

Outline for November 13, 2008

1. How to Deal with Deadlock (Policies)
 - a. Ignore
 - b. Detection and recovery
 - c. Prevention: mutual exclusion, no preemption, circular wait, hold and wait
 - d. Avoidance
2. Deadlock Recovery
 - a. Breaking circular wait
 - b. Break no preemption (i.e., allow preemption)
3. Deadlock Prevention
 - a. Single-programming environment
 - b. Hierarchical ordering (ordered resource) policy
 - c. Acquire all resources before running
 - d. Maximum claim techniques
4. Deadlock Avoidance
 - a. Banker's Algorithm
5. File Systems
 - a. Virtual vs. physical
 - b. File names
 - c. Directories and directory structure