

# SQL CARTESIAN OR CROSS JOINS

---

The **CARTESIAN JOIN** or **CROSS JOIN** returns the cartesian product of the sets of records from the two or more joined tables. Thus, it equates to an inner join where the join-condition always evaluates to True or where the join-condition is absent from the statement.

## Syntax:

The basic syntax of **INNER JOIN** is as follows:

```
SELECT table1.column1, table2.column2...
FROM table1, table2 [, table3 ]
```

## Example:

Consider following two tables, (a) CUSTOMERS table is as follows:

ID	NAME	AGE	ADDRESS	SALARY
1	Ramesh	32	Ahmedabad	2000.00
2	Khilan	25	Delhi	1500.00
3	kaushik	23	Kota	2000.00
4	Chaitali	25	Mumbai	6500.00
5	Hardik	27	Bhopal	8500.00
6	Komal	22	MP	4500.00
7	Muffy	24	Indore	10000.00

(b) Another table is ORDERS as follows:

OID	DATE	CUSTOMER_ID	AMOUNT
102	2009-10-08 00:00:00	3	3000
100	2009-10-08 00:00:00	3	1500
101	2009-11-20 00:00:00	2	1560
103	2008-05-20 00:00:00	4	2060

Now let us join these two tables using **INNER JOIN** as follows:

```
SQL> SELECT ID, NAME, AMOUNT, DATE
      FROM CUSTOMERS, ORDERS;
```

This would produce following result:

ID	NAME	AMOUNT	DATE
1	Ramesh	3000	2009-10-08 00:00:00
1	Ramesh	1500	2009-10-08 00:00:00
1	Ramesh	1560	2009-11-20 00:00:00
1	Ramesh	2060	2008-05-20 00:00:00
2	Khilan	3000	2009-10-08 00:00:00
2	Khilan	1500	2009-10-08 00:00:00
2	Khilan	1560	2009-11-20 00:00:00
2	Khilan	2060	2008-05-20 00:00:00
3	kaushik	3000	2009-10-08 00:00:00

3	kaushik	1500	2009-10-08	00:00:00
3	kaushik	1560	2009-11-20	00:00:00
3	kaushik	2060	2008-05-20	00:00:00
4	Chaitali	3000	2009-10-08	00:00:00
4	Chaitali	1500	2009-10-08	00:00:00
4	Chaitali	1560	2009-11-20	00:00:00
4	Chaitali	2060	2008-05-20	00:00:00
5	Hardik	3000	2009-10-08	00:00:00
5	Hardik	1500	2009-10-08	00:00:00
5	Hardik	1560	2009-11-20	00:00:00
5	Hardik	2060	2008-05-20	00:00:00
6	Komal	3000	2009-10-08	00:00:00
6	Komal	1500	2009-10-08	00:00:00
6	Komal	1560	2009-11-20	00:00:00
6	Komal	2060	2008-05-20	00:00:00
7	Muffy	3000	2009-10-08	00:00:00
7	Muffy	1500	2009-10-08	00:00:00
7	Muffy	1560	2009-11-20	00:00:00
7	Muffy	2060	2008-05-20	00:00:00