Problem Set 28

CS 311

Due Apr. 28, 2014

Due at the beginning of class in hardcopy.

Sections 12.7–9

1. Consider the following backup schedule:

   - **Day 1:** Copy to a backup medium all files from disk.
   - **Day 2:** Copy to another backup medium all files changed since day 1.
   - **Day 3:** Copy to another backup medium all files changed since day 1.
   - . . .
   - **Day N:** Copy to another backup medium all files changed since day 1. Then go back to day 1.

   This differs from the schedule given in Section 12.7.4 by having all subsequent backups copy all files modified since the first full backup. What are the benefits of this schedule over the one in Section 12.7.4? What are the drawbacks? Are restore operations made easier or more difficult? Explain your answer.

2. NFS is a stateless protocol. Why — what problem(s) would result from a "stateful" NFS server crashing and coming back up while an NFS client had a file on the server open for sequential writing? Explain your answer.