CPSC 3125, Operating Systems Homework 24

Chapter 30, *Operating Systems, Three Easy Pieces*

Readings

Read chapter 30 in the *Operating Systems, Three Easy Pieces* book.

Discussion Questions

Answer the discussion questions in writing.

1. What is a *condition* as we use that term in computer science? What do we use conditions for?

2. What is a *condition variable*?

3. What does it mean to "signal on the condition?"

4. What are the arguments to `wait()`? What is the return value? What does it do?

5. What are the arguments to `signal()`? What is the return value? What does it do?

6. Give a general description of the producer/consumer problem? Give one real life example of a producer/consumer application.

7. Why does using `while` work, but using `if` does not work? See page 359 of the book.

8. What are the arguments to `pthread_cond_broadcast()`? What is the return value? What does it do?