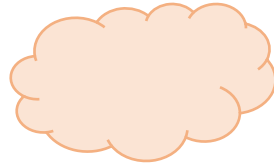


RocksDB



memtable

- in-memory buffer that temporarily stores the incoming writes
- self-balancing binary search tree (e.g. red-black tree)

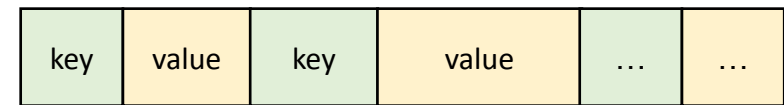
memory

disk



log

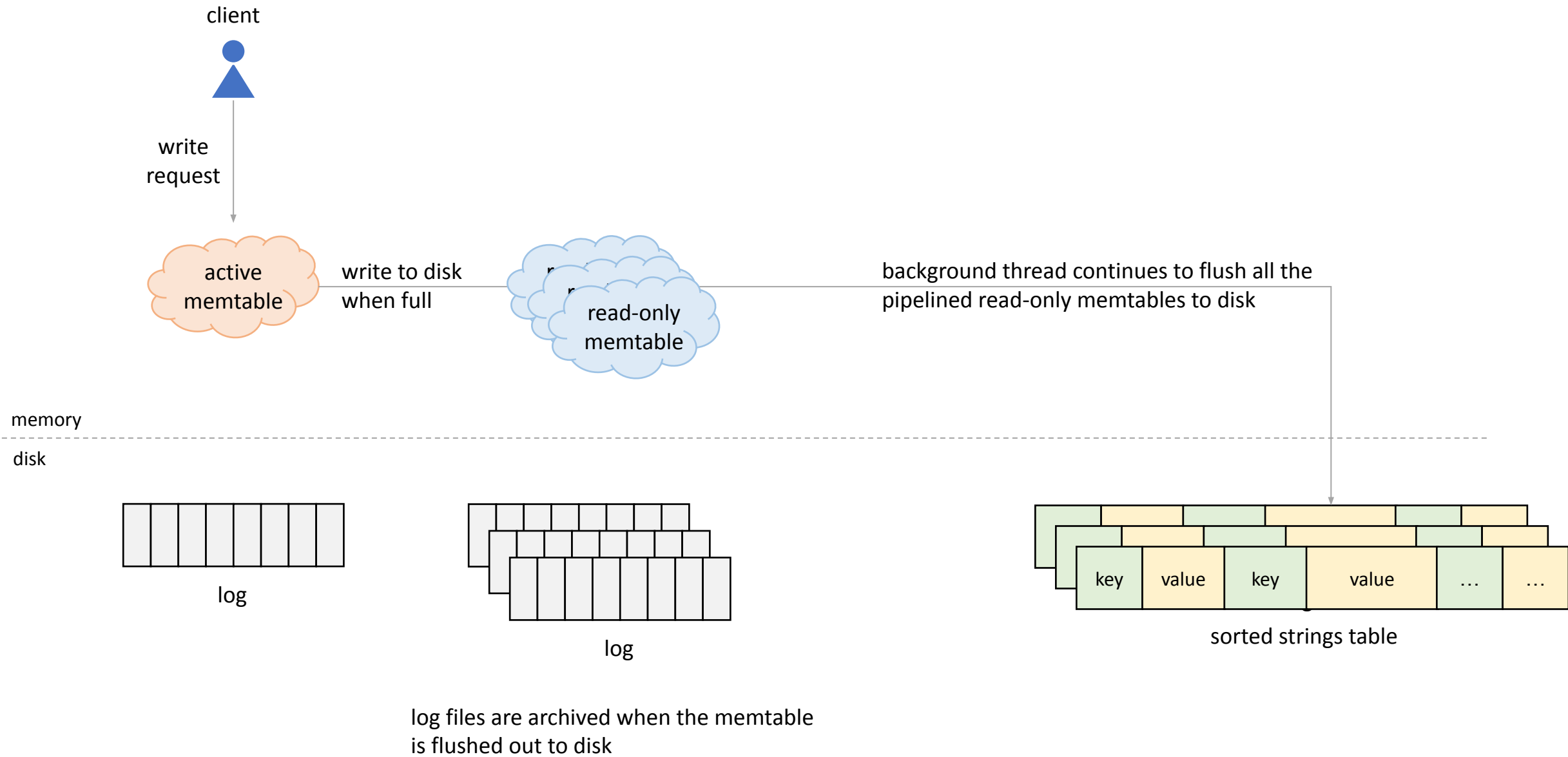
- write-ahead log (append-only file that captures every write)
- used to restore the memtable after a database crash



