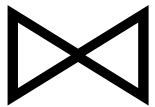


# Resumen costos por operación

**$\sigma$**

- File Scan:  $B(R)$
- Index Scan:  $\text{Height}(\text{Idx}) + 1$  (*idx primario*)  
 $\text{Height}(\text{Idx}) + \lceil n(R) / V(A_i, R) \rceil$  (*idx sec.*)  
 $\text{Height}(\text{Idx}) + \lceil B(R) / V(A_i, R) \rceil$  (*idx clust*)



- Loops anidados:  $B(R) + \lceil B(R) / (M-2) \rceil * B(S)$
- Único loop:  $B(R) + n(R) * \text{Costo\_Index\_Scan}(S)$
- Junta Hash:  $3 * (B(R) + B(S))$