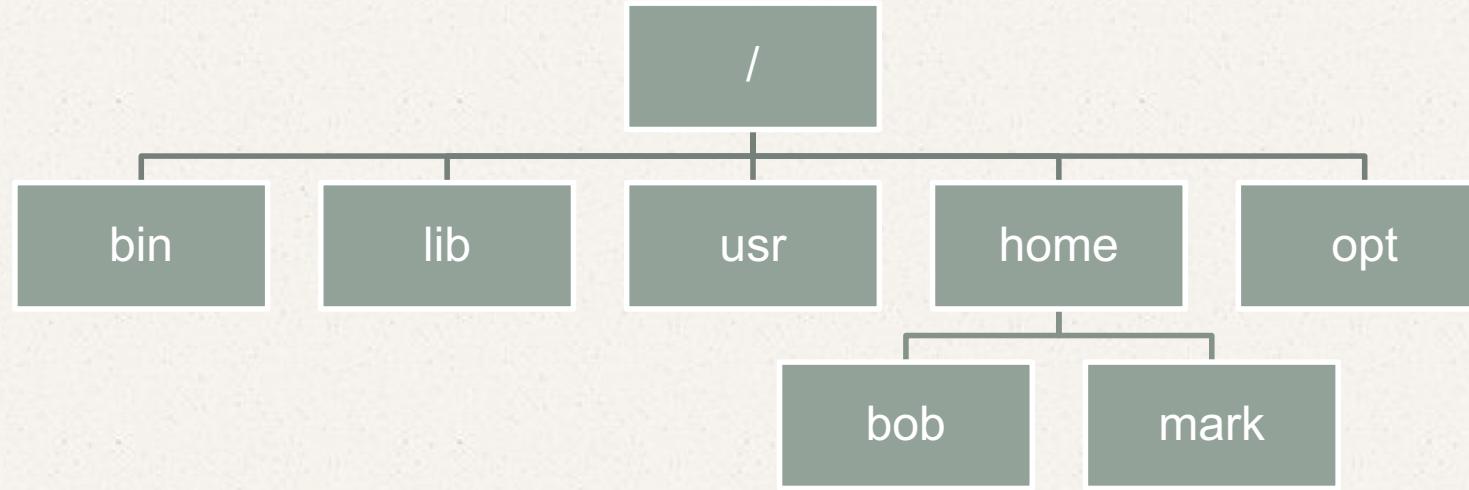


Now in text format:

/home/mark/Desktop



The file system

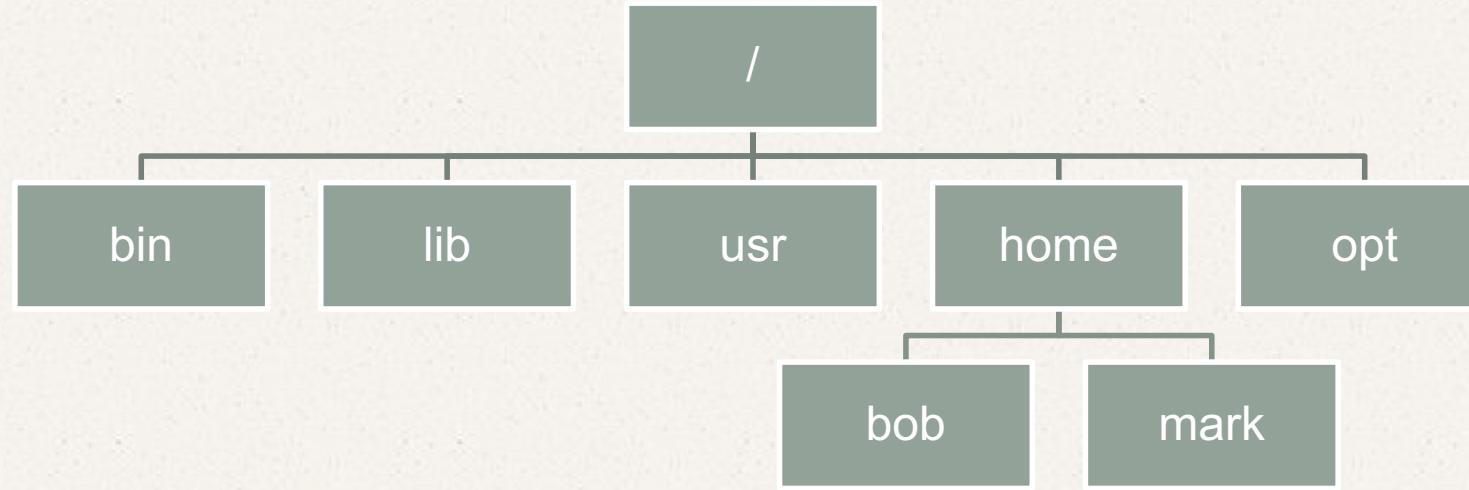


Now in text format:

/home/mark/Desktop/file2



The file system



Now in text format:

/home/mark/Desktop/file2

↑
path



TO YOUR TERMINALS!!!

