Meeting 4: Data Structures and Pattern Matching

Today

- Your questions
- More functions and pattern matching

Announcements

- Lab 1 due Fri/Sat
- Teams. Partners for Labs 1 and 2? Get to know your whole team: need new partner from your team next lab.
- Submit on moodle (exactly 3 files named appropriately) and Cog
- Sign up for interviews

Peer Learning Assistants

Questions

- Divmod? Code N?
- Case class? vs. Algebraic Datatypes
- Warren: Running your interpreter
  - Test file - error - like
  - Order of operators - concern?
regular recursion vs. tail recursion

Running
bash
→ ./lab1.sh file.jsy
↑ executable
→ src/test/resources/lab1/...

sealed abstract class Expr
  case class N(n: Int) extends Expr

  algebraic data type
  case class Plus (e1: Expr, e2: Expr) extends Expr

≡
≡
Order of evaluation

\[ e_1 + e_2 \]

case \( \text{Plus}(e_1, e_2) \) \Rightarrow

\[ "1 + 2 + 3" \]

syntactic

\[ (1+2) + 3 \]
$(1 + 2) + 3$

$1 + 2 \times 3$ should be

$1 + (2 \times 3)$