

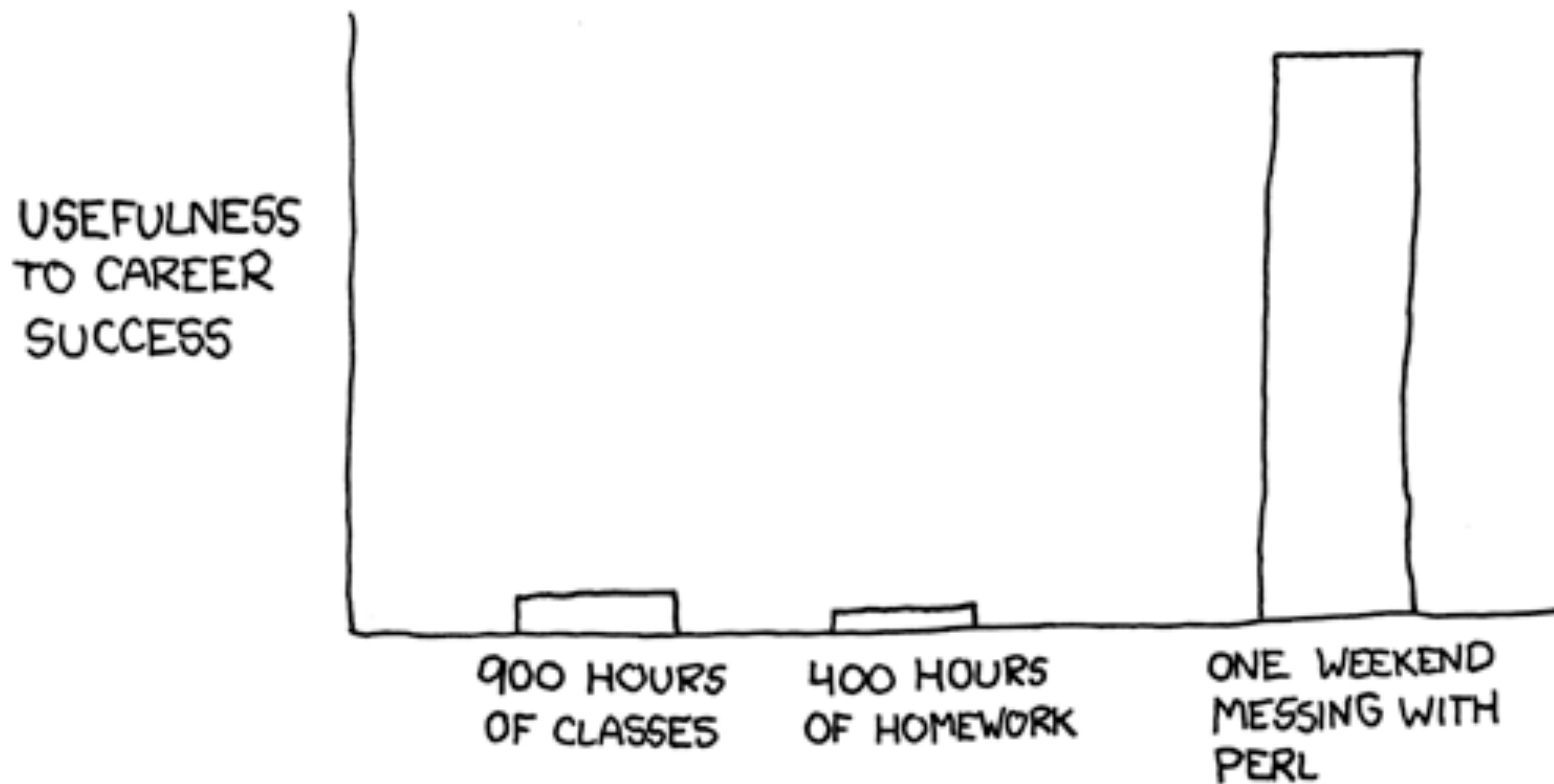
# 10x Command Line-Fu

How to look cooler at Starbucks

How to understand more XKCD comics

<https://github.com/epylkn/itp-command-fu>

# 11TH-GRADE ACTIVITIES:



# Why am I here? Why practice command-fu?

- You use the command line at work
- You use it to bootstrap your code projects
- Automating tasks you do frequently
- Anthony seems like a cool guy I wonder what he has to say

The command line is  
incredibly expressive and  
powerful. It can help you be  
more productive and  
automate mundane tasks.

