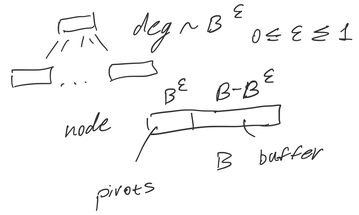
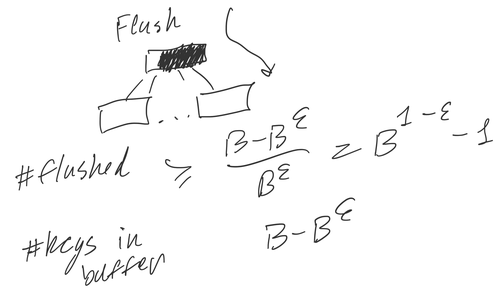


	Insert	Lookup
ε=1 B-tree	$\log_B N$	$\log_B N$
Buffered Tree	$\frac{1}{B}\cdot\log_{M/B}\frac{N}{B}$	—
B^ε-tree	$\frac{1}{B^{1-\varepsilon}}\frac{1}{\varepsilon}\log_B N$	$\log_{B^\varepsilon} N = \frac{1}{\varepsilon}\log_B N$
Buffered Repository Tree	$\frac{1}{B}\log_2 N$	$\log_2 N$
ε=0 deg=2,3 Fractal Tree ε=1/2	$\frac{1}{\sqrt{B}}\log_B N$	$\log_B N$

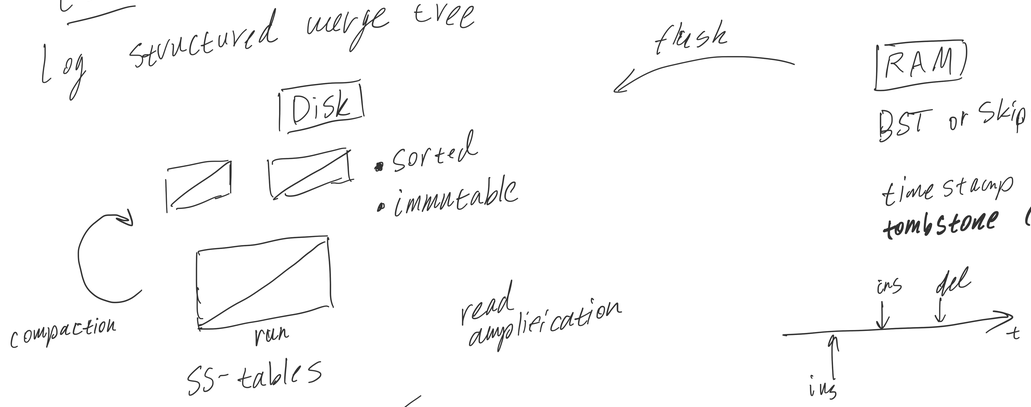
write intensive

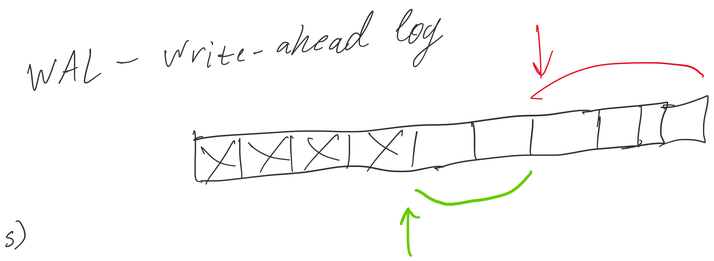
read intensive



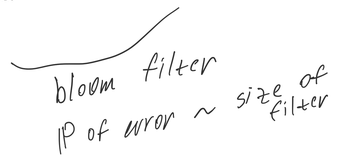
LSM

Log structured merge tree



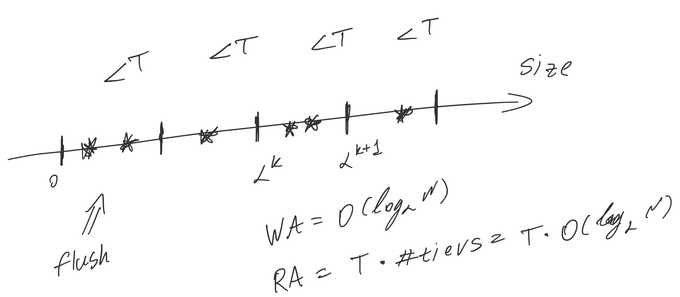


write amplification

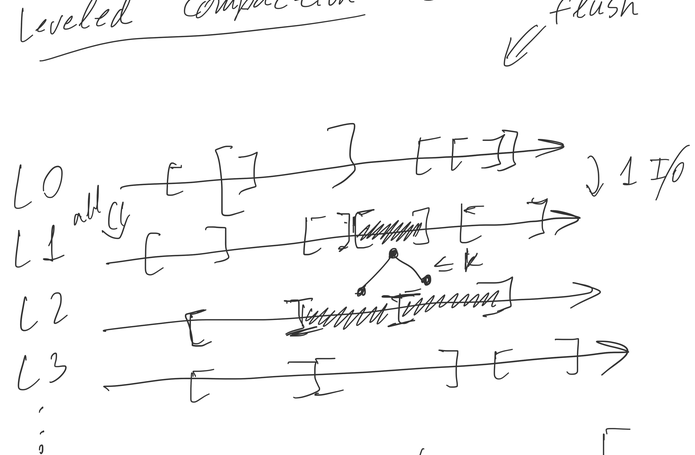


major timestamp

Tiered compaction



Leveled compaction (Level DB)



WA = #levels · K

RA = #levels + # run L0

desired SS table size = d

size $L_i \sim T^i$

#levels = $O(\log_T)$