

## Outline for January 9, 2002

1. Greetings and Felicitations!
2. Puzzle of the day
3. Robust Programming
  - a. Go through handout, emphasizing principles
  - b. Information hiding and abstraction
  - c. Error handling
4. Common Implementation Vulnerabilities
  - a. Unknown interaction with other system components (DNS entry with bad names, assuming finger port is finger and not chargen)
  - b. Overflow (year 2000, *lpr* overwriting flaw, *sendmail* large integer flaw, *su* buffer overflow)
  - c. Race conditions (*xterm* flaw, *ps* flaw)
  - d. Environment variables (*vi* one-upsmanship, *loadmodule*)
  - e. Not resetting privileges (Purdue Games incident)