Announcements

- Homework 9 (4 pts) due Wednesday 4/29 @ 11:59pm
- Quiz 4 due Thursday 4/30 @ 11:59pm
- No videos on Friday 5/1; come to lecture (and fill out the HKN course survey at the end)
- If at least 60% of students respond, everyone gets an extra credit point
- Next week: 18 hours of review sessions Monday, Tuesday, & Wednesday 11-5 in 271/273 Soda
  - Two TAs are available every hour
  - One room will be a review session going over topic-specific problems
  - The other room is unstructured; staff will answer any questions you have

Syntactic Ambiguity in English

- Programs must be written for people to read

Definitions from the New Oxford American Dictionary

- program (noun): a series of coded software instructions
- program (verb): provide a computer with coded instructions
- must (verb): be obliged to
- must (noun): dampness or mold

Syntax Trees
Representing Syntactic Structure

A Tree represents a phrase:
- tag -- What kind of phrase (e.g., S, NP, VP)
- branches -- Sequence of Tree or Leaf components
A Leaf represents a single word:
- tag -- What kind of word (e.g., N, V)
- word -- The word

Context-Free Grammar Rules

A grammar rule describes how a tag can be expanded as a sequence of tags or words

Grammar rules can be expanded as...

Exhaustive Parsing

Expand all tags recursively, but constrain words to match input

Constraint: A Leaf must match the input word

(End)
Scoring a Tree Using Relative Frequencies

Not all syntactic structures are equally common

```
  V  NP  VP
    NP
  S
```

teacher strikes idle kids

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