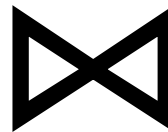




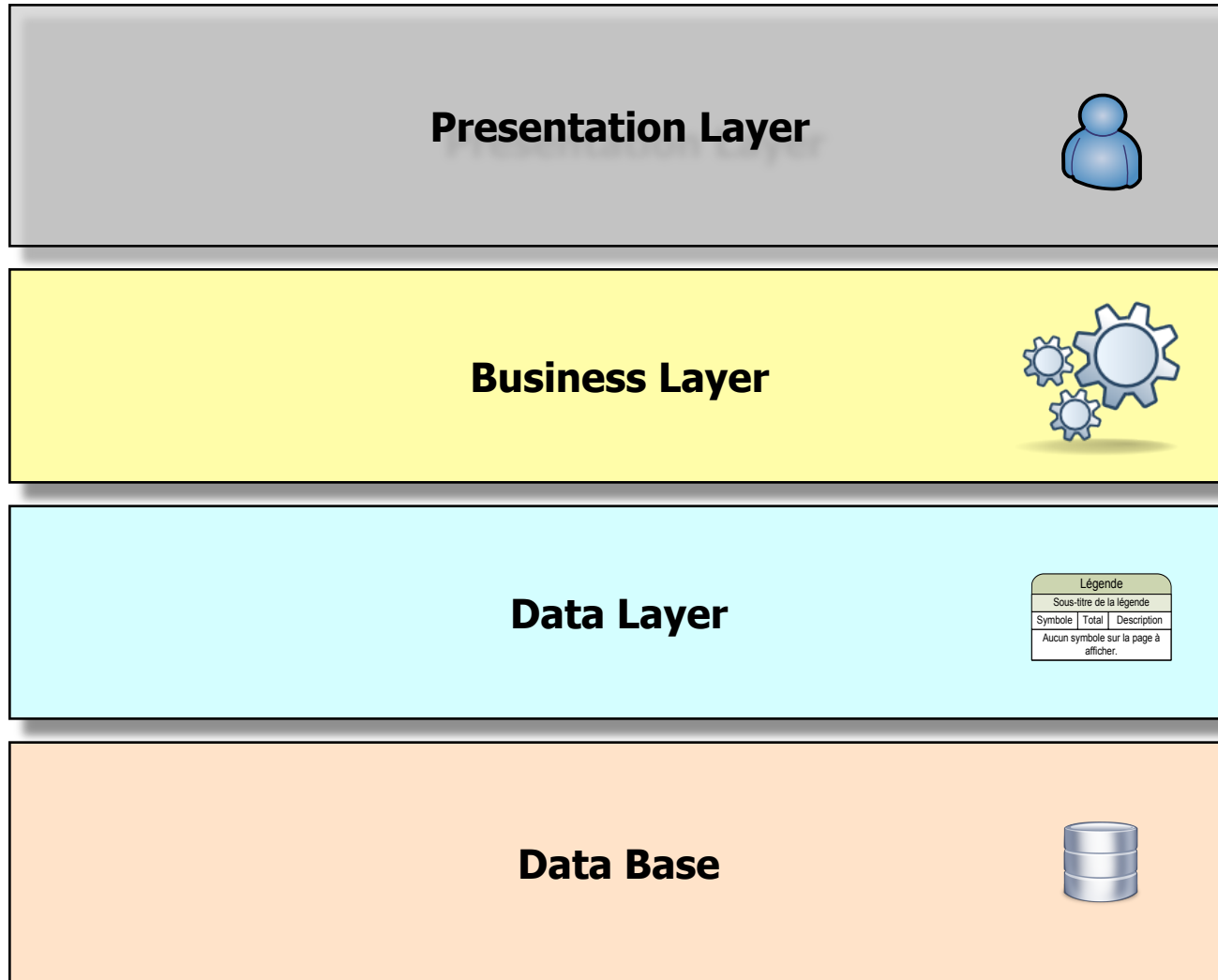
σ

Conception Avancée de Bases de Données

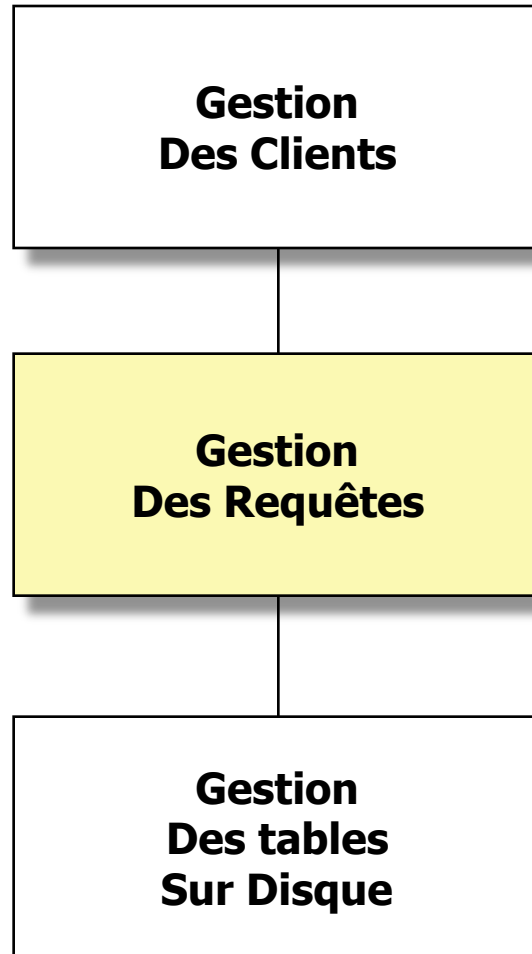
Jointure Naturelle

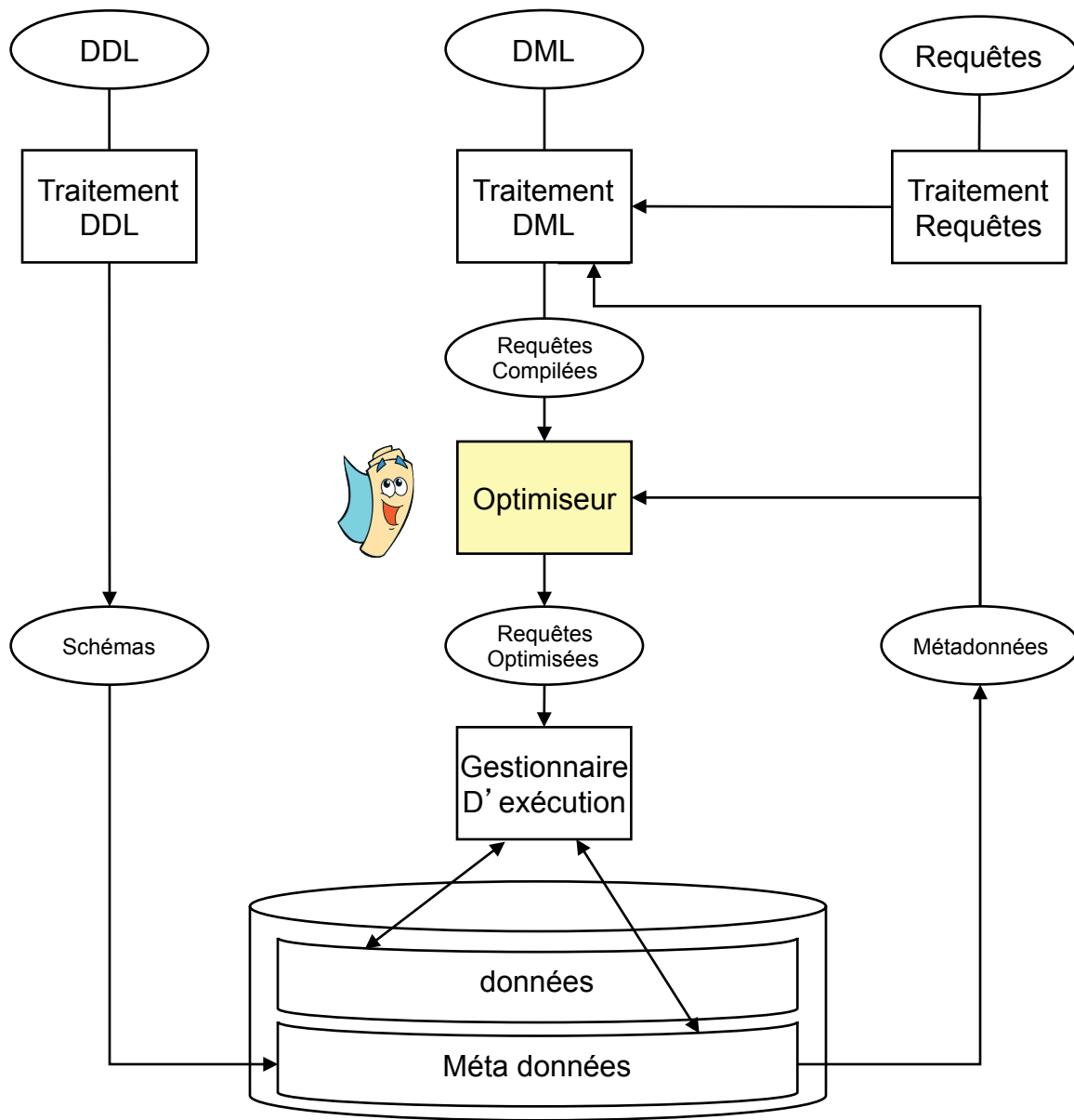


