What are joins in SQL? State its types.

In SQL, *joins* are operations that allow you to combine rows from two or more tables based on a related column between them. Joins are essential when working with relational databases, as they help you retrieve data across multiple tables in a cohesive manner.

Types of Joins

1. **Inner Join**

2. **Left (Outer) Join**

3. **Right (Outer) Join**

4. **Cross Join**

5. **Self Join**

Define Cross join.

Cross Join

- A *cross join* returns the Cartesian product of the two tables, which means every row in the first table is combined with every row in the second table.

- This can result in a large number of results and is generally used only in specific cases.

- Syntax: SELECT columns FROM table1 CROSS JOIN table2;