

# Ling 5200

## Day 2: Introduction to Unix

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# Logging on for the first time

- First thing to do: change your password.
- `passwd`
- Give it your current password, then your new password. Repeat the new one.  
(Why?)

# Connecting with another computer

```
ssh -l your_name babel.colorado.edu
```

You are prompted to log in.

# Logging on for the first time, again

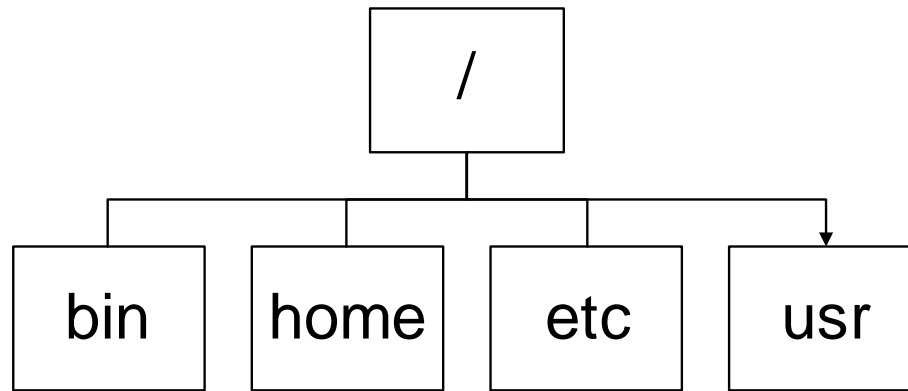
- First thing to do: change your password.
- `passwd`
- Give it your current password, then your new password. Repeat the new one.  
(Why?)

# Where am I?

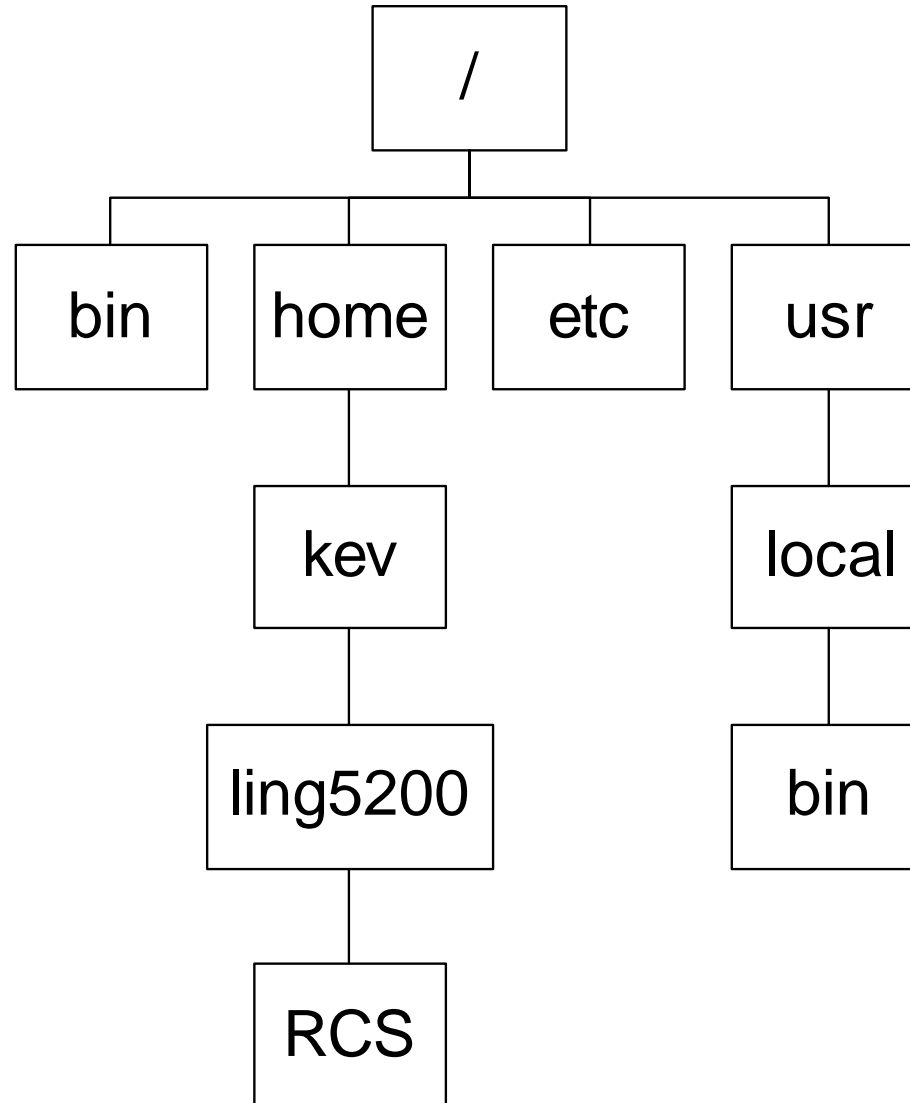
- Type `pwd`
- You see something like this:

```
/home/kev
```

