



WGBD et BD01

SQL comme langage d'interrogation : Equi-jointures

EPFC-ULB

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SQL de base : équi-jointure



Une **jointure** permet de combiner les colonnes de plusieurs tables.

Une **équi-jointure** lie deux tables sur base de l'égalité des valeurs d'une colonne commune (souvent une clé primaire/étrangère).

Employee

<u>SSN</u>	FName	LName	BDate	Address	DNum		Departme	nt
123	John	Doe	19801212	•••	1	l	<u>DNum</u>	DName
456	John	Smith	19760302	•••	1		1	Research
789	Paul	Smith	19820201	•••	2		2	Logistics

Noms des employés du département recherche

SELECT e.FName

FROM Employee e, Department d

WHERE e.DNum = d.DNum AND d.DName='Research'



Etape I: FROM



Employee

<u>SSN</u>	FName	LName	BDate	Address	DNum
123	John	Doe	19801212		1
456	John	Smith	19760302		1
789	Paul	Smith	19820201		2

Produit cartésien (X)

Department

<u>DNum</u>	DName
1	Research
2	Logistics

Noms des employés du département recherche

SELECT e.FName

FROM Employee e, Department d

WHERE e.DNum = d.DNum AND d.DName='Research'

artmen	SSN
	123
Deb	123
X e	456
loye	456
Emp	789

ment	Employee. SSN	Employee. FName	Employee. LName	Employee .BDate	Employee. Address	Employee. DNum	Department. DNum	Department. DName
partn	123	John	Doe	19801212		1	1	Research
Dep	123	John	Doe	19801212		1	2	Logistics
×	456	John	Smith	19760302		1	1	Research
ployee	456	John	Smith	19760302		1	2	Logistics
Emp	789	Paul	Smith	19820201		2	1	Research
2015/2016	789	Paul	Smith	19820201		2	2	Logistics



Etape 2:WHERE



Employee

<u>SSN</u>	FName	LName	BDate	Address	DNum
123	John	Doe	19801212		1
456	John	Smith	19760302		1
789	Paul	Smith	19820201	•••	2

Department

<u>DNum</u>	DName
1	Research
2	Logistics

Noms des employés du département recherche

SELECT e.FName

FROM Employee e, Department d

WHERE e.DNum = d.DNum AND d.DName='Research'

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nent	Employee. SSN	Employee .FName	Employee .LName	Employee .BDate	Employee. Address	Employee. DNum	Department. DNum	Department. DName	
partn	123	John	Doe	19801212	•••	1	1	Research	1
Dep	123	John	Doe	19801212		1	2	Logistics	X
se X	456	John	Smith	19760302		1	1	Research	✓
ploye	456	John	Smith	19760302	•••	1	2	Logistics	X
Emp	789	Paul	Smith	19820201	•••	2	1	Research	X
	789 5/2016	Paul	Smith	19820201		2	2	Logistics	X



Etape 3 : SELECT



nent	Employee. SSN	Employee .FName	Employee .LName	Employee .BDate	Employee. Address	Employee. DNum	Department. DNum	Department. DName	
artı	123	John	Doe	19801212		1	1	Research	1
Dep	123	John	Doe	19801212		1	2	Logistics	X
ee X	456	John	Smith	19760302		1	1	Research	1
0	456	John	Smith	19760302		1	2	Logistics	X
Emp	789	Paul	Smith	19820201		2	1	Research	X
	789	Paul	Smith	19820201	•••	2	2	Logistics	X

Noms des employés du département recherche

SELECT e.FName

FROM Employee e, Department d
WHERE e.DNum = d.DNum AND d.DName='Research'

John
John





SQL de base : jointure avec JOIN

Employee

<u>SSN</u>	FName	LName	BDate	Address	DNum
123	John	Doe	19801212	•••	1
456	John	Smith	19760302	•••	1
789	Paul	Smith	19820201	•••	2

Department

<u>DNum</u>	DName
1	Research
2	Logistics

Noms des employés du département recherche

SELECT e.FName

FROM Employee e, Department d

WHERE e.DNum = d.DNum AND d.DName='Research'

SELECT e.FName

FROM Employee e JOIN Department d ON e.DNum = d.DNum

WHERE d.DName='Research'