Replace yourself with a very small shell script

Stefanie Schirmer
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@linse_ebooks

Outbreak of Markov Bots!!

King James Programming

King James Programming

Posts generated by a Markov chain trained on the King James Bible, Structure and Interpretation of Computer Programs, and Why's Poignant Guide to Ruby. Run by Michael Walker (barrucadu).

@KJV_Programming @barrucadu @HackSoc
Github KJP Rejects

> **13:30** But God raised him from the creation of still greater programs.

23 hours ago *35 notes* *#kjv* *#bible* *#sicp* *#poignant guide* *#markov chains*

> **12:16** And it shall come to pass, when he was strong, the great horn that is between his eyes is the first element of dy

1 day ago *6 notes* *#kjv* *#bible* *#sicp* *#poignant guide* *#markov chains*

> **7:10** Moreover I will deliver the inhabitants of Jerusalem, so that the sum is performed iteratively.

2 days ago *27 notes* *#kjv* *#bible* *#sicp* *#poignant guide* *#markov chains*

> Fortunately, learning to program is considerably less efficient because it performs redundant computation.

3 days ago *34 notes* *#kjv* *#bible* *#sicp* *#poignant guide* *#markov chains*

> Then you ask yourself, “Wait a minute. I thought this was a burnt offering unto the LORD, We have sinned: do thou unto us all things that thou hast dreamed?

4 days ago *52 notes* *#kjv* *#bible* *#sicp* *#poignant guide* *#markov chains*

> While you can have only one if and one else, you can fill the in-between with an exorbitant amount of cartoon foxes. And I will bring evil upon this place.

5 days ago *64 notes* *#kjv* *#bible* *#sicp* *#poignant guide* *#markov chains*

The Doom that came to Puppet

The Doom that Came to Puppet

Posts generated by a Markov chain trained on the Puppet documentation and the assorted works of H. P. Lovecraft. Created by
@branan using barrucadu/markov. Inspired by King James Programming.

> *"Replace "namegoeshere" with the function name, and even if the most drastic directions were not carried out, he must be placed where he could inflict no harm upon Charles Ward."*

5 months ago

> *"Things–presences or voices of some sort–could be drawn down from unknown places as well as to standard out."*

5 months ago

> *"Some of the upper levels were wholly vacant, but most of the space was filled with small odd-looking leaden jars of two general types; one tall and without handles like a Grecian lekythos or oil-jug, and the other with a single resource type"*

5 months ago

Erowid Recruiter

The easy way

Better twitterbots for all your friends~

208 commits | 2 branches | 0 releases | 17 contributors

branch: master | twitter_ebooks / +

Merge pull request #68 from prichey/master ...

mispy authored 4 days ago — latest commit f22ca8841c

bin	added append command usage is: ebooks append model path/to/corpus.csv	29 days ago
data	Fix file permissions	a year ago
lib	Merge pull request #82 from negatendo/consume_append	4 days ago
skeleton	Bot can now respond to favorite events.	5 months ago
spec	Spec tests updates	5 months ago
.gitignore	Lots of documentation and cleanup	6 months ago
.rspec	Memory optimization	8 months ago
.travis.yml	INTERNAL_CONSTANTS is really recent	7 months ago
Gemfile	rspec and memory_profiler	8 months ago
LICENSE	Fix file permissions	a year ago
README.md	Merge pull request #68 from prichey/master	4 days ago
Rakefile	Fix file permissions	a year ago
twitter_ebooks.gemspec	3.0.7 - remove eventmachine dependency	5 months ago

README.md

twitter_ebooks

gem version 3.1.0 | build passing | dependencies up-to-date

A framework for building interactive twitterbots which respond to mentions/DMs. See ebooks_example for a fully-fledged bot definition.