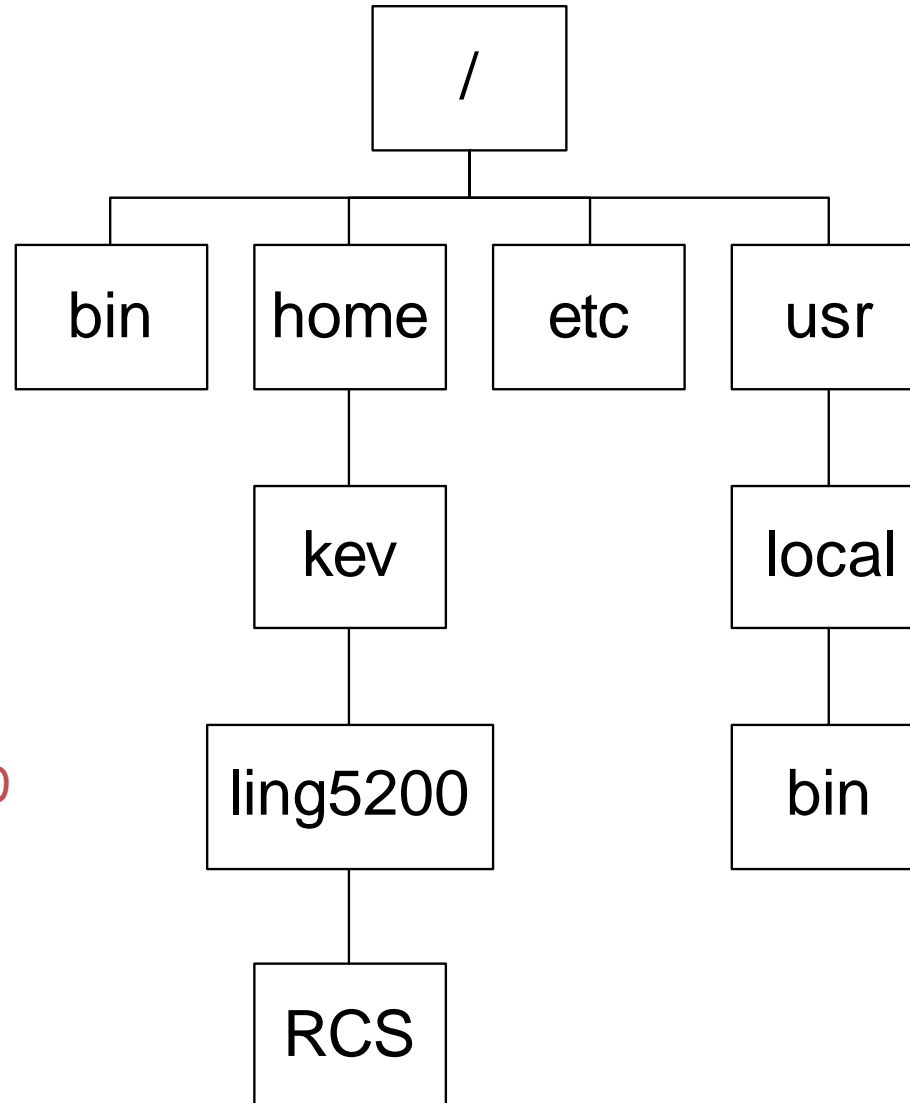
# What's that mean??