Layered Architecture



Big Picture





D'après C.J DATE

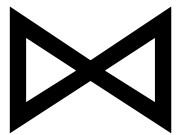
DDL : langage de définition des données; DML : langage de manipulation des données

Décomposition



■ Jointure =

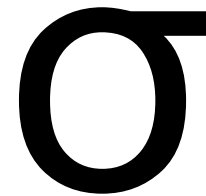
■ produit cartésien puis
selection



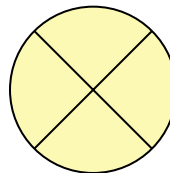
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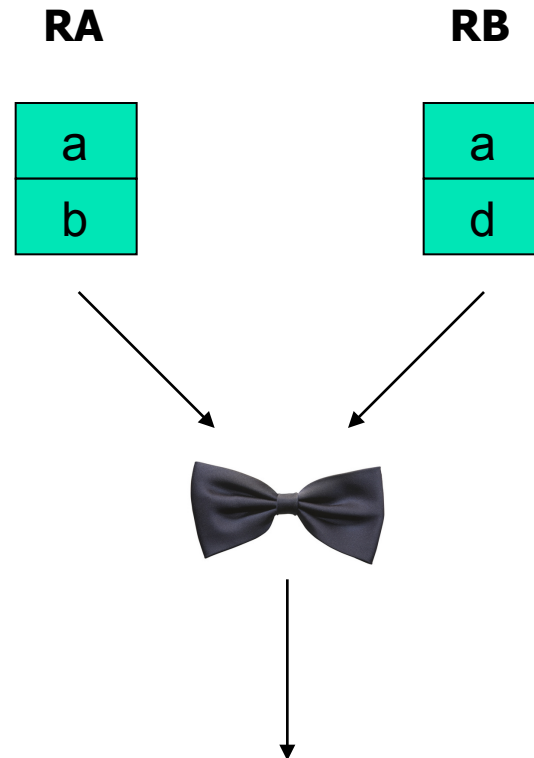
=>



