

Files & Records

Random Heap Files

- Append if full

Ordered Sequential

Hashed Files

Analysis:

- B. # of blocks(pages) of data
- R. # of records per block
- D. disk I/O time average time D of random/ D of sequential
- C. Time to process one record name = "Smith"
- H. time to compute a hash value

	Search	scan	insert	delete
Heap	$(D_s + R * C) * B / 2$		$2 * D_r + C$	Time(Search) +C+Dr
Sorted	$\log(B) * (D_r + 2C)$ + $\log(R) * C$	同上	Time(Search) + $2 * 1 / 2 * B * (D_s + RC)$	同上
Hashed	$H + D_r + RC$	$1.25 * ()$	Time(Search) +C+Dr	同左

D sequential! assume physically pages are contiguous

Space utilization factor: 80% $1 / .8 = 1.25$