

## February 27, 2014 Outline

**Reading:** §16; paper [HS97]

**Assignment due:** Homework #3, due March 4, 2014

Project: due March 21, 2014

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1. Entropy-based analysis
  - a. Flow of information from  $x$  to  $y$
  - b. Implicit flow of information
2. Non-lattice policies
  - a. Transitivity
  - b. Information flow policy
  - c. Confinement flow model
3. Transitive non-lattice policies
  - a. Quasi-ordered sets
4. Non-transitive policies
  - a. Dual mappings
  - b. Theorem: a dual mapping from a reflexive information flow policy into an ordered set is order-preserving
5. Compiler-based flow mechanisms
  - a. Scalar declarations
  - b. Array declarations
  - c. Assignment statements
  - d. Compound statements
  - e. Conditional statements
  - f. Iterative statements
  - g. Goto statements
  - h. Procedure calls