

# PPL 3/2

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## Midterm

- Know LR Parsing example from the slides
  - For LR parsing, the only thing we need to know about its derivation is that it's a right most derivation
  - We need to know what a right most derivation is as well
- We need to know how to use the `.output` file generated by bison
- We should look at the `<stdlib.h>` syntax..?
- Be able to make our own, small grammar (i.e. know assignment 2)
- Let me tell ya, taking a nap right before class is a bad idea. My brain is still asleep
- He's been showing us code for the whole class period so I don't have a lot of notes
- Don't miss class next week because we'll be **really** lost in the next two assignments
  - We can skip like usual after that though
- We can bring anything on paper as a resource

## Static Analysis

- Escape analysis can reference limited context, and if so it can be allocated in the stack
- out of order optimizations consider if it safe to rearrange the order of computations
- thread safety determines if some instructions can be executed in parallel
- Unsafe optimizations can lead to incorrect results
- Speculative static analysis does work preemptively and possibly removes anything that isn't necessary
  - It can also refer to something that can be undone