

February 23, 2022 Outline

Reading: *text*, §17.1–17.3.2, C

Assignments: Homework 4, due March 9

Module 48

1. Entropy

Module 49

2. Entropy-based analysis
 - (a) Flow of information from x to y
 - (b) Implicit flow of information

Module 50

3. Non-lattice policies
 - (a) Transitivity
 - (b) Information flow policy
 - (c) Confinement flow model
4. Transitive non-lattice policies
 - (a) Quasi-ordered sets
5. Basic policy composition
6. Non-transitive policies
 - (a) Dual mappings
 - (b) Theorem: a dual mapping from a reflexive information flow policy into an ordered set is order-preserving

Module 51

7. Compiler-based flow mechanisms
 - (a) Scalar declarations
 - (b) Array declarations
 - (c) Assignment statements
 - (d) Compound statements
 - (e) Conditional statements