



Chapter 10 Important Points

This is a summary of the parts of Chapter 10 that you should understand and be able to explain. In addition you should be able to solve problems related to them.

1. Demand paging
 - (a) How it facilitates sharing
 - (b) How it provides protection
 - (c) Effect of page size on
 - i. Fragmentation
 - ii. Page table size
 - iii. I/O overhead
 - iv. Number of page faults
 - v. Locality
 - (d) Prepaging
2. Page faults
 - (a) Valid/invalid bit to determine
 - (b) How they are handled - detailed steps
 - (c) How they affect performance
 - i. Instruction restart
 - ii. Effective access time calculations
3. Copy-on-write
4. Page replacement - basic steps independent of algorithm
5. FIFO page replacement
 - (a) Belady's anomaly
6. Optimal page replacement
7. Least Recently Used page replacement
 - (a) approximations :
 - i. Least frequently used
 - ii. Most frequently used
8. Second chance stack algorithms
 - (a) With just reference bit
 - (b) With reference and modified bit
9. Global versus local replacement
10. Page buffering
11. Allocation of pages to processes
12. Principle of locality
13. Thrashing