# Important directories

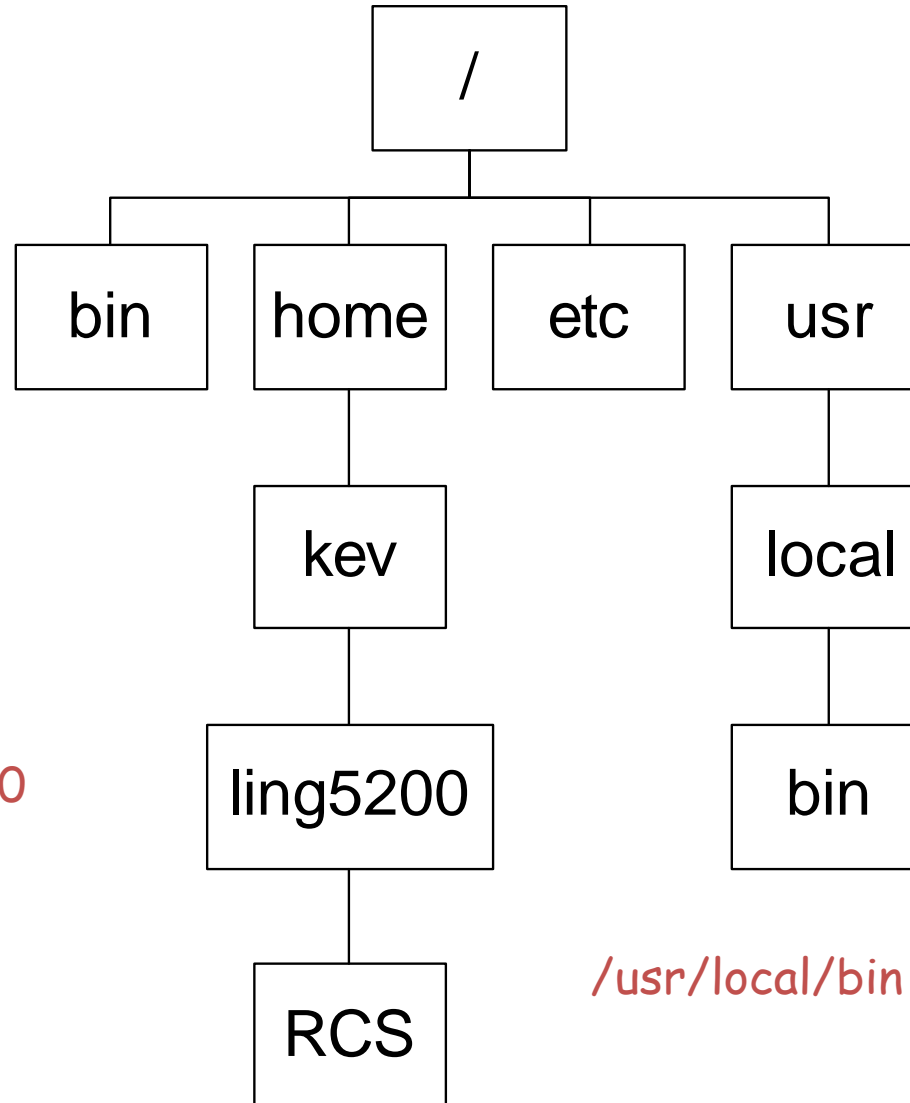


# Important directories



*/home/kev/ling5200*

# Important directories



*/home/kev/ling5200*

*/usr/local/bin*

# Navigating directories

- `ls` to list contents, `cd` to navigate
- `/home/kev` shortcut: `~`
- “the directory above this one”: `..`
- “this directory”: `.`

# What's in the neighborhood?

- Type `ls`
- You see a list of directories and files that are contained within the current directory

```
Homework_1.txt
```

```
tools
```

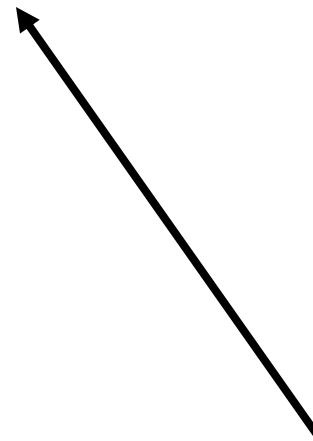
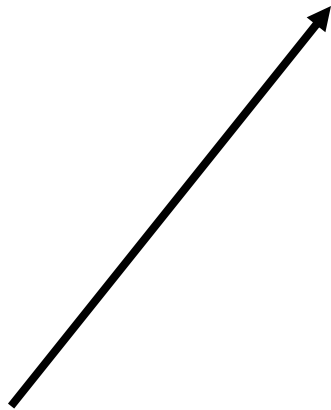
```
buglog.txt
```

# I'd like to go somewhere else...

- Type `pwd`
- Type `cd`
- Where are you?
- Type `cd ..`
- Where are you?
- Type `cd your_user_id`
- Where are you?

