File Paths

Stat 133 with Gaston Sanchez

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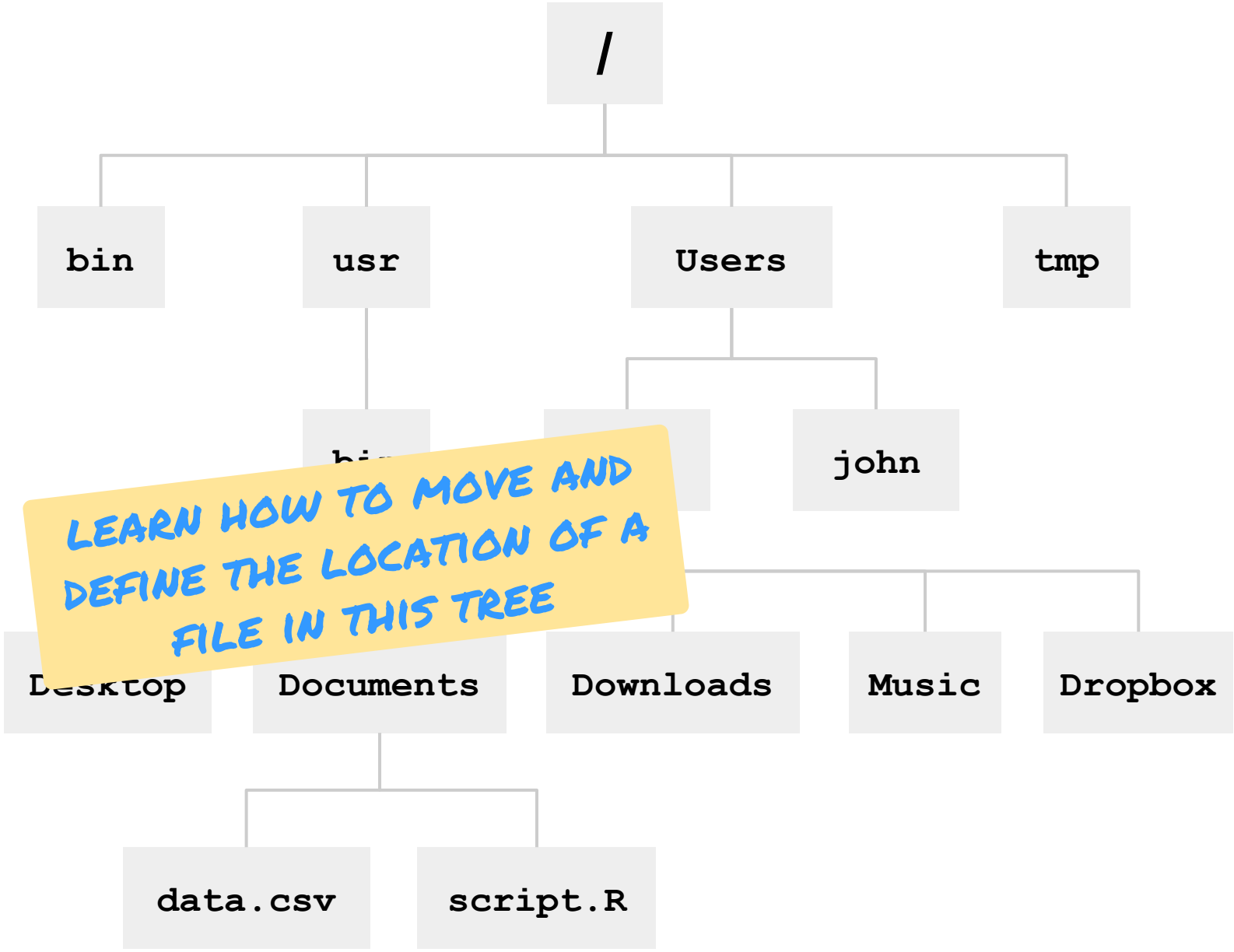
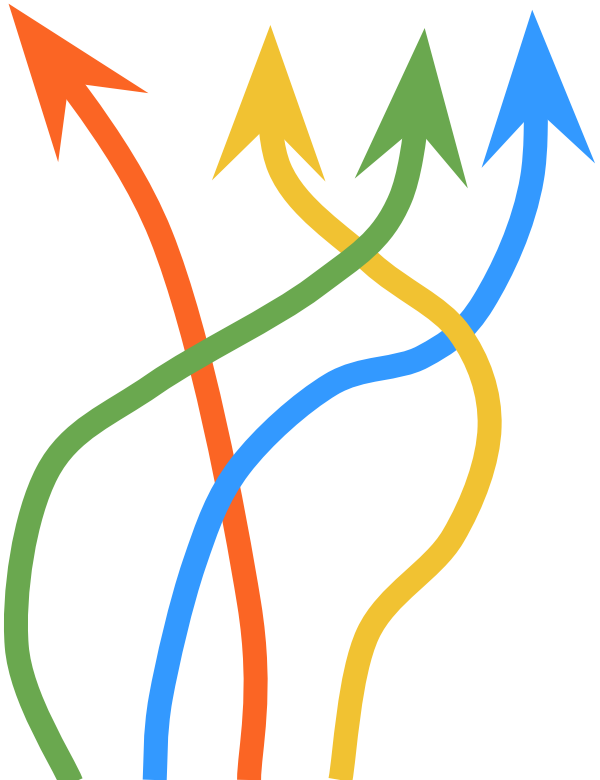
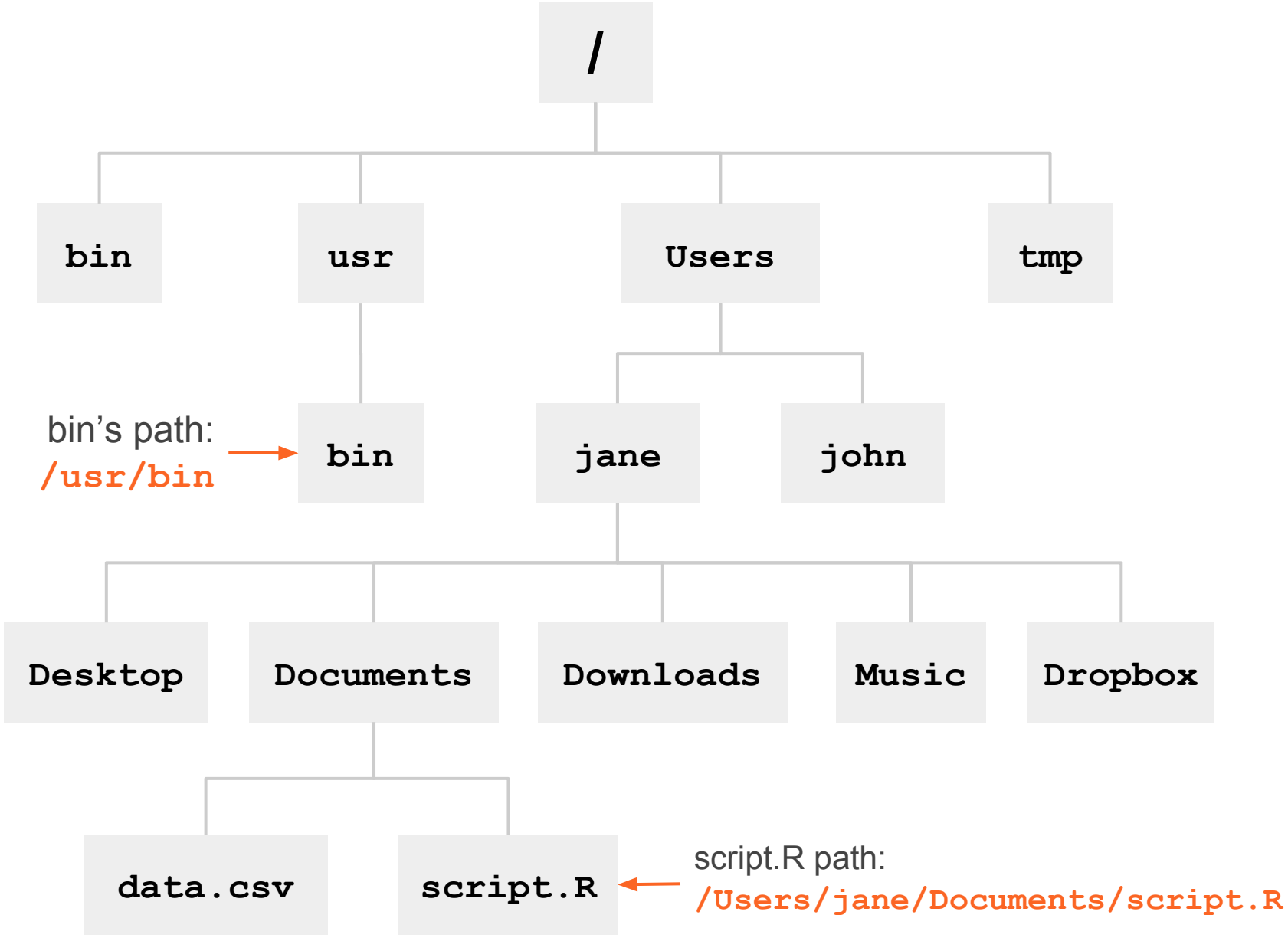
Lesson 1: Learn how to refer to the files in a project

