# Joins Are From Descartes, Rows Are From Schemas

### Part 1

\* The outputs of following queries are 25 and 10, respectively.

```sql

SELECT COUNT(\*)

FROM first\_table;

SELECT COUNT(\*)

FROM second\_table;

```

\* What will be the number of rows in the output of the following query?

```sql

SELECT \*

FROM first\_table, second\_table;

**Student Response:**

**The output will be Cartesian Product (cross-join). Cartesian product returns all the rows in all the tables listed in the query. Each row in the first table is associated with all the rows in the second table. This happens when there is no relationship defined between the 2 tables.**

### Part 2

\* The query `SELECT \* FROM table\_one;` returns the following:

![Images/descartes01.png](Images/descartes01.png)

\* And the query `SELECT \* FROM table\_two;` returns the following:

![Images/descartes01.png](Images/descartes02.png)

\* What will the query `SELECT \* FROM table\_one, table\_two;` look like?

\* \_You can use pgAdmin and create a new table to test out this activity\_

**Student Response:**

**The output will be Cartesian Product (cross-join). Cartesian product returns all the rows in all the tables listed in the query. Each row in the first table is paired with all the rows in the second table. This happens when there is no relationship defined between the 2 tables.**