

## Test : Union in Quantifier Domain

[ $UserId, SongId$ ]

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