

sql Lab2

Consultas

Autosuficiente

Albumes de cada banda

$$\text{Album_performer} \leftarrow (\pi_{\text{band,name}}(\text{Involvement}) *_{\text{band=performer}} \text{Albums})$$

tracks de cada banda

$$\text{Tracks_performer} \leftarrow (\pi_{\text{pair, seq, writer}}(\text{Tracks}) *_{\text{pair}} \text{Album_performer})$$

numero de tracks interpretados por cada banda

$$\text{Totales} \leftarrow \pi_{\text{performer, count() as TOTAL}}(\pi_{\text{pair, seq, performer}} \text{Tracks_performer}) \text{GroupBy(performer)}$$

tracks propias de cada banda

$$\text{tracks_propias} \leftarrow \sigma_{\text{writer=name}}(\text{tracks_performer})$$

número de tracks propias de cada banda

$$\text{num_tracks_propias} \leftarrow \pi_{\text{performer, count() as numPropias}}(\text{track_propias}) \text{GroupBy(performer)}$$

Unión de conteos

$$\text{Tracks_union} \leftarrow \text{num_tracks_propias} *_{\text{performer}} \text{Totales}$$

porcentaje de tracks propias de cada banda

$$\text{result}_1 \leftarrow \pi_{\text{performer, (numTotales/TOTAL)*100}} \text{Tracks_union}$$

Interpretaciones propias de cada banda

$$\text{int_propias} \leftarrow \pi_{\text{performer, count() as propias}}(\text{Performances} *_{\text{performer}} \text{tracks_propias}) \text{GroupBy(performer)}$$

interpretaciones totales

$$\text{int_totales} \leftarrow \pi_{\text{performer, count() as TOTAL}}(\text{Performances}) \text{GroupBy(performer)}$$
$$\text{int_union} \leftarrow \text{int_propias} *_{\text{performer}} \text{int_totales}$$
$$\text{result}_2 \leftarrow \pi_{\text{performer, (propias/TOTAL)*100}} \text{int_union}$$

resultado final:

$$\text{sol} \leftarrow \text{result}_1 *_{\text{performer}} \text{result}_2$$