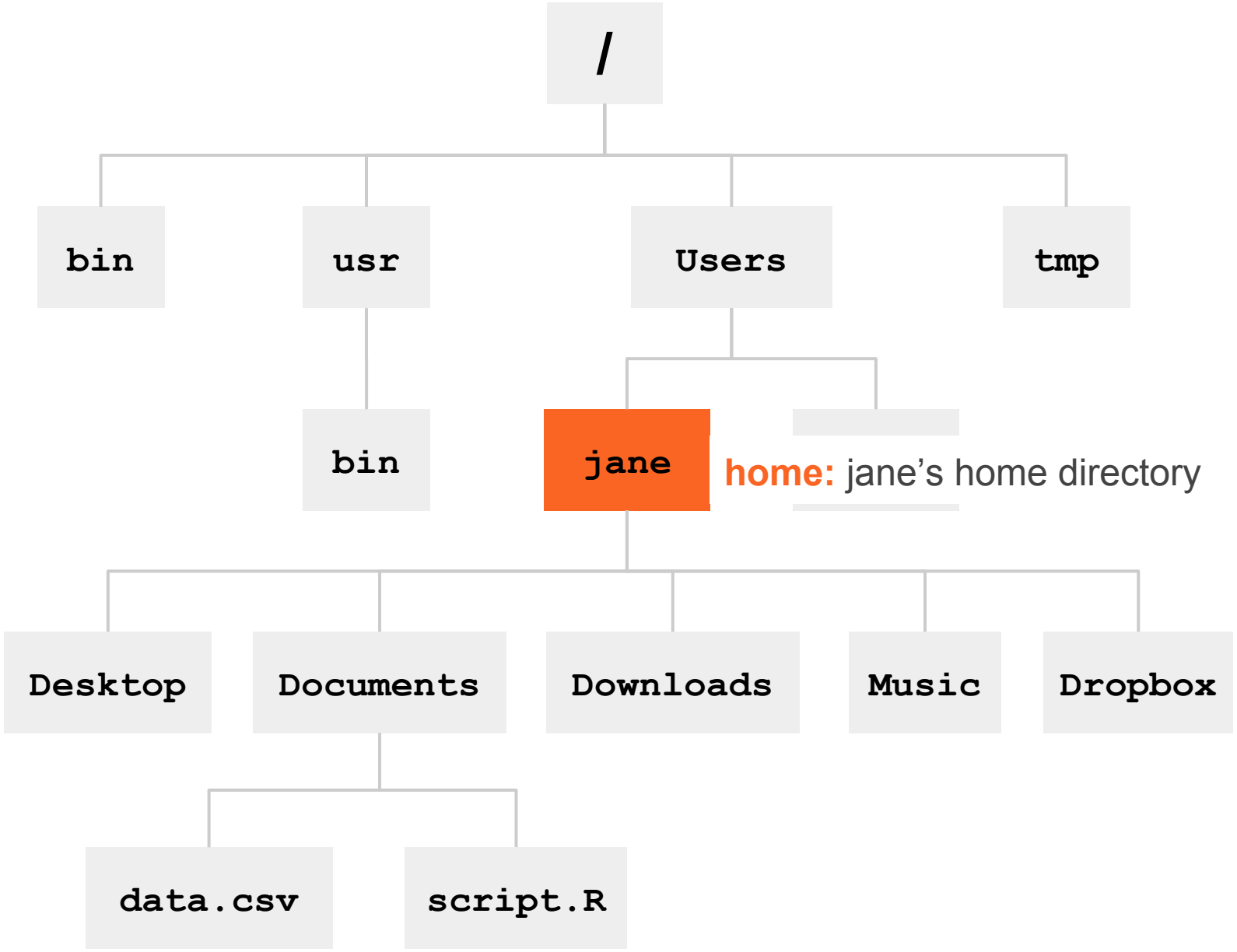

/
bin
usr
Users
tmp
john
LEARN HOW TO MOVE AND DEFINE THE LOCATION OF A FILE IN THIS TREE
Desktop
Documents
Downloads
Music
Dropbox
data.csv
script.R

