FORMULE 3° ESERCIZIO Basi di Dati

- Hash

$$\text{Record} \times \text{Blocco}_{Dir} = \left\lfloor \frac{\text{Block Size}}{P_{size}} \right\rfloor$$

$$\text{N° Blocchi} \times \text{BuckT Dir} = \left\lceil \frac{\text{N° Bucket}}{\text{Record} \times \text{Blocco}} \right\rceil$$

$$\text{Blocchi} \times \text{Bucket} = \left\lceil \frac{\text{Record} \times \text{Bucket}}{\text{Record} \times \text{Blocco}} \right\rceil$$

$$\text{Record} \times \text{Blocco}_{Buk} = \left\lfloor \frac{\text{Block Size} - \text{Pointer Size}}{\text{Record size}} \right\rfloor$$

$$\text{Record} \times \text{Bucket} = \left\lceil \frac{\text{N° Record}}{\text{N° Bucket}} \right\rceil$$

$$\text{Avg Time} = \left\lceil \frac{\text{Blocchi} \times \text{Bucket}}{2} \right\rceil$$

- ISAM

$$\text{Record} \times \text{Blocco Index} = \left\lfloor \frac{\text{Block size}}{\text{Pointer size} + \text{key size}} \right\rfloor$$

$$\text{Record} \times \text{Blocco} = \left\lceil \frac{\text{Block size}}{\text{Record size}} \right\rceil$$

$$\text{Total Block Main} = \left\lceil \frac{\text{N° Record}}{\text{Record} \times \text{Blocco}} \right\rceil$$

$$\text{Total Block Index} = \left\lceil \frac{\text{Total Blck Main}}{\text{Record} \times \text{Blocco Index}} \right\rceil$$

$$\text{T Accesso} = \log_2 (\text{Total Block Index}) + 1$$

B-Tree

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SE VOGLIO PIENO AL MIN.

$$\text{Rec per Blocco} = \frac{\text{Blk Size}}{\lfloor \text{Rsize} \rfloor} \qquad \left\lfloor \frac{\text{Blk size}/2}{\text{R size}} \right\rfloor$$

$$\text{Tot blocchi file Primaodc } (\text{Tot Blk M}) = \left\lceil \frac{N^\circ \text{Record}}{\text{Rec per Blk}} \right\rceil$$

$$N^\circ \text{Kays} = \frac{\text{Blk Size} - \text{Psize}}{\lfloor \text{Psize} + \text{Ksize} \rfloor} = \qquad \begin{array}{l} \text{SE VOGLIO RIEMPIRE L' ALBERO} \\ \text{AL MAX} \end{array}$$

$$d = \left\lceil \frac{(\text{Blk Size}/2) - \text{Psize}}{\text{Psize} + \text{Ksize}} \right\rceil = \text{MIN}$$

1) liv 0   34000

2) liv 1 $\left\lceil \dfrac{34000}{23} \right\rceil = 1479$

3) Liv 2 $\left\lceil \dfrac{1479}{23} \right\rceil = 65$

4) liv 3 $\left\lceil \dfrac{65}{23} \right\rceil = 3$

S) $\lim_{u} 4 \lceil \frac{3}{23} \rceil = 1 \rightarrow$ MI FERMO

TOT BLOK $f = 1473 + 65 + 3 + 1 =$

l costo é il nº di livelli = S