HTTPS clone URL

https://github.com/t

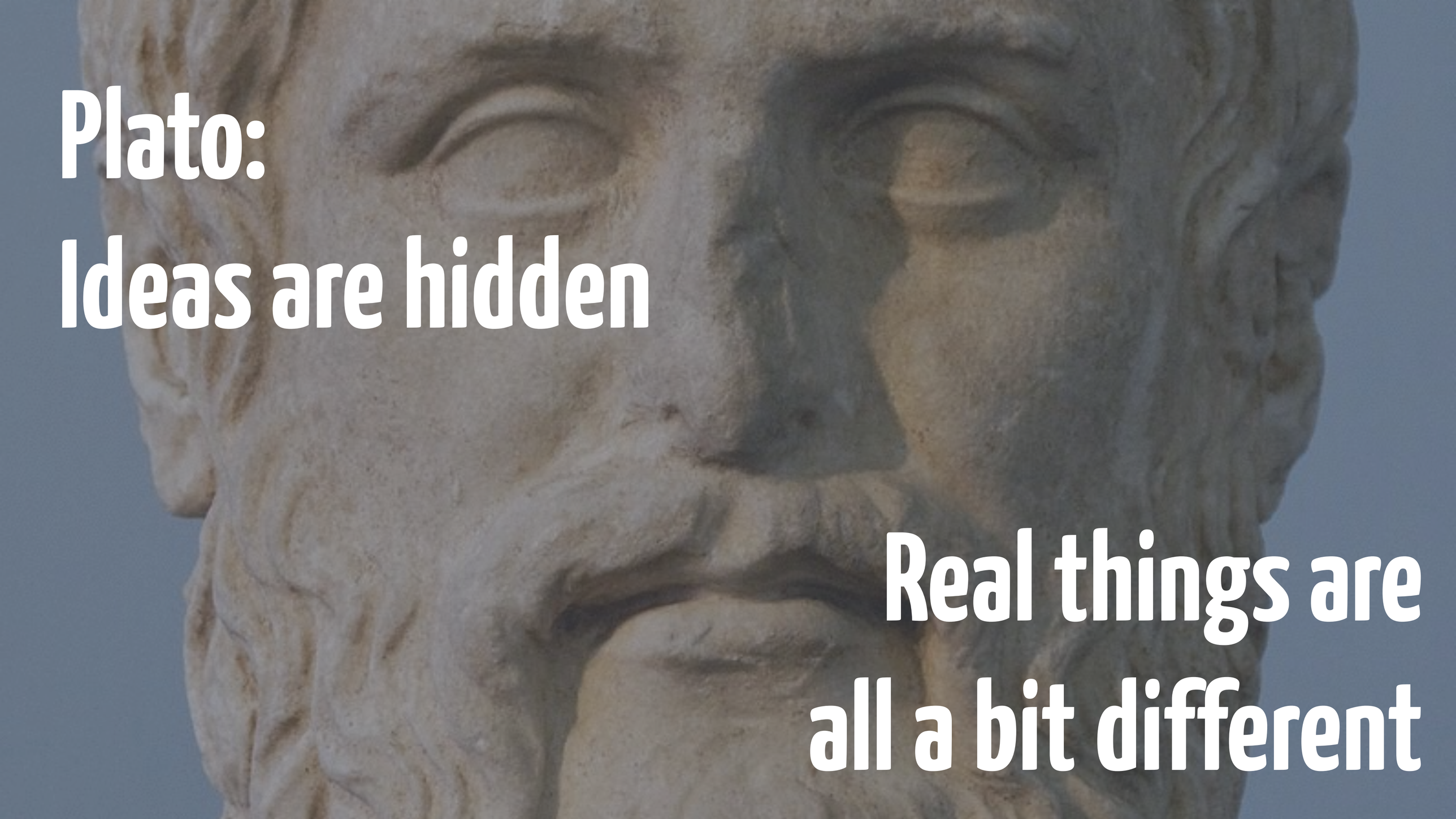
You can clone with HTTPS, SSH, or Subversion.