Paths



Each file and directory has a unique name in the filesystem called a **path**


/
bin
usr
Users
tmp
bin's path:
/usr/bin
bin
jane
john
Desktop
Documents
Downloads
Music
Dropbox
data.csv
script.R
script.R path:
/Users/jane/Documents/script.R


/
bin
usr
Users
tmp
bin
jane
home: jane's home directory
Desktop
Documents
Downloads
Music
Dropbox
data.csv
script.R

Special Directories

`/`	root directory
`~`	home directory (i.e. `/home/user`)
`.`	current directory
`..`	parent directory

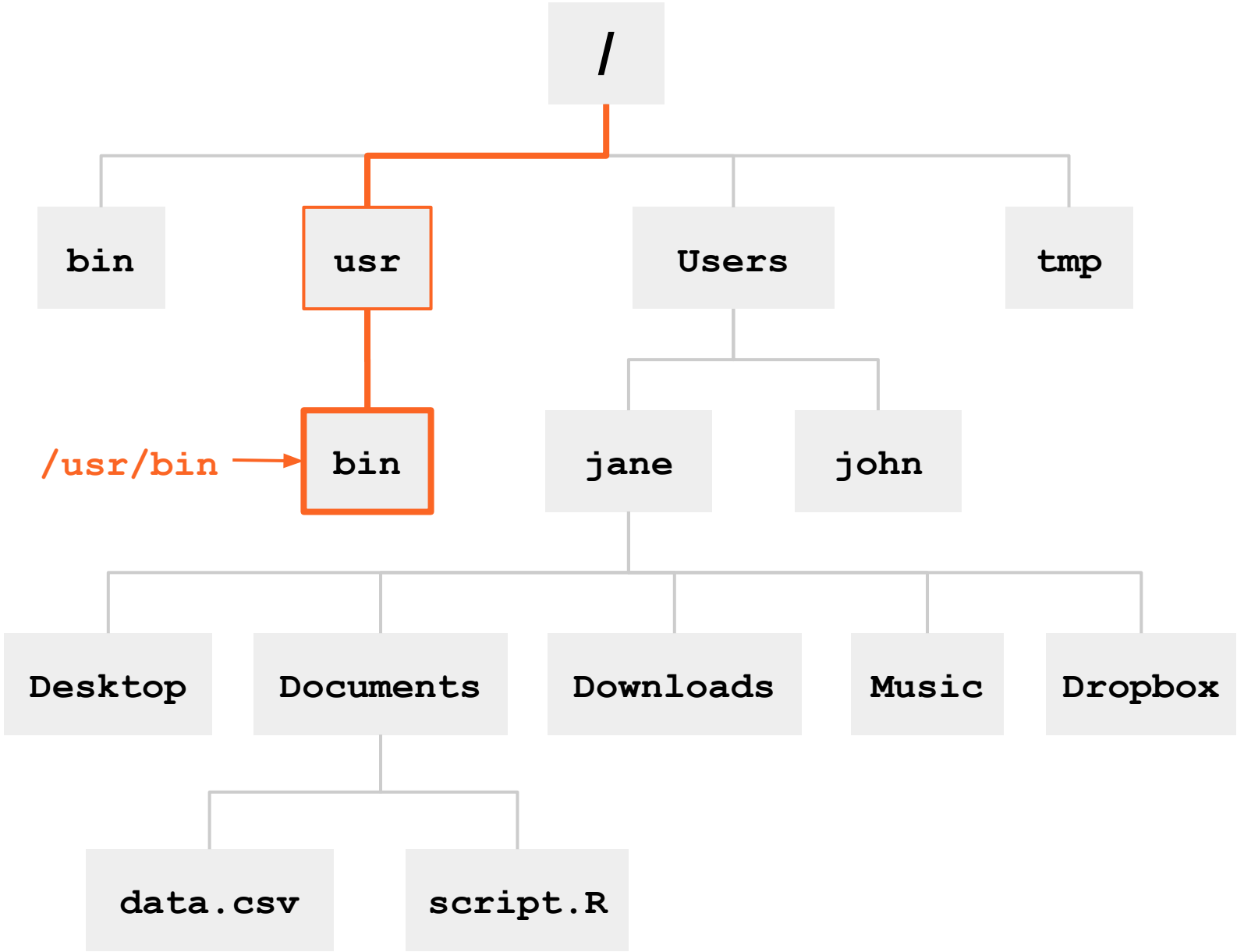
Absolute Paths

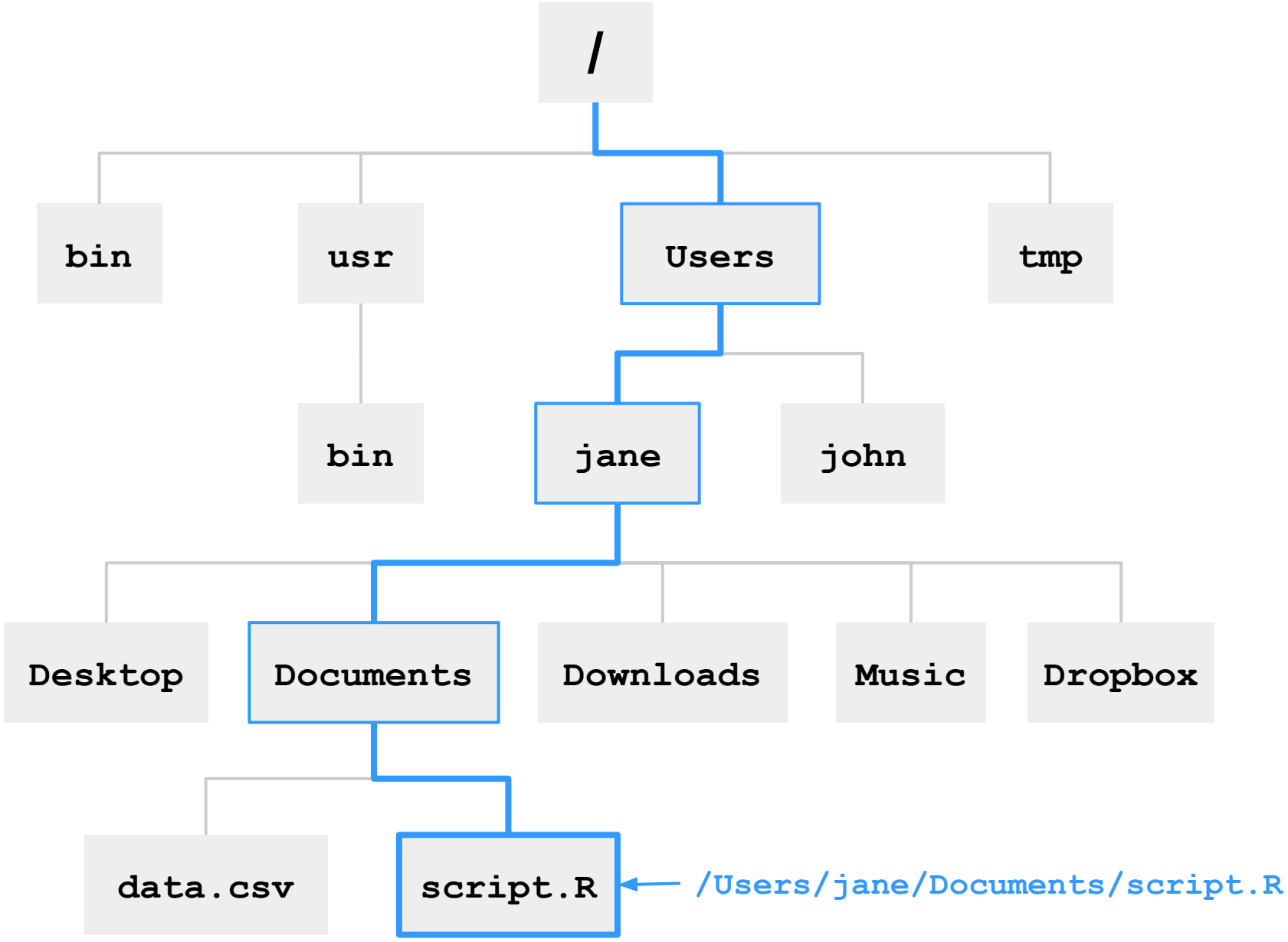
Absolute paths: an absolute pathname begins with the root directory and follows the tree branch by branch

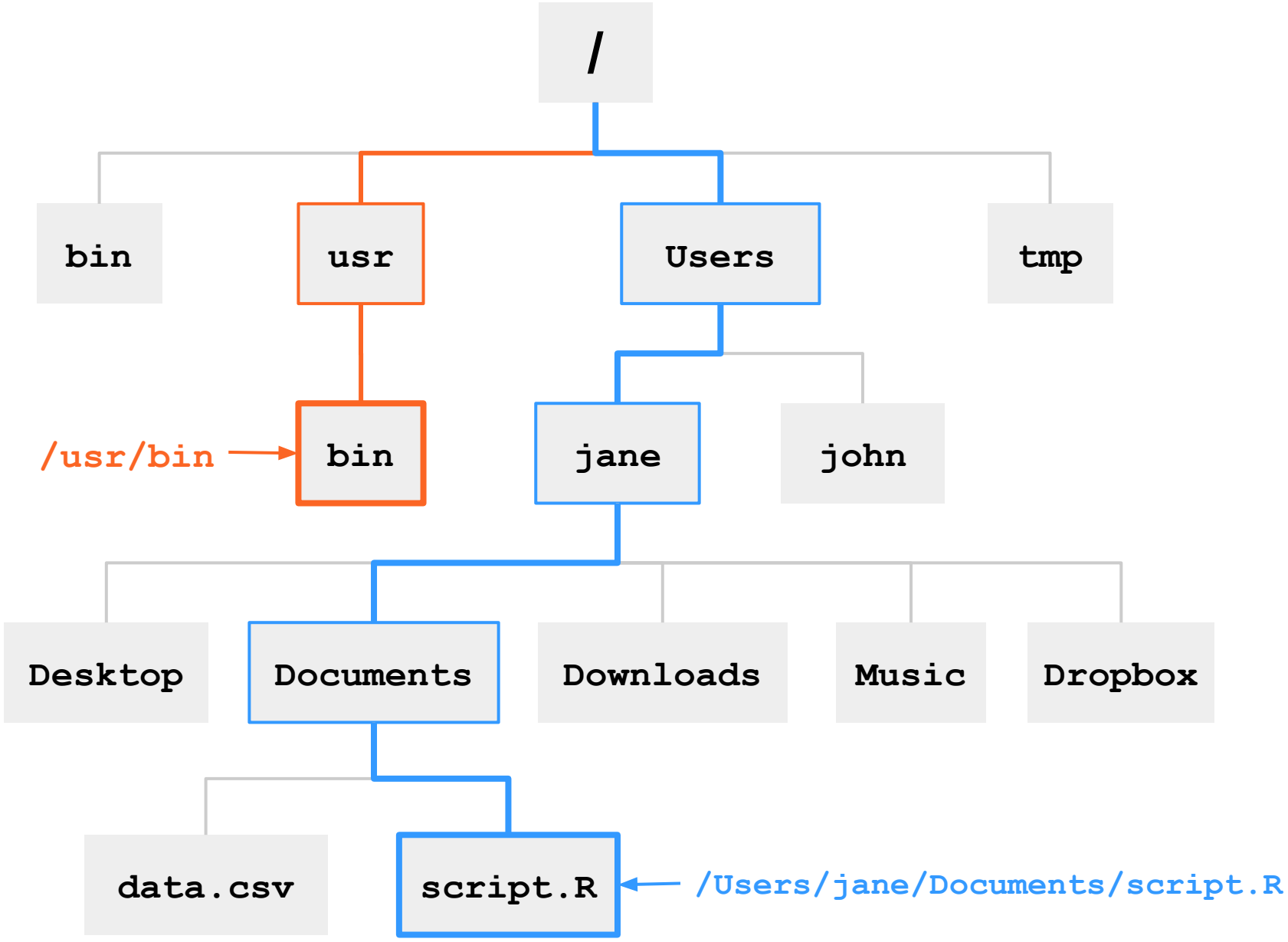
```
/A/B/C/D
```

The firts slash is the root directory

Subsequent slashes separate directories


/
bin
usr
Users
tmp
/usr/bin
bin
jane
john
Desktop
Documents
Downloads
Music
Dropbox
data.csv
script.R


