

Textbook Assignment #2: Names, Scopes, and Bindings

Issued: Wednesday, September 25

Due: Wednesday, October 9

Purpose

This assignment asks you to think about the management of names in programming languages: scope (aka, visibility), extent (aka, lifetime), and binding (i.e., meaning).

Be careful to answer all of an exercise's questions.

Textbook Exercises

Exercise 3.2 (page 164): Consider variable allocation. Give Pascal and Scheme examples. They don't need to compile/execute.

Exercise 3.4 (page 164): Consider live, but invisible, variables. Your examples need not compile/execute.

Exercise 3.5 (page 164): Consider declaration order.

Exercise 3.7 (page 165): Analyze memory bugs.

Exercise 3.8 (page 167): Port Modula-2 stacks to C. Compile, execute, and test your modules.

Exercise 3.14 (page 168): Consider static and dynamic scope.

Exercise 3.18 (page 169): Consider shallow and deep binding.