Clone in Desktop

Download ZIP

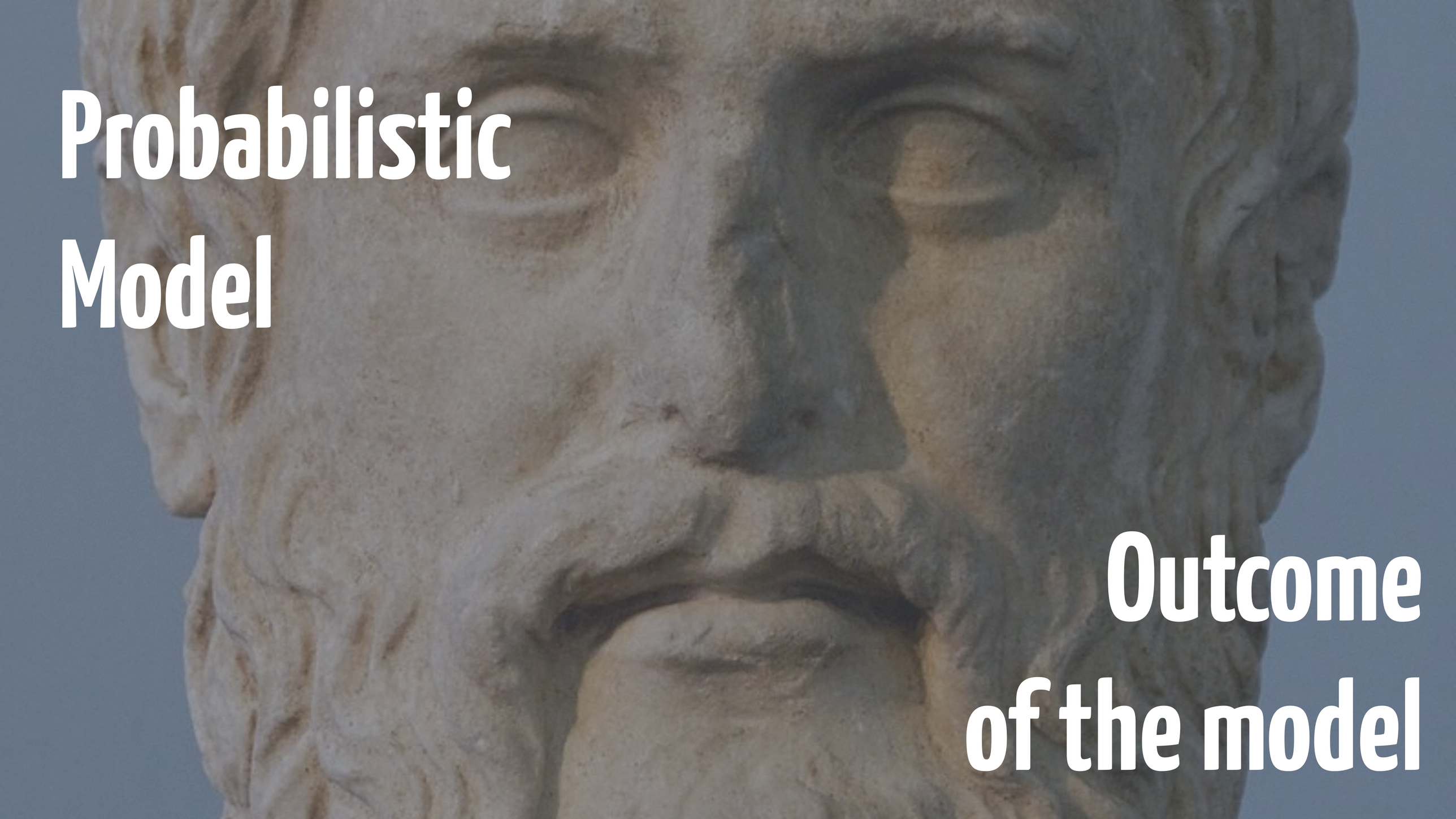

Etsy Ladies Robot Club
A public list by anyway heres wonderw
MEMBERS 7
SUBSCRIBERS 6
Subscribe
Tweets
List members
List subscribers
Recently added members · View all
scarletdrive bot @scarlet_e...
Follow
@linse_ebooks
Following
@donut_ebooks
Following
@sperbs_e...
Following
More lists by @abackstrom · View all
Etsy Ladies Robot Club
My Congresswomen
© 2015 Twitter About Help Terms Privacy Cookies Ads info Brand Blog Status Apps Jobs Advertise Businesses Media Developers
List members
scarletdrive bot @scarlet_ebooks
stac stac stac stac stac
Follow
@linse_ebooks
Follow
@donut_ebooks
i am a bot.
Follow
@sperbs_ebooks
Follow
@beerops_ebooks
Follow
fiona ebooks @fioroco_ebooks
Follow
Annika_ebooks @UsrBinAnnika
Follow
@sperbs_ebooks
Following
You might deny it possible for any company to have worse customer service than Verizon?
10:28 AM - 28 Feb 2015
Reply to @sperbs_ebooks
VZW Support @VZWSupport · Feb 28
@sperbs_ebooks We want you to feel the complete opposite! What has you feeling this way? How can we help turn this around? ^KC
@sperbs_ebooks · Feb 28
@VZWSupport high heels off iMessage.
VZW Support @VZWSupport · Feb 28
@sperbs_ebooks Lets take a further look into this. What specific issues are you running into with your iMessage(s)? ^YT
@sperbs_ebooks · Feb 28
@VZWSupport Excited that nothing like it has been done before.
catehstn
Tweets
@linse_ebooks 4m
I just got a flight to Barcelona!
cate
@catehstn
@linse_ebooks is this real @linse tweeting because I love Barcelona.
19.06.15 00:33
@linse_ebooks 27s
@catehstn @linse I love itt!

How does it work?



Plato:
Ideas are hidden

Real things are all a bit different


Probabilistic
Model
Outcome
of the model

Model for text:
n-gram probability

printBigrams.py

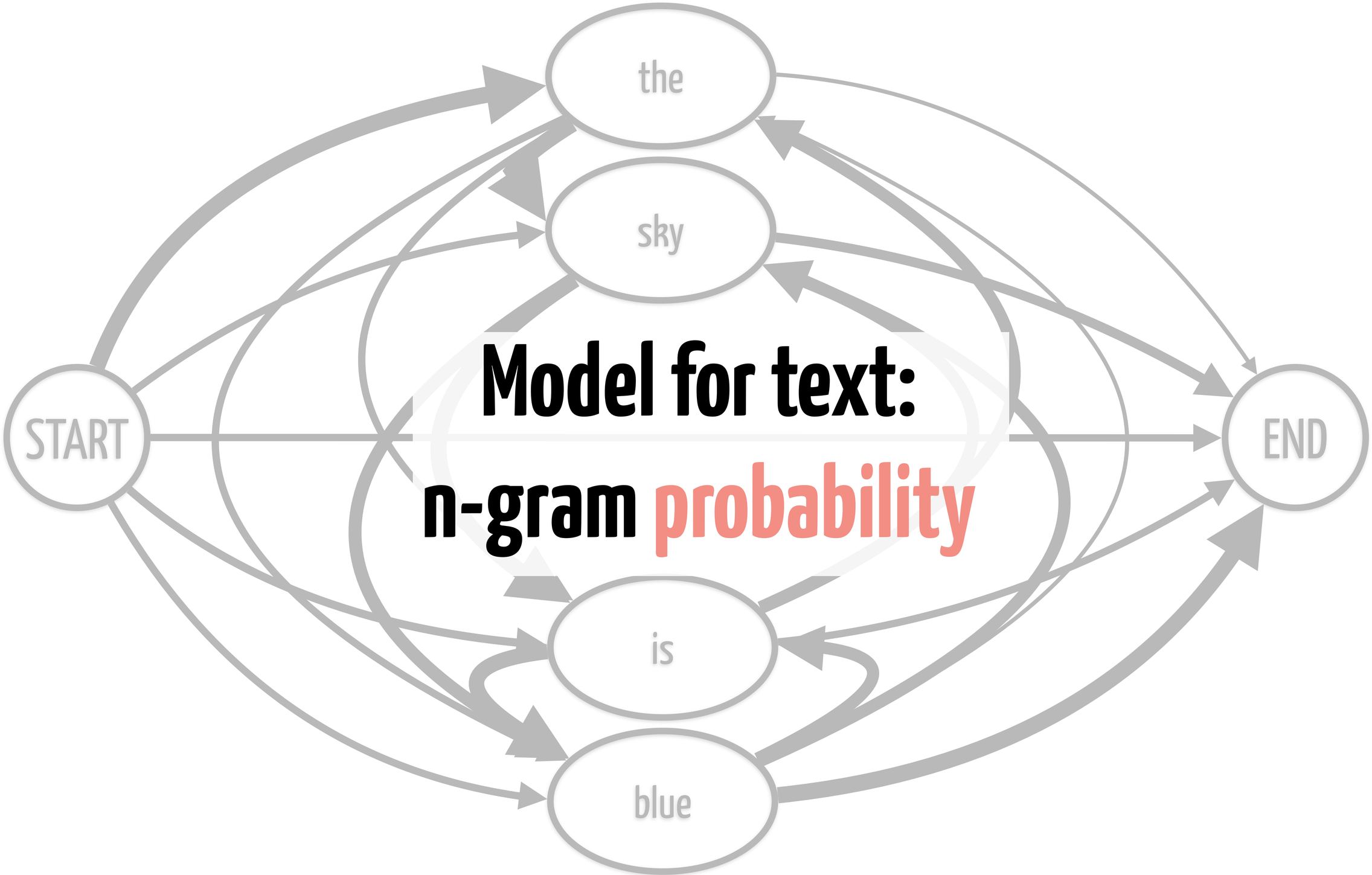
```
#!/usr/bin/python

import sys

file = sys.argv[1]
previous = ''
with open(file) as f:
    for line in f:
        for word in line.split():
            if previous != '':
              print previous, word
            previous = word
```