/
bin
usr
Users
tmp
bin
jane
john
Desktop
Documents
Downloads
Music
Dropbox
data.csv
script.R
/Users/jane/Documents/script.R

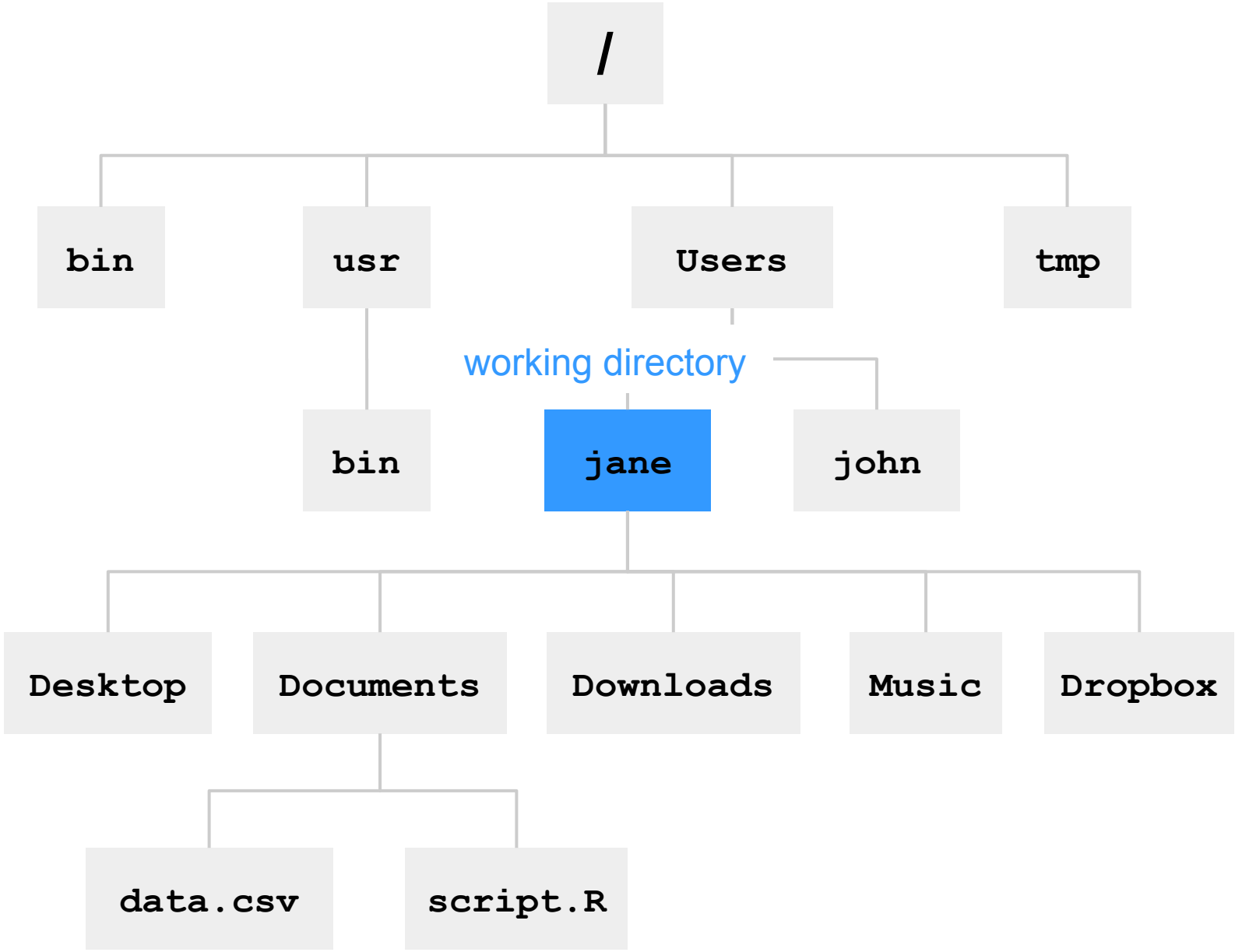

/
bin
usr
Users
tmp
/usr/bin
bin
jane
john
Desktop
Documents
Downloads
Music
Dropbox
data.csv
script.R
/Users/jane/Documents/script.R