Unix is a verb-initial language

cd ..



"go"

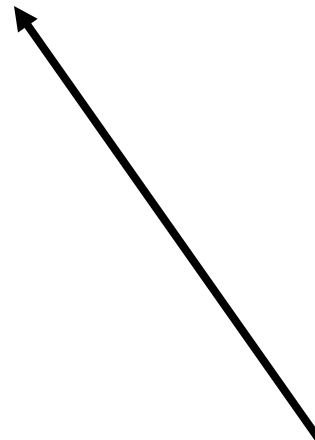
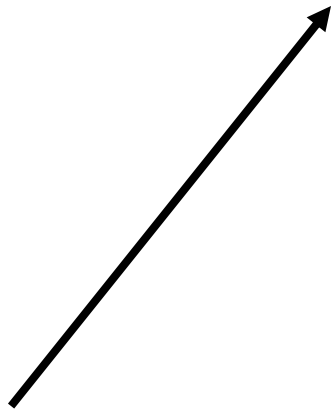
where to go

# Unix is a verb-initial language

cd

"go"

If no argument, I assume  
you mean "home"



# Making a new directory

- Type `cd`
- Type `ls`
- Type `mkdir ling5200`
- Type `ls`
- Go to the directory you just made (how?)
- Type `pwd`
- Type `ls`

# The grammar of Unix so far

- `ssh -l my_name babel.colorado.edu`  
(connect with babel)
- `pwd` (where am I?)
- `ls` (what's here?)
- `cd` (I want to go somewhere else)
- `mkdir`

# Switches: Unix adverbs

- options that you specify
- `ls -l`: long listings
- `ls -a`: show hidden files, too
- `ls -t`: sort by time
- `ls -lat`: show all files, in long format, sorted by time

# Switches

```
babel>ls
5200          firstLab.txt~  kev          kevin
firstLab.txt  junk          kevi         nsmail
babel>ls -l
total 9
drwxr-xr-x   4 kev          512 Aug 23 18:39 5200
-rw-r--r--   1 kev        1289 Aug 28 09:53 firstLab.txt
-rw-r--r--   1 kev          583 Aug 28 09:36 firstLab.txt~
-rw-r--r--   1 kev           12 Aug 28 09:47 junk
-rw-r--r--   1 kev           12 Aug 28 09:45 kev
-rw-r--r--   1 kev           13 Aug 28 00:07 kevi
-rw-r--r--   1 kev           14 Aug 28 00:07 kevin
drwx-----  2 kev          512 Aug 28 13:42 nsmail
babel>
```

# Arguments: objects

- No argument allowed:
  - `pwd`
- Argument required:
  - `mkdir`

```
[kev@compbio kev]$ mkdir
```

```
mkdir: too few arguments
```

```
Try `mkdir --help' for more information.
```

```
[kev@compbio kev]$
```

# Arguments

- Argument(s) optional:
  - `cd` (no arg—what happens?)
  - `cd ..` (arg is ..—what happens?)

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  - `ls` (no arg—what happens?)
  - `ls .cshrc` (arg is `.cshrc`)

# Arguments

- Argument(s) optional:

- `cd` (no arg—what happens?)

- `cd ..` (arg is `..`—what happens?)

- `ls` (no arg—what happens?)

- `ls .cshrc` (arg is `.cshrc`)

```
babel>ls .cshrc
```

```
.cshrc
```

File named `.cshrc` exists

```
babel>ls i_like_my_dog
```

```
i_like_my_dog not found
```

File named `i_like_my_dog`  
doesn't exist

# Wildcards

- Underspecified objects
- Syntax: combine with any amount of the name of an argument
- Examples:
  - ls ling\*
  - ls linguistics\*
  - ls \*linguistics

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- Syntax: combine with any amount of the name of an argument
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  - ls ling\*
  - ls linguistics\*
  - ls \*linguistics

Semantics: “allow zero or more of any character(s) here”

