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Q	What is aujoin for a stop of large to the house to
	A join is a feature of sql that allows us to get data
	from two different baller where the warm reds are related.
	They are used in all veries that involve multiple
5	They are used in queries that involve multiple fables, which is a lot of queries that we will write as
	a developen
	to the start by confing the coins quising they come rowers

Air of the several tables.

But we use joins to get data from quelated tables into a single query and a single set of nesults.

Ex 1-

-	perso	n				company	
1	person id	first name	company_id		id	company name	1
	Total or	Susan	(null)	2336	21r+1	ABC PP Ltd	1
	2	John	2		2 . 10	XYZ Service	1
100	3.4	Mark	1 642 1K 0	n's	3	CB construction	-
	the 2411	Sarah	Form 12 15	12 16 0	4		+
	5	Rober t	4		5	Plumbing Solution	+
	se for any		7. 7. 4		3 1	Magic Printing	ł

We can select from these tables individually

SELECTR DESIRES CON A CON	SELECT	B.I Man . U.
person_id,	rdr	But the in the
first name,	company-name	two different
company-id	FROM company;	queries and
FROM person .		two different
		Huulte

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But, what if we want the data in one yoult? what if we wanted to see a list of people's names and the company names they are yelocted to.

to see ble can we Josh nove to below it distant

he want by writing the select query, then some columns from the person table

ble specify the beson table, then we need to specify the second table. Before the second table, we specify a join.

The differences are in how they handle data found in one table but not another.

Inner Join

A inner join lets us relate records between two tables, and returns records where there is a match in both tables.

If there is a yerostd in one table without a match in the other, it is not shown in the results.

for ex! - If there is a person that has no company id second,
the person won't be shown if we use an inner join

ompany won't be shown

}	A	10/	A	move	A	A	r tailt
	В		B		B	B	in A then it
	C		0		3	3	
+	0	+	5				

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select			7 3
person id	1	I NNER J	NIOIN = JOIN
	ne,	(gnn	er is oftional)
	id company nom		*
FROM pers	on company nom	first table	. 103 3
	N company	-> second	table
ON per	son company-iq		
—	<b>,</b> , , , , , , , , , , , , , , , , , ,	, ,	100115
on we c	an also specify	, the fields are	from which toble
7.5	127.10 239.8	, 5 64	or hop and
select	121		Section and
	rson_id,	y riging E	madaras karguas
person.firs			16.001 Ferrers
			reed confirm to
	company nam		en france.
FROM per.		2	There
		( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( )	
		= company i'd	
A Venneral	The 's	7.0	Control of the Contro
result	TV S	2.	2 P
7 77 19	8.5 ()	N	America A
person_id	first-name	company-id	company. name
2,	John	2	XYZ Services
sie 3 milit	as Mark topic	12 1.1.110	XYZ Services
	de Sarah no		
4	4.1	13 12 Proce 6/2	ABC Put Ltd.
5	Polant	4	01 1 11
	Robert	4	Plumbing solution

This join type will show all yers yet from the table on the left of the join keyword which is the table on specified first.

Then if there are any records matching the wight table, then they are also included if there are no

matches null is shown.

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A		A				10 13134
В	la.ie	B	WINE GROWING	A	A.	· volum
C	W 4 17	140	Sant Come	B	B	ror A
		D		C	1.	and three
3		3	5 1 2 m 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2	8	3	ica limita
		إد	J. 10000 C	wrote	200 113	OB VENTAL

## SELECT

person person id, which it winds de mes ou berson. Perst name, LEFT OUTER JOEN person. company \_id, = LEFT FOIN company. company name (outer is optional) FROM person LEFT OUTER JOEN company

ON person, company id = company id

## Heyul E)

			18061 15005
person id	first-name	company id	company -name
1	Susan	Chull)	(null)
2	John	2	
3	Mark	9	XYZ Services
4	Sarah	1	xyz Services
5 min year	0.1.1		ABC Pty 1+d
10000	1.	sugarta spro	Plumbing Solutions.

So, this join is helpful if we want all seconds in a table even if there is no madely in another table.

## Right Outer Join

This join type will show all records from table on the stight of the join keyword. Then all the matching seconds from the

left toble will also be shown, if no motching yecords then null will be shown

A	A	1		Γ
B	B	4	4	H
 C		B	В	_
 -			D	1
	9	E	3	
3	3			

SELECT

person-person-id,

person. first-name,

person. company-id,

company. company-name

Company. company-name

Courer is optional)

FROM person

RIGHT OUTER JOEN company

ON person. company i'd = company i'd

(ruult)

person-id	first-name	company-i'd	company-name
2	John	2	XYZ services
3	Mark	2	XYZ services
4	Sarah		ABC pty Ltd
5	Robert	4	Plumbing Solutions
(7411)	(7411)	3	CB construction
(null)	(null)	5	Magic Printing
	3	pr.	0

Left = Right with opposite tables

FROM person FROM company

LEFT OUTER JOEN company REGHT OUTER JOEN person

full outer join	Г. Н			
	-ull	but	er	inim

Combination of both left and right outer join.

. Onder of the tables doesn't matter.

person_id	first-name	company-id	company-name
1	Swan	(nuli)	(7411)
૨	John	2	XYZ services
3	Mark	2	XYZ Services
4	Jarah	1	ABC pty Ltd.
5	Robert	4	Plumbing solutions
(null)	(null)	3	CB Construction
(mu11)	(null)	5	Magic Printing
1	,		The state of the s

query for this

SELECT

person. person-id,

berson first name,

person. company - id,

company. company name.

FROM person

FULL OUTER JOEN company

ON person company - it = company .id

Hesult