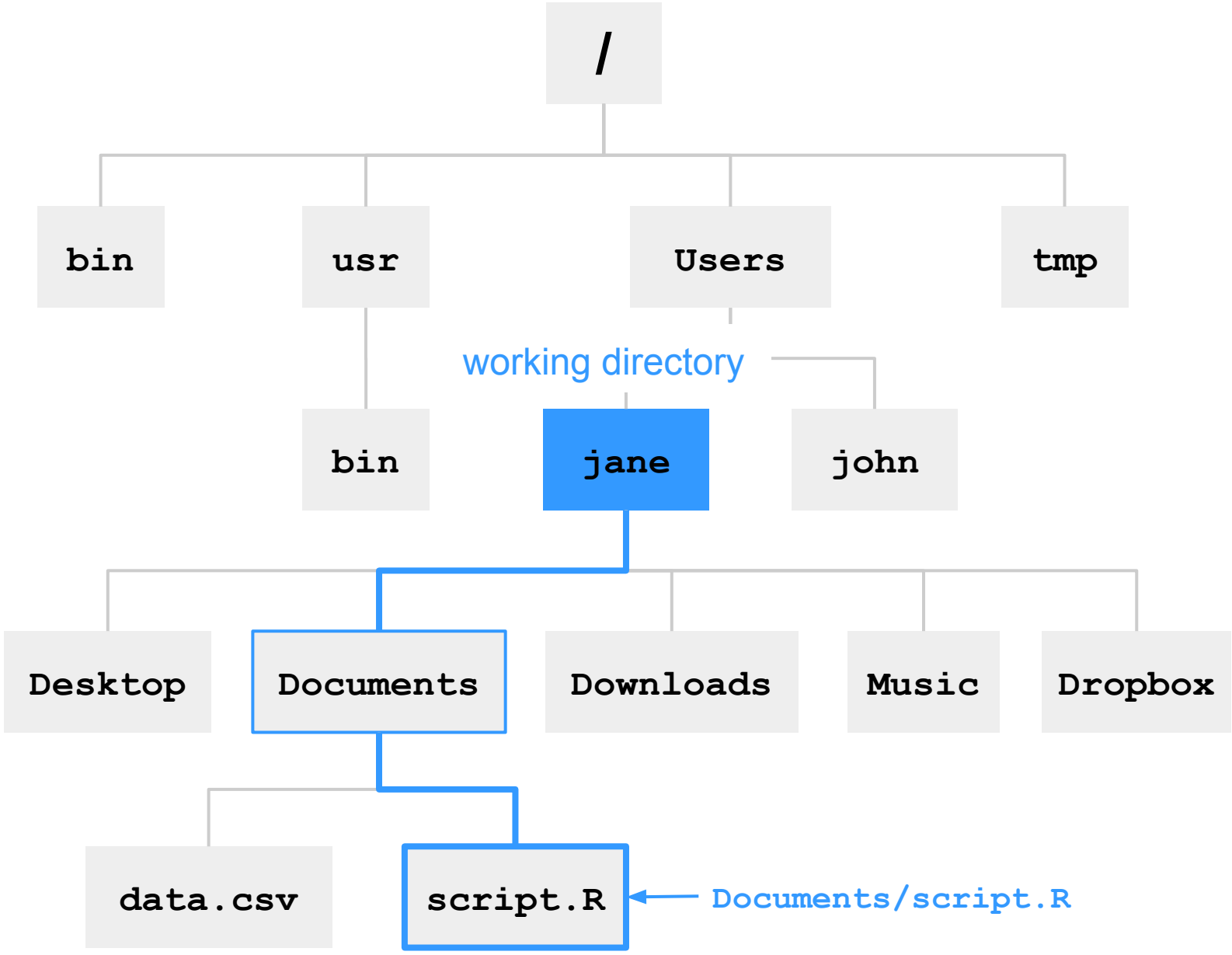
Relative Paths

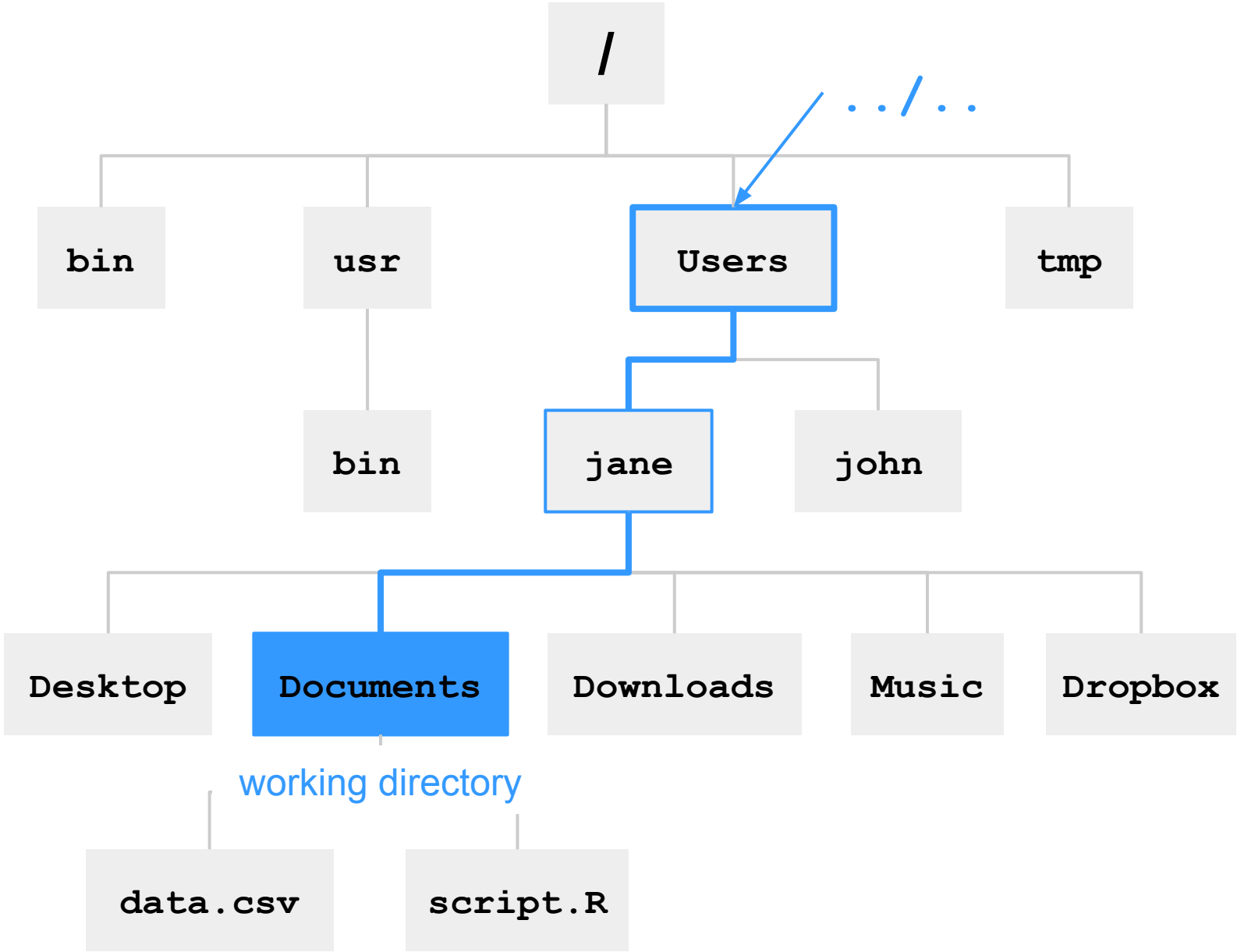
Relative paths: a relative pathname begins at some working directory, moving either up or down the tree

