

SQL: Cross Join and Self Join

### 1. What is a CROSS JOIN?

A CROSS JOIN returns the Cartesian product of the two tables involved, meaning it combines each row of the first table with each row of the second table. This type of join does not require any condition to join the tables.

## 2. Basic Syntax of CROSS JOIN

The basic syntax for a CROSS JOIN is as follows:

SELECT columns FROM table1 CROSS JOIN table2;

- SELECT columns: Specifies the columns to be included in the result set.
- FROM table1: Specifies the first table.
- CROSS JOIN table2: Specifies the second table and performs the join operation.

# 3. Detailed Example with Steps for CROSS JOIN

Consider two tables, products and colors:

#### products Table:

product_id	product_name
1	T-shirt
2	Jeans

### colors Table:

color_id	color_name
101	Red