Notes for February 2, 1998

1. Greetings and felicitations!
   a. **Reading**: Pfleeger, pp.228-253; Garfinkel & Spafford, pp. 71–137
2. Puzzle
   a. Point is that *root* introduces a security flaw by its existance; secure systems don't have them
3. User identification
   a. Go through UNIX idea of "real", "effective", "saved", "audit"
   b. Go through notion of "role" accounts; cite Secure Xenix, DG, etc.
   c. Go through PPNs (TOPS-10) and groups
   d. Review least privilege
4. Privilege in Languages
   a. Nesting program units
   a. Temporary upgrading of privileges
5. Different forms of access control
   a. UNIX method
   b. ACLs: describe, revocation issue

[*ended here*]

   c. MULTICS rings: (b1, b2) access bracket - can access freely; (b2, b3) call bracket - can call segment through gate; so (4, 6, 9) as example
   d. Capabilities: file descriptors in UNIX