

H04 - Algebra Relacional

1. $\pi \text{ first_name, last_name } (\sigma \text{ gender} = 'F' (\text{actors}))$
2. $\pi \text{ name } (\sigma \text{ year} > 1999 (\text{movies}))$
3. $X = \rho \text{ idMovie} \leftarrow \text{id} (\text{movies})$
 $A = X \bowtie \text{idMovie} = \text{movie_id movies_directors}$
 $B = A \bowtie \text{director_id} = \text{id directors}$
 $\pi \text{ name, first_name, last_name } (B)$
4. $Y = \sigma \text{ rank} > 6 (\text{movies})$
 $X = \rho \text{ idMovie} \leftarrow \text{id} (Y)$
 $A = X \bowtie \text{idMovie} = \text{movie_id roles}$
 $B = A \bowtie \text{actor_id} = \text{id actors}$
 $\pi \text{ name, first_name, last_name, role } (B)$
5. $A = \gamma \text{ director_id; count(movie_id)} \rightarrow \text{Total} (\text{movies_directors})$
 $B = A \bowtie \text{director_id} = \text{id directors}$
 $\pi \text{ first_name, last_name, Total } (B)$
6. $\gamma \text{ genre; count(movie_id)} \rightarrow \text{Total} (\text{movies_genres})$
7. $A = \text{movies} \bowtie \text{id} = \text{movie_id movies_genres}$
8. $\gamma \text{ genre; avg(rank)} \rightarrow \text{Medio, min(rank)} \rightarrow \text{Minimo, max(rank)}$
 $\rightarrow \text{Maximo } (A)$

