What we covered:

1. **Chapter 1:**
    - introduction/motivation
    - intro to C++ concepts (in tutorials)
2. **Chapter 2:**
    - file opening/closing, file reading/writing
    - physical devices vs. logical files
3. **Chapter 3:**
    - disk organization: sectors, tracks, platters, cylinders, blocks, etc.
    - internal vs external fragmentation

- for final, ignore mag tape and CD-ROM
- buffer management, buffer strategies

4. **Chapter 4:**
    - field and record organization

5. **Chapter 5:**
    - primary and secondary keys
    - sequential vs. direct access
    - binary vs. text files

6. **Chapter 6:**
    - data compression
    - file compaction (reclaiming space)

- internal sorting and binary search
- keysorting

7. **Chapter 7:**
    - simple indexing
    - index management (addition, deletion, updating)
    - indexes in memory/files
    - multiple key access
    - retrieval using combinations of secondary keys
    - inverted lists

8. **Chapter 8 (8.1 - 8.3):**

- cosequential processing
- matching, merging (union), master-file update
- 2-way, k-way

9. **Chapter 9:**
    - B-trees
    - B-tree insertion,deletion, and redistribution
    - B-tree analysis of space and search complexity
    - B*-trees
    - B-tree page buffering

10. **Chapter 10:**

- B^+-trees
- indexed sequential access
- simple, prefix B^+-trees
- index set block size
- variable-order B^+-trees
- efficient B^+-tree loading

11. **Chapter 11:**

    - hashing
    - hashing analysis (predicting distributions, collisions, packing density, etc.)
    - collision resolution strategies
    - buckets and their effect on hashing performance

- deletions and tombstones
- other hashing techniques
- **not** responsible for table-assisted hashing

12. **Chapter 12:**
    - tries and their transformation into a directory
    - extendible hashing, including insertion and deletion
    - dynamic hashing
    - linear hashing

13. **Applications of Hashing**