

Disks

- – Seek time: moving read-write head (9 ms)
 - Rotational latency: data moving into position under r/w head (2 ms)
- Access time: 10 ms
- Blocks: fixed size chunk of data: 512 bytes - 16 kb

File Organization

- Storing a relation on disk
- Many options:
 - Structured storage
 - Unstructured ("heap") storage
- Ordered Storage
 - Within blocks order primary key
 - Blocks recorded in PK order
 - Reads: lookup by binary search; $O(\log_2(n))$
 - Inserts: expensive; easier if maintain some empty space
 - Deletetions: similar
- Analysis
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