

## Test : Union in Quantifier Domain

$[UserId, SongId]$

$$\frac{\text{users} : \mathbb{F} \text{ } UserId \text{ songs} : \mathbb{F} \text{ } SongId \text{ hated} : UserId \rightarrow \mathbb{F} \text{ } SongId \text{ loved} : UserId \rightarrow \mathbb{F} \text{ } SongId}{\forall i : \text{dom hated} \cup \text{dom loved} \bullet \text{hated}(i) \cap \text{loved}(i) = \text{emptyset}}$$