

Relacijska algebra

Tabela T

Relacija $T \subseteq A_1^{S_1} \times A_2^{S_2} \times A_3^{S_3}$

SELECT * FROM T WHERE P;

↑
pogoj

$$\{ \vec{r} \in T \mid P(\vec{r}) \} \subseteq T \subseteq A_1 \times A_2 \times A_3$$

SELECT S_1, S_3 FROM T;

$$S \subseteq A \times B$$

$$\{ (x_1, x_3) \in A_1 \times A_3 \mid \exists x_2 \in A_2. (x_1, x_2, x_3) \in T \}$$

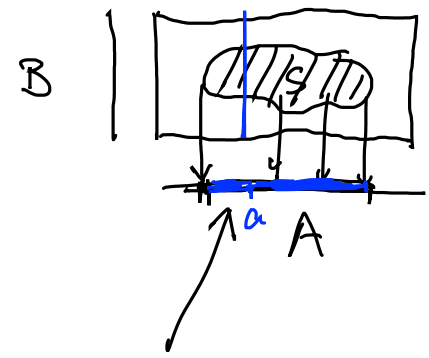
SELECT * FROM T, S;

$$B_1 \times B_2 \cup \{ \}$$

$$T \times S = \{ (\vec{r}, \vec{s}) \mid \vec{r} \in T, \vec{s} \in S \}$$

$$\cap A_1 \times A_2 \times A_3 \times B_1 \times B_2$$

$$\cap A_1 \times A_2 \times A_3$$



$$\{ a \in A \mid \exists b \in B. (a, b) \in S \}$$

Spoj

SELECT, ... FROM T_1, T_2 WHERE $T_1.s_1 = T_2.s_2$;

Primer:

<u>Oseba</u>	<u>Kraj</u>
Ime	Kraj
Priimek	Posta
Ulice	
Posta	

→

SELECT ime, priimek, ulice, ^{Oseba.posta} ~~posta~~, kraj
 FROM Oseba, Kraj WHERE Oseba.posta = Kraj.posta ;

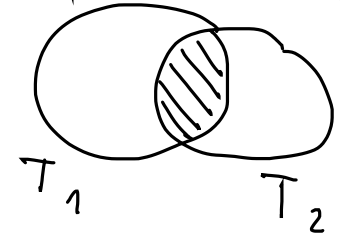
SELECT ... FROM
 T_1 JOIN T_2 ON $T_1.s_1 = T_2.s_2$;

$$T_1 \bowtie_{s_1, s_2} T_2 = \{ (\vec{r}_1, \vec{r}_2) \in T_1 \times T_2 \mid r_1.s_1 = r_2.s_2 \}$$

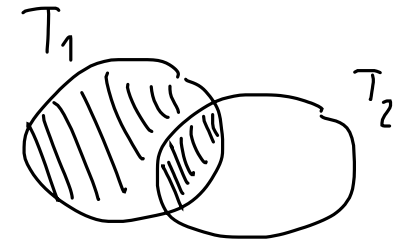
Join

T_1 JOIN T_2 ON $T_1.S_1 = T_2.S_2$;

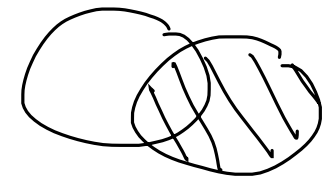
Napáien diagram:



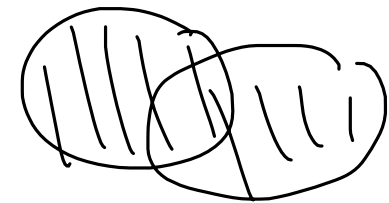
T_1 LEFT JOIN T_2 ON $T_1.S_1 = T_2.S_2$;



T_1 RIGHT JOIN



T_1 FULL JOIN



Kino

