

Joins In SQL

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Join:-

- operation combines data or rows from two or more tables based on a common field between them.

بتضم البيانات او الصفوف من جدولين او اكثر بناءا على حقل مشترك

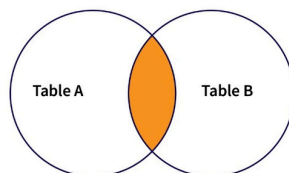
- is used to query and access data from multiple tables by establishing logical relationships between them.

يتم استخدامه للاستعلام عن البيانات والوصول إليها من جداول متعددة عن طريق إنشاء علاقات منطقية بينها.

1- Inner Join

- selects rows that have matching values in both tables.

Inner Join



لو كتبت join or inner join نفس المعني ==> لان ال inner join هو ال default ==> ل join

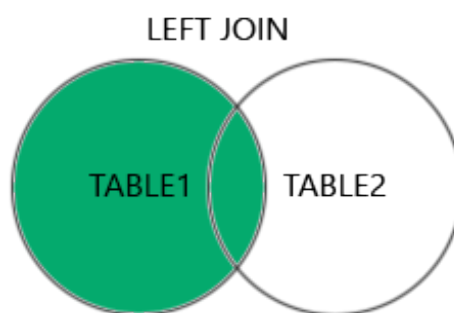
```
SELECT Name, Gender, Salary, DepartmentName
FROM tblEmployee
INNER JOIN tblDepartment
ON tblEmployee.DepartmentId = tblDepartment.Id
```

OR

```
SELECT Name, Gender, Salary, DepartmentName
FROM tblEmployee
JOIN tblDepartment
ON tblEmployee.DepartmentId = tblDepartment.Id
```

2- Left Join

- returns all records from the left table (table1), and the matching records from the right table (table2).



بيختار جميع صفوف الجدول الأيسر مع الصفوف المشتركة من الجدول الآخر

SQLQuery1.sql - E...ENEPC\Eugene (52))*

```
1 USE productsdb;
2
3 SELECT FirstName, CreatedAt, ProductCount, Price, ProductId
4 FROM Orders LEFT JOIN Customers
5 ON Orders.CustomerId = Customers.Id
```

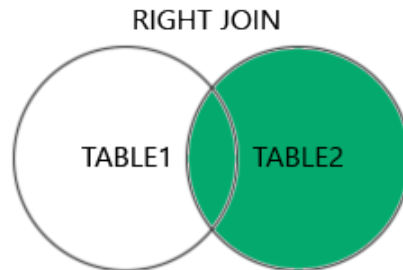
100 %

Results Messages

	FirstName	CreatedAt	ProductCount	Price	ProductId
1	Tom	2017-07-11	2	46000.00	3
2	Tom	2017-07-13	1	41000.00	1
3	Bob	2017-07-11	1	41000.00	1

3- Right Join

- returns all records from the right table (table2), and the matching records from the left table (table1).



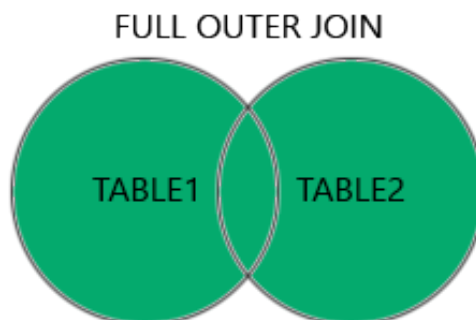
بيختار جميع صفوف الجدول الأيمن مع الصفوف المشتركة من الجدول الآخر

Worksheet		Query Builder	
1	SELECT	first_name, last_name,	
2		department_name, salary	
3	FROM	employees e	
4	RIGHT JOIN	departments d	
5	ON	e.department_id= d.department_id;	

Query Result x				
SQL Fetched 50 rows in 0.053 seconds				
FIRST_NAME	LAST_NAME	DEPARTMENT_NAME	SALARY	
1 Jennifer	Whalen	Administration	4400	
2 Michael	Hartstein	Marketing	13000	
3 Pat	Fay	Marketing	6000	
4 Den	Raphaely	Purchasing	11000	
5 Alexander	Khoo	Purchasing	3100	
6 Shelli	Baida	Purchasing	2900	
7 Sigal	Tobias	Purchasing	2800	
8 Guy	Himuro	Purchasing	2600	
9 Karen	Colmenares	Purchasing	2500	
10 Susan	Mavris	Human Resources	6500	

4- Full Outer JOIN

- selects all rows in both tables.



بيجيب كل الصفوف ف الجدولين.

Microsoft SQL Server Management Studio

File Edit View Query Project Debug ApexSQL Refactor SQL Prompt 5 Tools Window Community Help

AdventureWorks2008R2 | Execute

Alt+Shift+ExampleData...12 sqtly.net (630)

```
49 SELECT *
50 FROM dbo.TblA AS A
51 FULL OUTER JOIN dbo.TblB AS B
52 ON A.TblA_Val = B.TblB_Val;
```

Results Messages

	TblA_Val	TblA_Desc	TblB_Val	TblB_Desc
1	1	A-1	NULL	NULL
2	2	A-2	2	B-2
3	3	A-3 (1st)	3	B-3
4	3	A-3 (2nd)	3	B-3
5	4	A-4 (1st)	4	B-4 (1st)
6	4	A-4 (1st)	4	B-4 (2nd)
7	4	A-4 (2nd)	4	B-4 (1st)
8	4	A-4 (2nd)	4	B-4 (2nd)
9	5	A-5	5	B-5 (1st)
10	5	A-5	5	B-5 (2nd)
11	NULL	NULL	6	B-6

Query executed successfully. | sqtly.net (R2) (0.50 SP1) | Image ©2012 sqtly.net... | AdventureWorks2008R2 | 00:00:00 | 11 rows

Ready | Ln 54 | Col 1 | Ch 1 | BMS