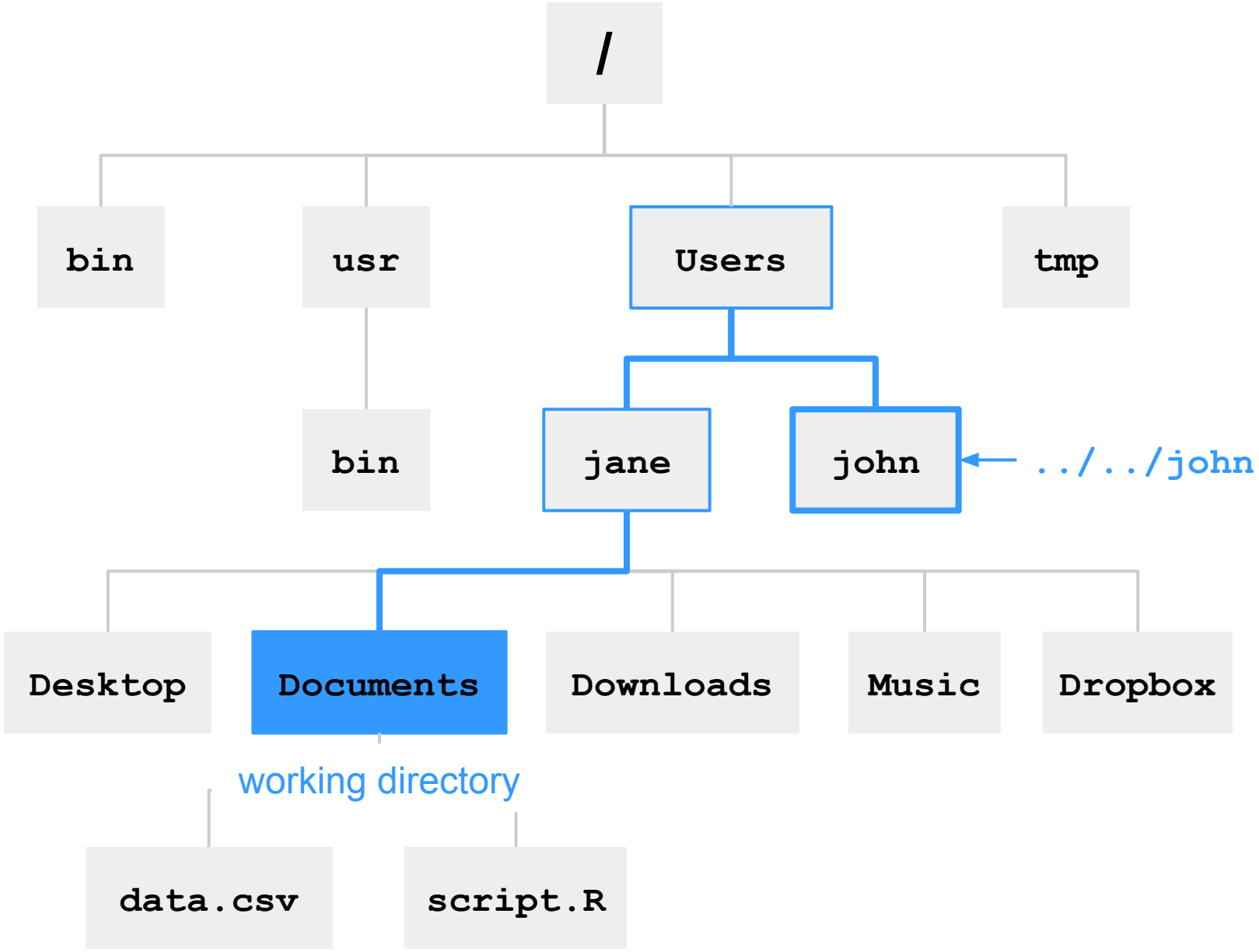
```
../C
```

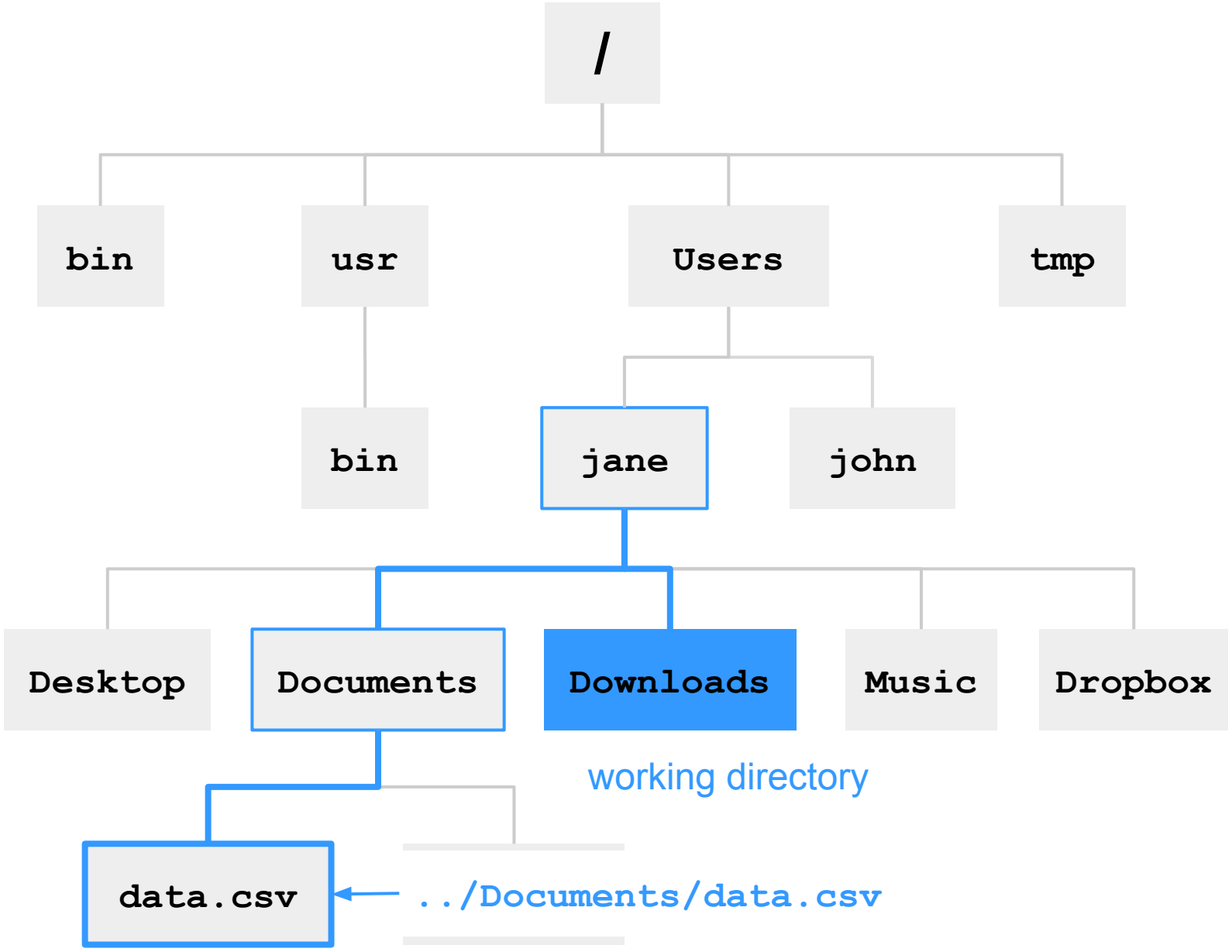
```
./B
```


/
bin
usr
Users
tmp
working directory
bin
jane
john
Desktop
Documents
Downloads
Music
Dropbox
data.csv
script.R

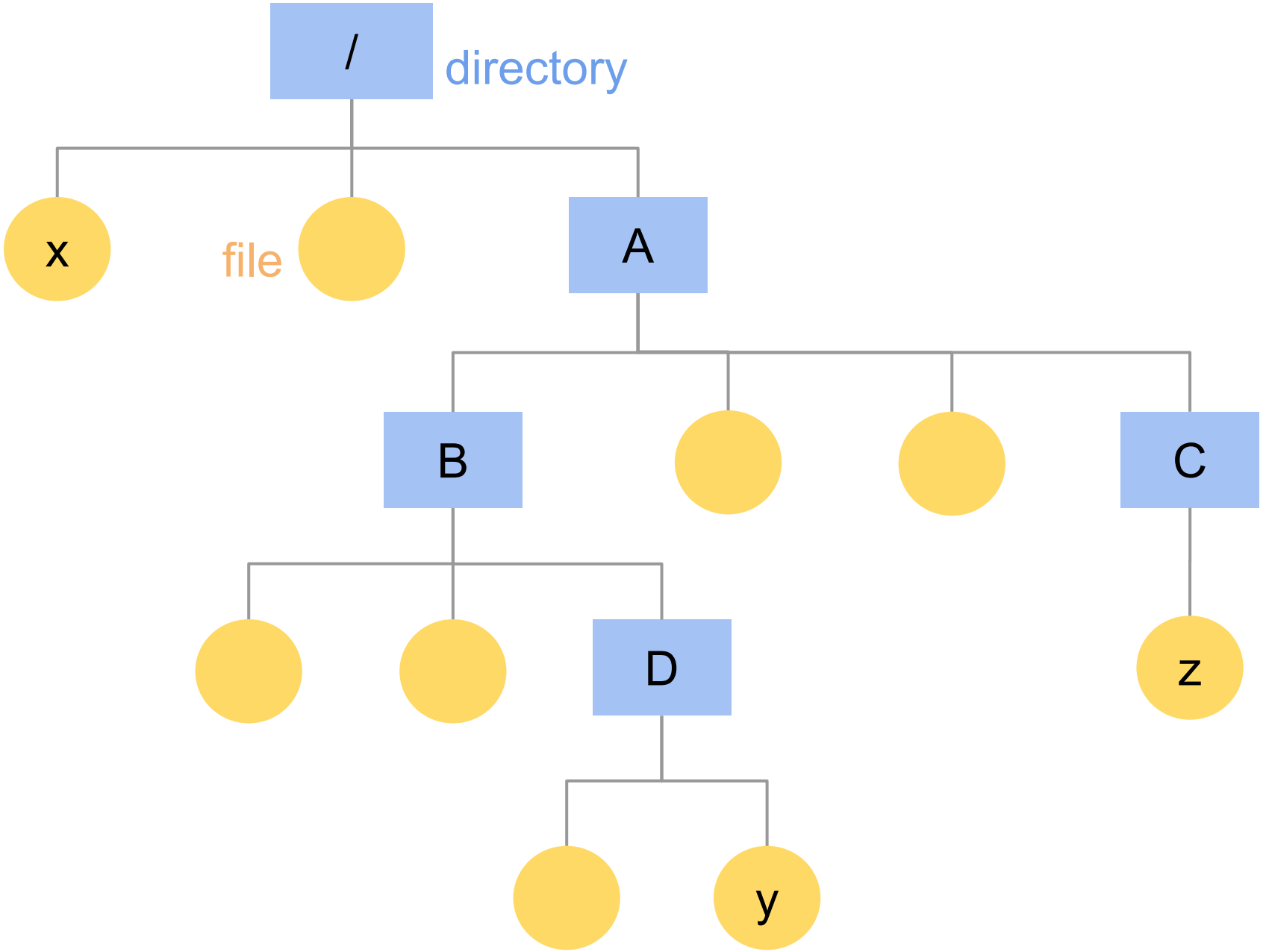

/
bin
usr
Users
tmp
working directory
bin
jane
john
Desktop
Documents
Downloads
Music
Dropbox
data.csv
script.R
Documents/script.R


/
../..
bin
usr
Users
tmp
bin
jane
john
Desktop
Documents
Downloads
Music
Dropbox
working directory
data.csv
script.R


/
bin
usr
Users
tmp
bin
jane
john
../../john
Desktop
Documents
Downloads
Music
Dropbox
working directory
data.csv
script.R


/
bin
usr
Users
tmp
bin
jane
john
Desktop
Documents
Downloads
Music
Dropbox
working directory
data.csv
../Documents/data.csv

Your turn


/
directory
x
file
A
B
C
D
z
y

Write the following Absolute Paths

From root to C:

From root to z:

From A to y:

From A to z:

Write the following Relative Paths

From D to C:

To x from within C:

To y in D from within C: