Word N-Grams

Introduction



Markov Text/Word Generation

- Same Concepts from Markov Programs
 - Using typewriter metaphor, but choose words!
 - Order-1, use one word to predict next
 - Generalize: amusing stories with Java concepts
- Java class design
 - Word equivalent of String
 - Check for equality
 - Use as key in HashMap





• From 1-letter to 1-word random text



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 - Is training text recognizable?

lkneds thedol t hthe and asansegan!' `icecthe tatile hengabo owap. sher bot cheastt de he oede foorpe t: ey tavero th r heepsave. cofitighete che med itheald ce litsid utmealicanoul songrait tt



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 - Words use same interface! Easier to recognize.

```
he spoon: While she had left off staring at each side will be quite natural way. `I seem to say, `Look out of the look down a sleepy voice along--`Catch him, he'd do either!' And Alice thoughtfully: `but it out of everything is Dinah, tell you--all I beg your tongue!' added `Come, let's try the prisoner's handwriting?' asked it thought
```



- From 1-letter to 1-word random text
 - Is training text recognizable?
 - Words use same interface! Easier to recognize.





Modern or Dated Example?

• Is this order-1 character text recognizable?

cayt ald twh t ou? ber To Ton wery, Helitho ym the suts fr, orerorg ortred so Hetece Athe in sorelin'm Oout thorsinyorne ticat a mor An've trl yo fon canymusarouppate angoupineso I's erlllt he yt



Modern or Dated Example?

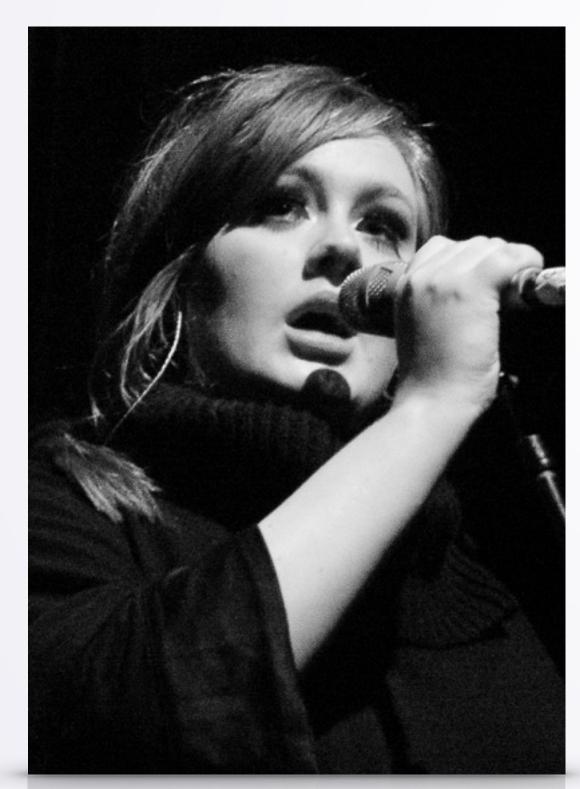
- Is this order-1 character text recognizable?
 - Order-1 MarkovWordOne runnable from same MarkovRunner program — Java interfaces!

```
the other side I hope that I've done But when I ain't done But it don't matter, it clearly doesn't tear you never seem to be When we were younger and free I've done much healing Hello, it's me, I must've called a thousand times
```



Modern or Dated Example?

- Is this order-1 character text recognizable?
 - Order-1 MarkovWordOne runnable from same MarkovRunner program — Java interfaces!



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