

Recap

Looking Back

- Programs are data
 - Interpreters, typecheckers, etc. take as input
 - Parsers, random generators, etc. produce as output
- Meta-language vs Object-language
 - plai, plai/gc2, and plaitypus as meta-languages
 - AE, WAE, FIWAE, FnWAE, FWAE, FAE, RCFAE, BFAE, RFAE, KFAE, EFAE, MFAE, TFAE, TBFAE, TPFAE, TRCF AE, TIFAE, TLFAE (18, count 'em!)
 - Wrote programs in (almost) all of them, quite different styles!
- Different languages share common concepts
 - Variables and scope, arithmetic, functions, recursion, state, control, memory management, types, etc.
 - Implemented them to better understand them
 - Often multiple strategies for the same concept!

Looking Forward

- You should now have a good understanding of the building blocks of languages
 - Should be easier to pick up new languages throughout your career; new veneer on familiar ideas
 - Should be able to compare and evaluate languages critically
- You should now be able to identify "language" problems when you see them
 - Remember: code is data!
 - Even if you don't build languages for a living, these problems show up!
 - Data formats, APIs, etc. are really languages in disguise!

Thanks!