Outline for May 13, 2013

Reading: §16.1–16.4, 32, [BDU07][1]

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1. Entropy
2. Entropy-based analysis
    a. Flow of information from x to y
    b. Implicit flow of information
3. Non-lattice policies
    a. Transitivity
    b. Information flow policy
    c. Confinement flow model
4. Transitive non-lattice policies
    a. Quasi-ordered sets
5. Non-transitive policies
    a. Dual mappings
    b. Theorem: a dual mapping from a reflexive information flow policy into an ordered set is order-preserving
6. 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
    i. Exceptions and infinite loops
    j. Semaphores
    k. Cobegin/coend
    l. Soundness
7. Execution-based flow mechanisms
    a. Fenton's Data Mark Machine
    b. Variable classes

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[1]This is available in the Resources area of SmartSite; look in the folder "Handouts"