Show me:

ling

linguist

linguistics

```
babel>pwd
/home/kev/demo_wildcards
babel>ls
ling
linguistic_anthropology
linguistic_phonetics
linguistics
linguistics_and_the_law
linguists
morphology
phonetics
psycholinguistics
sociolinguistics
```

```
babel>ls  
ling  
linguistic_anthropology  
linguistic_phonetics  
linguistics  
linguistics_and_the_law  
linguists  
morphology  
phonetics  
psycholinguistics  
sociolinguistics
```

```
babel>ls ling  
ling  
babel>ls ling*  
ling  
linguistic_anthropology  
linguistic_phonetics  
linguistics  
linguistics_and_the_law  
linguists
```

```
babel>ls  
ling  
linguistic_anthropology  
linguistic_phonetics  
linguistics  
linguistics_and_the_law  
linguists  
morphology  
phonetics  
psycholinguistics  
sociolinguistics
```

```
babel>ls linguist*
```

```
babel>ls  
ling  
linguistic_anthropology  
linguistic_phonetics  
linguistics  
linguistics_and_the_law  
linguists  
morphology  
phonetics  
psycholinguistics  
sociolinguistics
```

```
babel>ls linguist*  
linguistic_anthropology  
linguistic_phonetics  
linguistics  
linguistics_and_the_law  
linguists
```

```
babel>ls
```

```
ling
```

```
linguistic_anthropology
```

```
linguistic_phonetics
```

```
linguistics
```

```
linguistics_and_the_law
```

```
linguists
```

```
morphology
```

```
phonetics
```

```
psycholinguistics
```

```
sociolinguistics
```

```
babel>ls *linguistics
```

```
babel>ls  
ling  
linguistic_anthropology  
linguistic_phonetics  
linguistics  
linguistics_and_the_law  
linguists  
morphology  
phonetics  
psycholinguistics  
sociolinguistics
```

```
babel>ls *linguistics  
linguistics  
psycholinguistics  
sociolinguistics
```

```
babel>ls
```

```
ling
```

```
linguistic_anthropology
```

```
linguistic_phonetics
```

```
linguistics
```

```
linguistics_and_the_law
```

```
linguists
```

```
morphology
```

```
phonetics
```

```
psycholinguistics
```

```
sociolinguistics
```

```
babel>ls *ics
```

```
babel>ls  
ling  
linguistic_anthropology  
linguistic_phonetics  
linguistics  
linguistics_and_the_law  
linguists  
morphology  
phonetics  
psycholinguistics  
sociolinguistics
```

```
babel>ls *ics  
linguistic_phonetics  
linguistics  
phonetics  
psycholinguistics  
sociolinguistics
```

```
babel>ls
```

```
ling
```

```
linguistic_anthropology
```

```
linguistic_phonetics
```

```
linguistics
```

```
linguistics_and_the_law
```

```
linguists
```

```
morphology
```

```
phonetics
```

```
psycholinguistics
```

```
sociolinguistics
```

```
babel>ls *and*
```

```
babel>ls  
ling  
linguistic_anthropology  
linguistic_phonetics  
linguistics  
linguistics_and_the_law  
linguists  
morphology  
phonetics  
psycholinguistics  
sociolinguistics
```

```
babel>ls *and*  
linguistics_and_the_law
```

# Switches + Arguments

- You can combine them.
  - Switches come first.
- `ls -lt li*`
- “List everything that starts with *li* followed by zero or more of any other character...
- ...show me the “long” version...
- ...and arrange them by “time.”

# Two ways of specifying location

- Relative: walk out the door. Take stairs to first floor. Exit building from east. Take 36 to I-70. Get off at Vasquez exit. Merge onto Colorado. Turn left onto 23<sup>rd</sup>. Turn right onto Krameria. Go to next block. Go to house on southwest corner.

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- Relative: walk out the door. Take stairs to first floor. Exit building from east. Take 36 to I-70. Get off at Vasquez exit. Merge onto Colorado. Turn left onto 23<sup>rd</sup>. Turn right onto Krameria. Go to next block. Go to house on southwest corner.
- Absolute: Go to 2089 Krameria St., Denver, CO.

# I'm in /home/kev, and I want to see the contents of /home

- Using relative path:

```
ls ..
```

- Using absolute path:

```
ls /home
```

# I'm in `/home/kev`, and I want to see the contents of `/home/jurafsky`

- Using relative path:

```
ls ../jurafsky
```

- Using absolute path:

```
ls /home/jurafsky
```