# Our Roadmap

- standard unix bash commands
- chaining, pipes and output redirection
- alias, shell functions, and your first shell script
- scripting with javascript
- cron, .bashrc, and .bash\_profile
- homebrew - the package manager for OSX

**/bin/bash**

**Mac's run Unix.**

**Developers love Unix.**

**Unix is awesome.**

**You can be awesome.**

# Standard unix bash commands

## The basics

`cd` – change directory

`ls` – list files

`pwd` – current working directory

`cp` – copy

`mv` – move

`mkdir` – make directory

`rm` – remove

`cat` – concatenate

# Standard unix bash commands

## More advanced commands

say

history

head / tail

curl

time

watch

grep

find

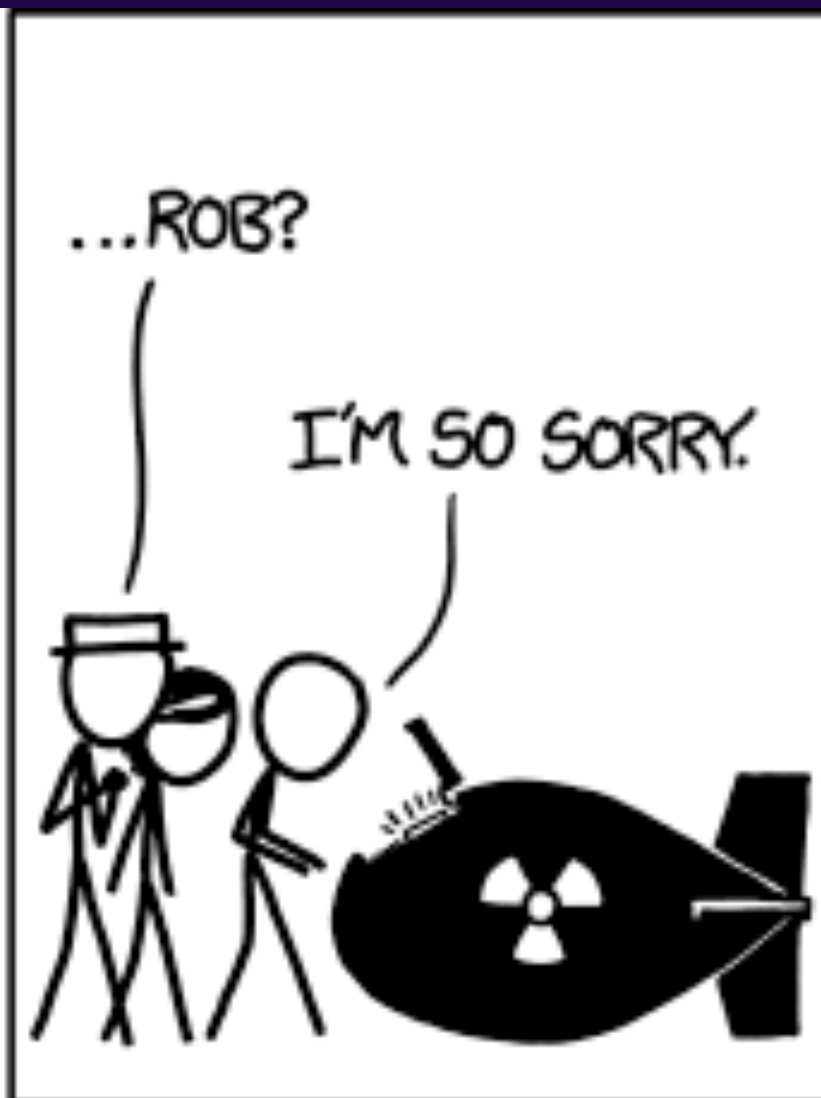
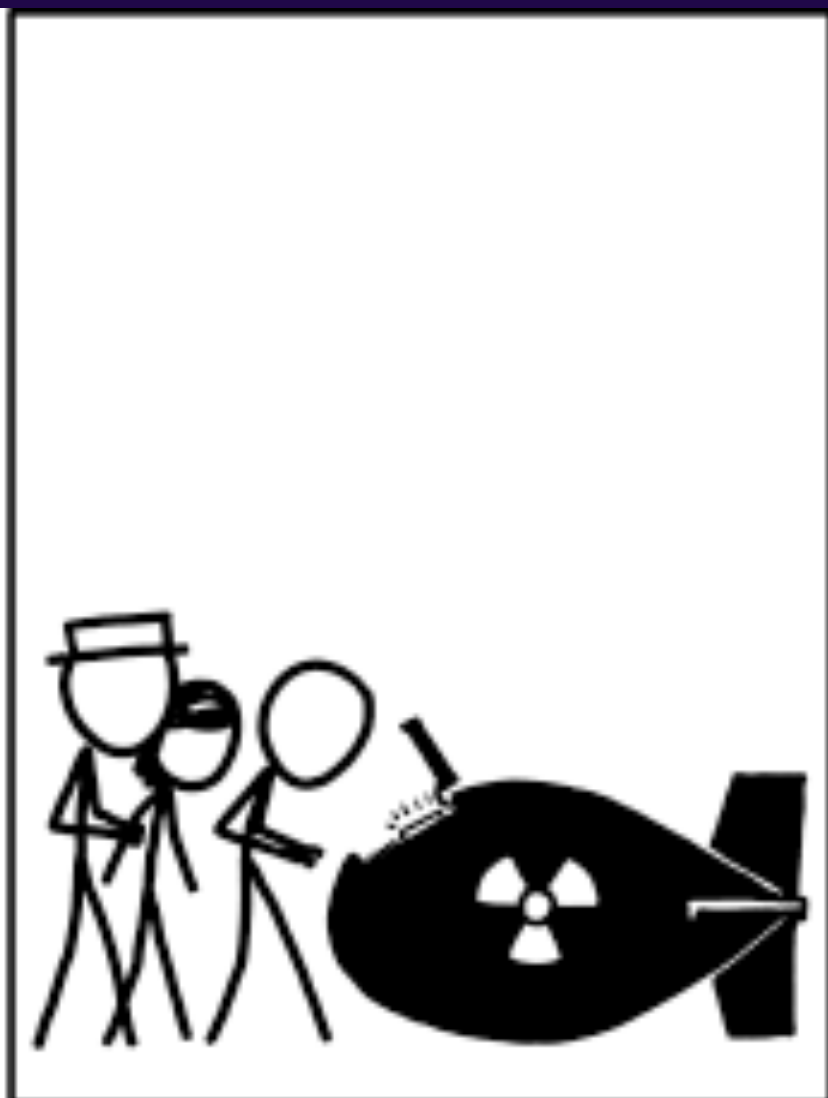
xargs