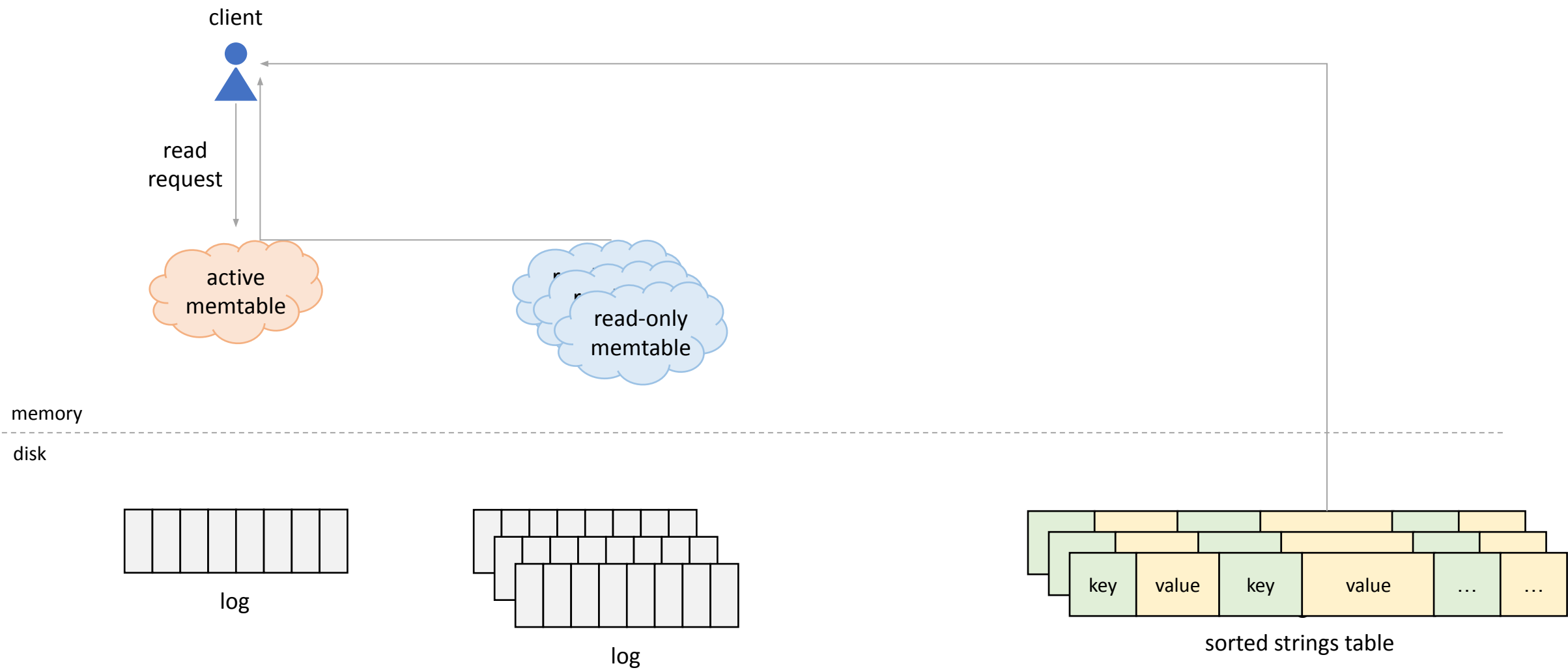
sorted strings table

- file of key-value pairs sorted by keys

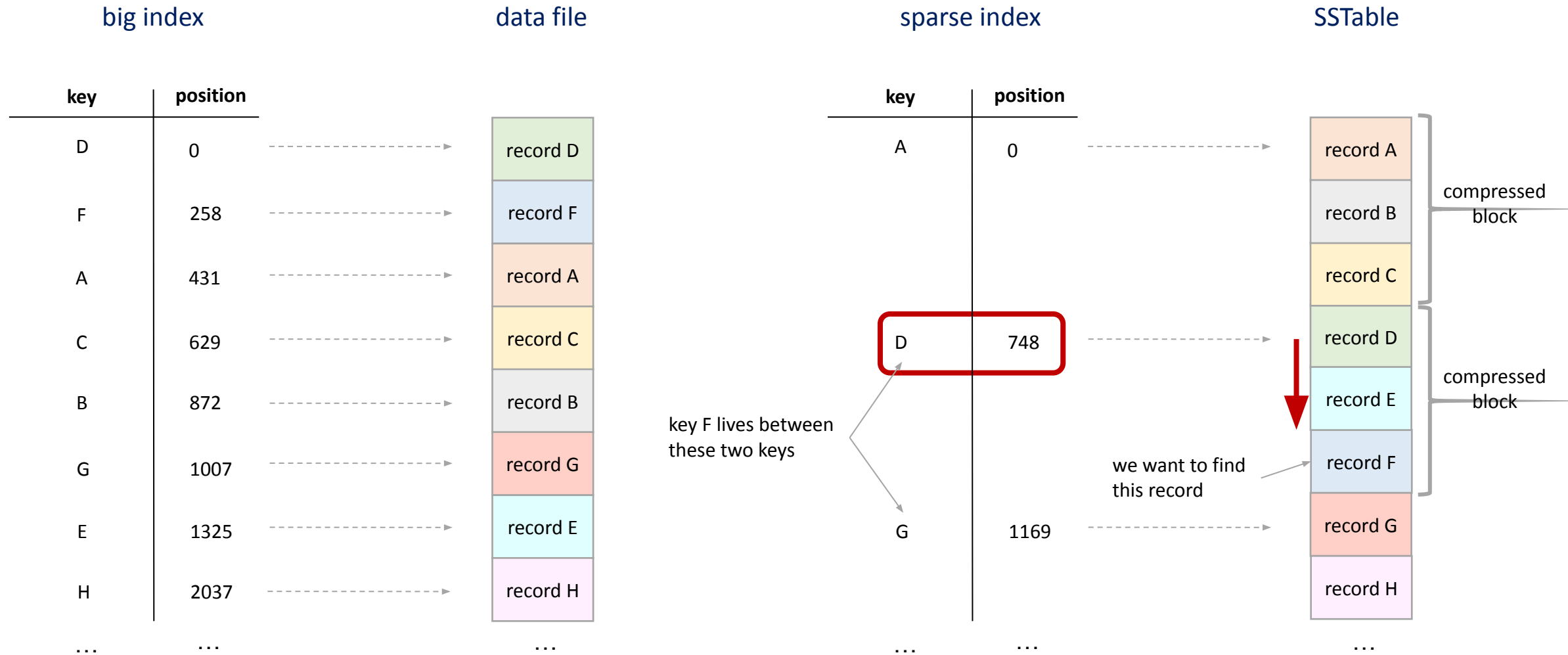
RocksDB



RocksDB



RocksDB



1. run binary search for the key F
2. scan records one by one to find the key F

RocksDB

