CS330A Reading List

This is in addition to the contents available on course home
Please attempt the exercises in the respective chapters listed below

- OS principles 7th edition
  - Chapter 2 (System Structures) sections: Operating-System Services, User Operating-System Interface, System Calls, Types of System Calls, System Programs, Operating-System Design and Implementation, Operating-System Structure, Operating-System Generation, System Boot, Summary.
  - Chapter 3 (Process-Concept) sections: Overview, Process Scheduling, Operations on Processes, Interprocess Communication, Examples of IPC Systems, Communication in Client-Server Systems, Summary.
  - Chapter 4 (Multithreaded Programming) sections: Overview, Multithreading Models, Thread Libraries, Threading Issues, Operating-System Examples, Summary.
  - Chapter 5 (Process Scheduling) sections: Basic Concepts, Scheduling Criteria, Scheduling Algorithms, Multiple-Processor Scheduling, Thread Scheduling, Operating System Examples, Algorithm Evaluation, Summary.
  - Chapter 6 (Synchronization) sections: Background, The Critical-Section Problem, Peterson's Solution, Synchronization Hardware, Semaphores, Classic Problems of Synchronization, Monitors, Summary.
  - Chapter 8 (Memory-Management Strategies) sections: Background, Swapping, Contiguous Memory Allocation, Paging, Structure of the Page Table, Segmentation, Example: The Intel Pentium, Summary.
  - Chapter 9 (Virtual-Memory Management) sections: Background, Demand Paging, Copy-on-Write, Page Replacement, Allocation of Frames, Thrashing, Memory-mapped Files, Other Considerations, Summary.
  - Chapter 11 (Implementing File Systems) sections: Directory Implementation, Allocation Methods.
- The Design of the UNIX OS
  - Chapter 1
  - Chapter 2
  - Sections 4.1, 4.2, 4.3, 4.5 from Chapter 4
  - Section 6.1 from Chapter 6
  - Sections 7.1, 7.2, 7.3, 7.4 from Chapter 7
  - Section 8.1 from Chapter 8
  - Sections 11.2.1 and 11.2.2 from Chapter 11