

JOINS IN SQL SERVER

joins.left_table

dt	country_id	units
2020-01-01	1	40
2020-01-02	1	25
2020-01-03	3	30
2020-01-04	2	35

joins.right_table

id	country
3	Panama
4	Spain

INNER JOIN

INNER Join: It will bring matching rows in left and right table

SELECT

l.dt, l.country_id, l.units,
r.id, r.country

FROM joins.left_table l

INNER JOIN joins.right_table r

ON l.country_id = r.id;

RESULT

dt	country_id	units	id	country
2020-01-03	3	30	3	Panama

Matching Rows
in
left & right table

JOINS IN SQL SERVER

LEFT JOIN

LEFT Join: It will bring all rows from left and matching rows in right table

SELECT

l.dt, l.country_id, l.units,
r.id, r.country

FROM joins.left_table l

LEFT JOIN joins.right_table r

ON l.country_id = r.id;

RESULT

dt	country_id	units	id	country
2020-01-01	1	40	NULL	NULL
2020-01-02	1	25	NULL	NULL
2020-01-03	3	30	3	Panama
2020-01-04	2	35	NULL	NULL

All rows from left
and matching in
right

JOINS IN SQL SERVER

RIGHT JOIN

LEFT Join: It will bring all rows from right and matching rows in left table

SELECT

l.dt, l.country_id, l.units,
r.id, r.country

FROM joins.left_table l

RIGHT JOIN joins.right_table r

ON l.country_id = r.id;

RESULT

dt	country_id	units	id	country
2020-01-03	3	30	3	Panama
NULL	NULL	NULL	4	Spain

All rows from right
and matching in left

JOINS IN SQL SERVER

FULL JOIN

FULL Join: It will bring all rows from right and left table but it will merge the same rows

SELECT

l.dt, l.country_id, l.units,
r.id, r.country

FROM joins.left_table l

FULL JOIN joins.right_table r

ON l.country_id = r.id;

RESULT

dt	country_id	units	id	country
2020-01-01	1	40	NULL	NULL
2020-01-02	1	25	NULL	NULL
2020-01-03	3	30	3	Panama
2020-01-04	2	35	NULL	NULL
NULL	NULL	NULL	4	Spain

3rd row is the same
so it has shown once

JOINS IN SQL SERVER

LEFT ANTIJOIN

LEFT ANTI JOIN: it will bring all rows from left table that are not matching in right table

SELECT

l.dt, l.country_id, l.units,
r.id, r.country

FROM joins.left_table l

LEFT JOIN joins.right_table r

ON l.country_id = r.id

WHERE r.id IS NULL;

RESULT

dt	country_id	units	id	country
2020-01-01	1	40	NULL	NULL
2020-01-02	1	25	NULL	NULL
2020-01-04	2	35	NULL	NULL

All rows from left table that are not matching in right table

JOINS IN SQL SERVER

RIGHT ANTI JOIN

RIGHT ANTI JOIN: it will bring all rows from right table that are not matching in left table

SELECT

l.dt, l.country_id, l.units,
r.id, r.country

FROM joins.left_table l

RIGHT JOIN joins.right_table r

ON l.country_id = r.id

WHERE l.id IS NULL;

RESULT

dt	country_id	units	id	country
NULL	NULL	NULL	4	Spain

All rows from right table that are not matching in left table

JOINS IN SQL SERVER

CROSS JOIN

It will combine each row of one table with each row of another table, and return the Cartesian product of the sets of rows from the tables that are joined.

SELECT

l.dt, l.country_id, l.units,
r.id, r.country

FROM joins.left_table l

CROSS JOIN joins.right_table r

RESULT

dt	country_id	units	id	country
2020-01-01	1	40	3	Panama
2020-01-02	1	25	3	Panama
2020-01-03	3	30	3	Panama
2020-01-04	2	35	3	Panama
2020-01-01	1	40	4	Spain
2020-01-02	1	25	4	Spain
2020-01-03	3	30	4	Spain
2020-01-04	2	35	4	Spain

All rows from right
and matching in left