リレーショナル演算

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| 演算名 | 演算の一覧 |
| 和 union | $$R∪S=\left\{t|t\in R∨t\in S\right\}$$ |
| 共通集合 intersection | $$R∩S=\left\{t|t\in R∧t\in S\right\}$$ |
| 差 difference | $$R-S=\left\{t|t\in R∧¬\left(t\in S\right)\right\}$$ |
| 直積 Cartesian product | $$R×S=\left\{\left(r,s\right)|r\in R∧s\in S\right\}$$ |
| 射影 projection | $$\begin{matrix}R\left[A\_{i\_{1}},A\_{i\_{2}},…,A\_{i\_{k}} \right]\\=\left\{u|u\in dom\left(A\_{i\_{1}}\right)×dom\left(A\_{i\_{2}}\right)×…×dom\left(A\_{i\_{k}}\right)∧\left(∃r\in R\right)\right.\\\left.\left(r\left[A\_{i\_{1}}\right]=u\left[A\_{i\_{1}}\right]∧r\left[A\_{i\_{2}}\right]=u\left[A\_{i\_{2}}\right]∧…∧r\left[A\_{i\_{k}}\right]=u\left[A\_{i\_{k}}\right]\right)\right\}\end{matrix}$$ |
| 選択 selection | 2属性 | $$R\left[A\_{i} θ A\_{j}\right]=\left\{t|t\in R∧t\left[A\_{i}\right] θ t\left[A\_{j}\right]\right\}$$ |
| 1属性と値 | $$R\left[A\_{i} θ c\right]=\left\{t|t\in R∧t\left[A\_{i}\right] θ c\right\}$$ |
| 結合 join | $$R\left[A\_{i} θ B\_{j}\right]S=\left\{\left(t,u\right)|t\in R∧u\in S∧t\left[A\_{i}\right] θ u\left[B\_{j}\right]\right\}$$ |