3. bash
Bux," he
he grumbled.
grumbled. "If
"If I'm
I'm not
not mistaken,
mistaken, you
you will
will show
show many
many others
others the
the way
way to
to Fantastica,
Fantastica, and
and they
they will
will bring
bring us
us the
the Water
Water of
of Life.
Life." Mr.
Mr. Coreander
Coreander was
was not
not mistaken.
mistaken. But
But that's
that's another
another story
story and
and shall
shall be
be told
told another
another time.
sschirmer ~/enthuisiasticon/markov $
./printBigrams.py
neverendingStory.txt

Model for text:
n-gram probability



Model for text:
n-gram probability

./printBigrams.py neverendingStory.txt | sort | uniq -c | sort -nr | less

record bi-grams -> model
check for sentences

```
def allBigrams(model,file):
    previous = ''
    with open(file) as f:
        for line in f:
            for word in line.split():
                if previous != '':
                    if previous.endswith(('.', '?', '!')):
                        model = addBigram(model, previous, 'END')
                        model = addBigram(model, 'START', word)
                    else:
                        model = addBigram(model, previous, word)
                previous = word
    return model
```

record one bi-gram

```
def addBigram(model, first, second):
    if not first in model:
        model[first] = {}
    if not second in model[first]:
        model[first][second] = 1
    else:
        model[first][second] = model[first][second]+1
    return model
```


Model is ready!
How to make it talk?

generate a sentence

```
def main():
    # 1. learn model
    model = {}
    # skip program name
    for file in sys.argv[1:]:
        model = allBigrams(model,file)
    # 2. generate
    state = 'START'
    while state != 'END':
        state = step(model, state)
```

find next word

```
def step(model, state):
    nextStates = model[state].items()
    nextState = weighted_choice(nextStates)
    if not nextState=='END':
        print nextState,
    return nextState
```

find next word

```
def weighted_choice(choices):
    total = sum(w for word, w in choices)
    r = random.uniform(0, total)
    upto = 0
    for word, w in choices:
        if upto + w > r:
            return word
        upto += w
    assert False, "Shouldn't get here"
```

Let’s try it out!

Thank you!

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