ssh



# Structure of a command

```
$ command --option option_argument x (y z ...)
```



```
tar czvf myTarball.tar.gz .
```

# say cheese

Simple command to make terminal say something.

say why cant we be friends

## Extra credit:

say --voice ?

say --voice "Bad News" The light you see at the end of the tunnel is the headlamp of a fast approaching train.

# history repeats itself

history

echo goodbye world

history

!-2

history

# heads or tails

```
head camp.txt
```

```
head -n50 camp.txt
```

```
tail camp.txt
```

## Extra Credit:

```
tail -f camp.txt
```

```
echo foo >> camp.txt
```

alias and your first shell script!

# curly fries

```
curl itpcalendar.herokuapp.com/calendar
```

```
curl wttr.in
```

```
open -a "Google Chrome" http://wttr.in
```

```
curl -I ideas.ted.com
```

## Extra Credit

```
curl -XPOST slack webhook
```

```
curl -o itp-calendar.html http://itp.nyu.edu/camp2016/session/238
```

```
# copy a cURL command from chrome inspector
```



# Steal an entire site with wget

<http://www.linuxjournal.com/content/downloading-entire-web-site-wget>

```
$ wget \
  --recursive \
  --no-clobber \
  --page-requisites \
  --html-extension \
  --convert-links \
  --restrict-file-names=windows \
  --domains blankslate.io \
  --no-parent \
  blankslate.io
```

# Chaining commands

```
false || echo "Oops, fail"  
# => Oops fail
```

```
true || echo "Will not be printed"  
# =>
```

```
true && echo "Things went well"  
# => Things went well
```

```
false ; echo "This will always run"  
# => This will always run
```

# Output redirection

<

# The < will take and send the input from the file on the right to the program on the left.

>

# The > takes the output of the command on the left, then writes it to the file on the right.

>>

# The >> takes the output of the command on the left, then appends it to the file on the right.

|

# The | takes the output from the command on the left, and "pipes" it to the command on the right.

# pipe

“pipe” the output of one command into the input of a second command

```
cat ~/.bash_history | grep say | tail -n20
```

# crontab -e

# Examples

```
*/1 * * * * say 'super duper'
```

# Use a login shell so that our ~/.bash\_profile gets loaded

```
*/1 * * * * /bin/bash -lc "/Users/anthony/me/itp/command-fu/03-superbole.js"
```

**\* \* \* \* \***

## Commands to be executed

Day of week (0-6) (Sunday = 0)

Month (1-12)

Day of Month (1-31)

