ITBU 373, Operating Systems Homework 30

Chapter 38, *Operating Systems, Three Easy Pieces*

Readings

Read chapter 38 in the *Operating Systems, Three Easy Pieces* book.

Discussion Questions

Answer the discussion questions in writing.

1. What is the meaning of *RAID*? Discuss "redundant," "array," and "inexpensive."
2. What three problems was RAID designed to solve?
3. Read the sidebar on the top of page 450, "Transparancy Enables Deployment." If you are not familiar with the software engineering principle *high cohesion, low coupling*, look it up and read about it. What is the relevance of the software engineering principle to the tip discussed in the sidebar?
4. What is meant by a *mirrored* RAID system?
5. What is meant by a *fail-stop* fault model?
6. Describe how RAID 0 works?
7. What is the difference between *single-request latency* and *steady-state throughput*? What is the similarity?
8. Describe how RAID 1 works?
9. Describe how RAID 4 works?
10. Explain to your grandmother how parity works.
11. Describe how RAID 5 works?
12. Make sure you understand the table presented as Figure 38.8.