

Outline for February 19, 2008

1. Information flow
 - a. Information flow policy, confidentiality policy, integrity policy
 - b. Example
2. Entropy
 - a. Random variables
 - b. Joint probability
 - c. Conditional probability
 - d. Entropy (or uncertainty in bits)
 - e. Joint entropy
 - f. Conditional entropy
3. Entropy-based analysis
 - a. Flow of information from x to y
 - b. Implicit flow of information
4. Non-lattice policies
 - a. Transitivity
 - b. Information flow policy
5. Confinement flow model
6. Transitive non-lattice policies
 - a. Quasi-ordered sets
7. Non-transitive policies
 - a. Dual mappings
 - b. Theorem: a dual mapping from a reflexive information flow policy into an ordered set is order-preserving