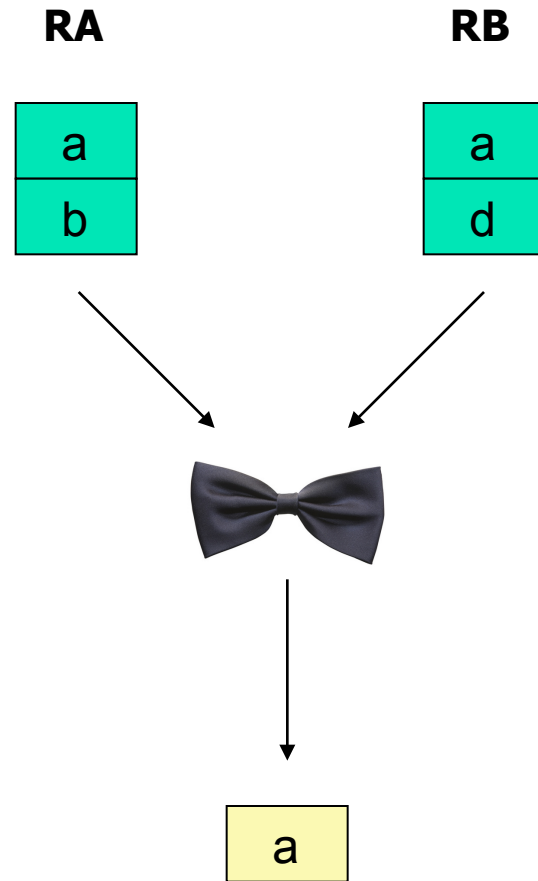
Sigma



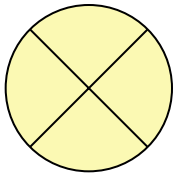
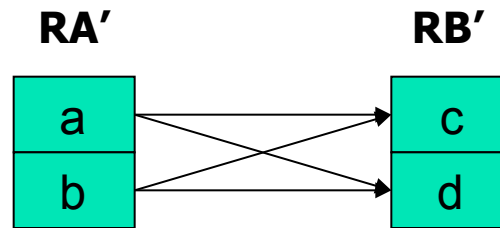
Jointure



Jointure

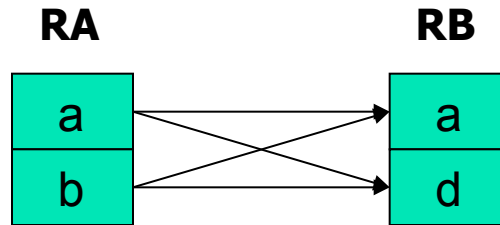


Produit Cartésien



ra	rb
a	c
a	d
b	c
b	d

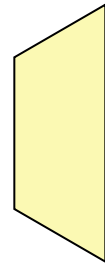
Sélection



ra	rb
a	a
a	d
b	a
b	d

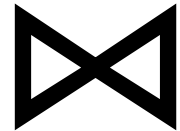
σ

Sigma



ra = rb

a	a
---	---



Autre cas



2 relations

RA

A	B	C
9	3	9
5	6	1
2	8	1

RB

C	D	E
1	2	9
5	7	3
9	1	2

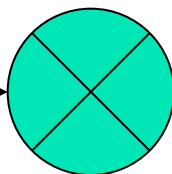


RA

A	B	C
9	3	9
5	6	1
2	8	1

RB

C	D	E
1	2	9
5	7	3
9	1	2



Produit Cartésien

A	B	C	C	E	F
9	3	9	1	2	9
5	6	1	1	2	9
2	8	1	1	2	9
9	3	9	5	7	3
5	6	1	5	7	3
2	8	1	5	7	3
9	3	9	9	1	2
5	6	1	9	1	2
2	8	1	9	1	2

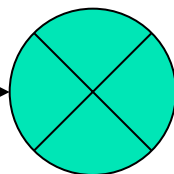


RA

A	B	C
9	3	9
5	6	1
2	8	1

RB

C	D	E
1	2	9
5	7	3
9	1	2



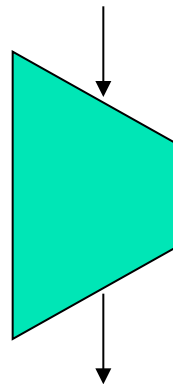
Produit Cartésien

A	B	C	C	E	F
9	3	9	1	2	9
5	6	1	1	2	9
2	8	1	1	2	9
9	3	9	5	7	3
5	6	1	5	7	3
2	8	1	5	7	3
9	3	9	9	1	2
5	6	1	9	1	2
2	8	1	9	1	2

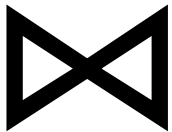
Sélection



A	B	C	C	E	F
9	3	9	1	2	9
5	6	1	1	2	9
2	8	1	1	2	9
9	3	9	5	7	3
5	6	1	5	7	3
2	8	1	5	7	3
9	3	9	9	1	2
5	6	1	9	1	2
2	8	1	9	1	2



σ Sigma



A	B	C	E	F
5	6	1	2	9
2	8	1	2	9
9	3	9	1	2