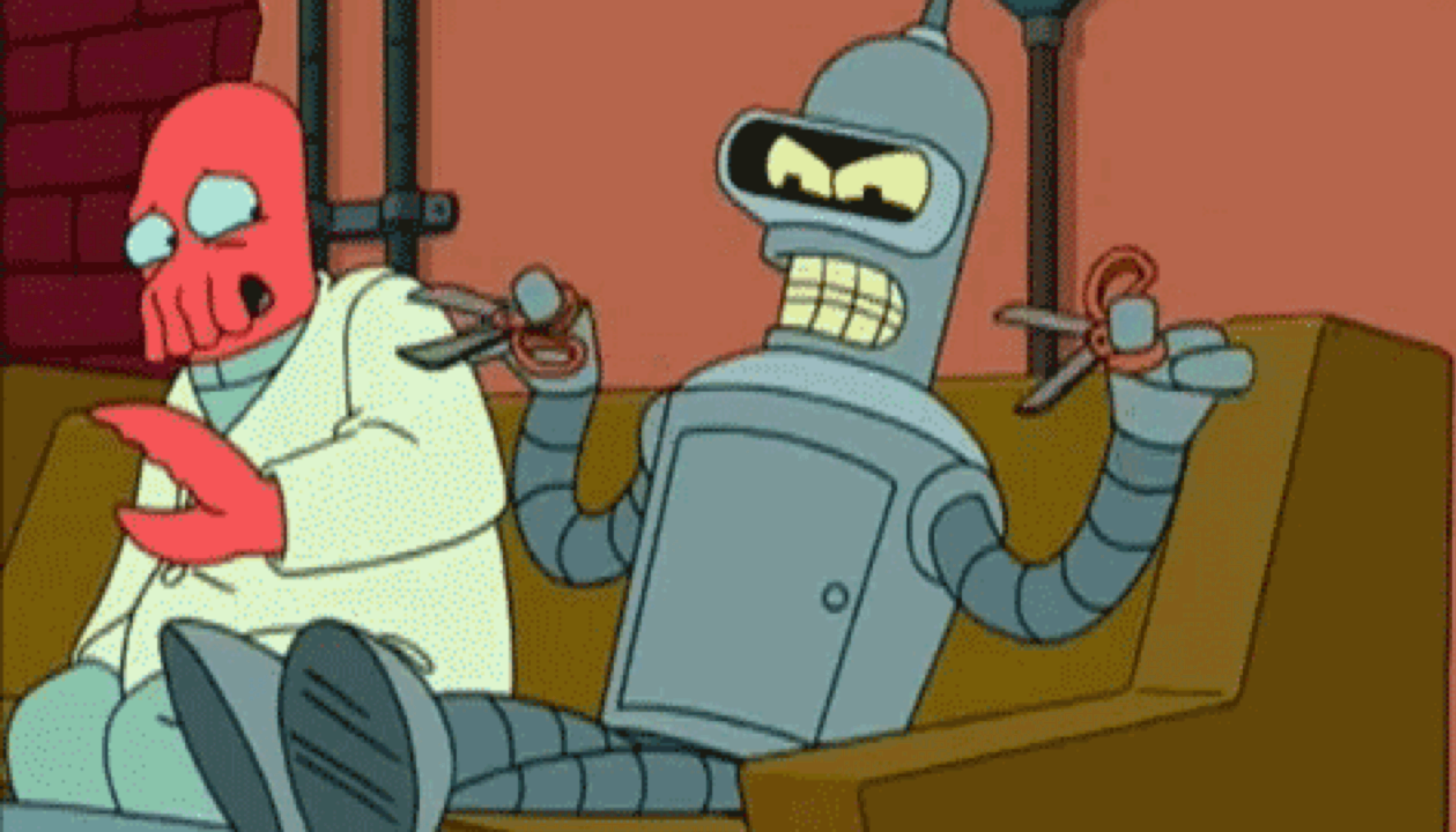
Hour (0-24)

Minute (0-59)

# Homebrew

The missing package manager for OS X







# Some homebrew recommendations

## Some homebrew recommendations:

```
brew update
brew install wget
wget https://cdn.rawgit.com/epylinkn/itp-command-fu/master/commandfu.pdf
brew install tree
tree .
brew install jq
curl itpcalendar.herokuapp.com/calendar | jq '[][.title]'

# faster and more configurable command-line search
brew install the_silver_searcher
```

# Brew Cask

```
brew install cask
```

```
brew cask info p5
```

```
brew cask install p5
```

```
open -a 'p5'
```

```
brew cask uninstall p5
```

```
brew cask search unity
```

```
brew cask install unity
```

```
#!/bin/bash
```

```
pip install "$1" &  
easy_install "$1" &  
brew install "$1" &  
npm install "$1" &  
yum install "$1" & dnf install "$1" &  
docker run "$1" &  
pkg install "$1" &  
apt-get install "$1" &  
sudo apt-get install "$1" &  
steamcmd +app_update "$1" validate &  
git clone https://github.com/"$1"/"$1" &  
cd "$1";./configure;make;make install &  
curl "$1" | bash &
```

# Resources

- <https://github.com/jlevy/the-art-of-command-line>
- <https://github.com/veltman/clmystery>



```
10  
?SYNTAX ERROR  
11  
12
```