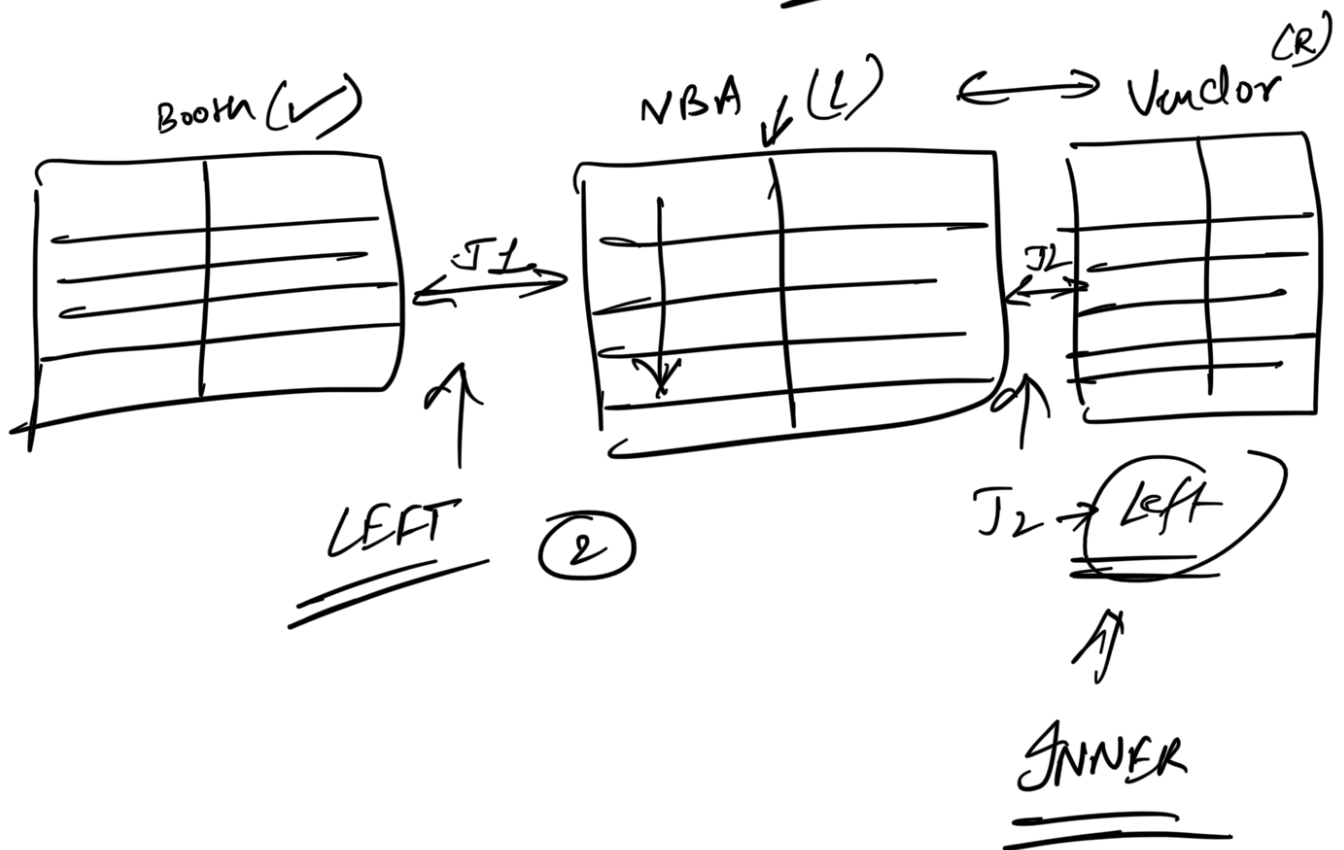


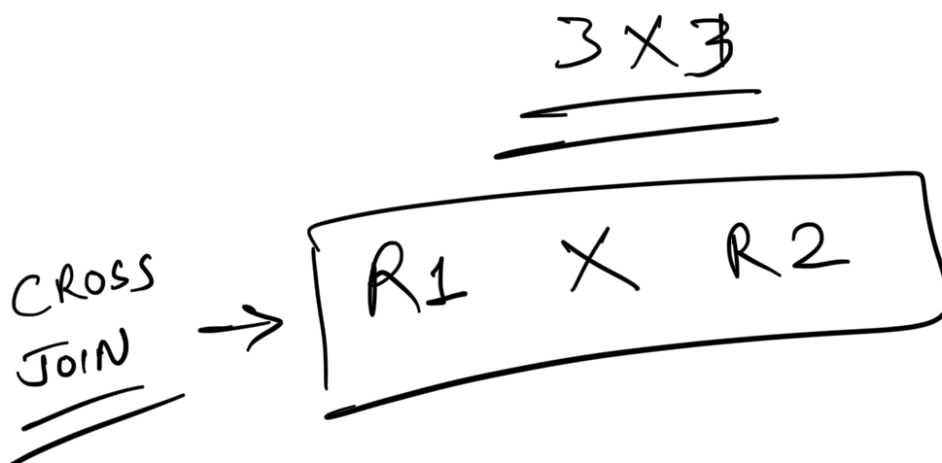
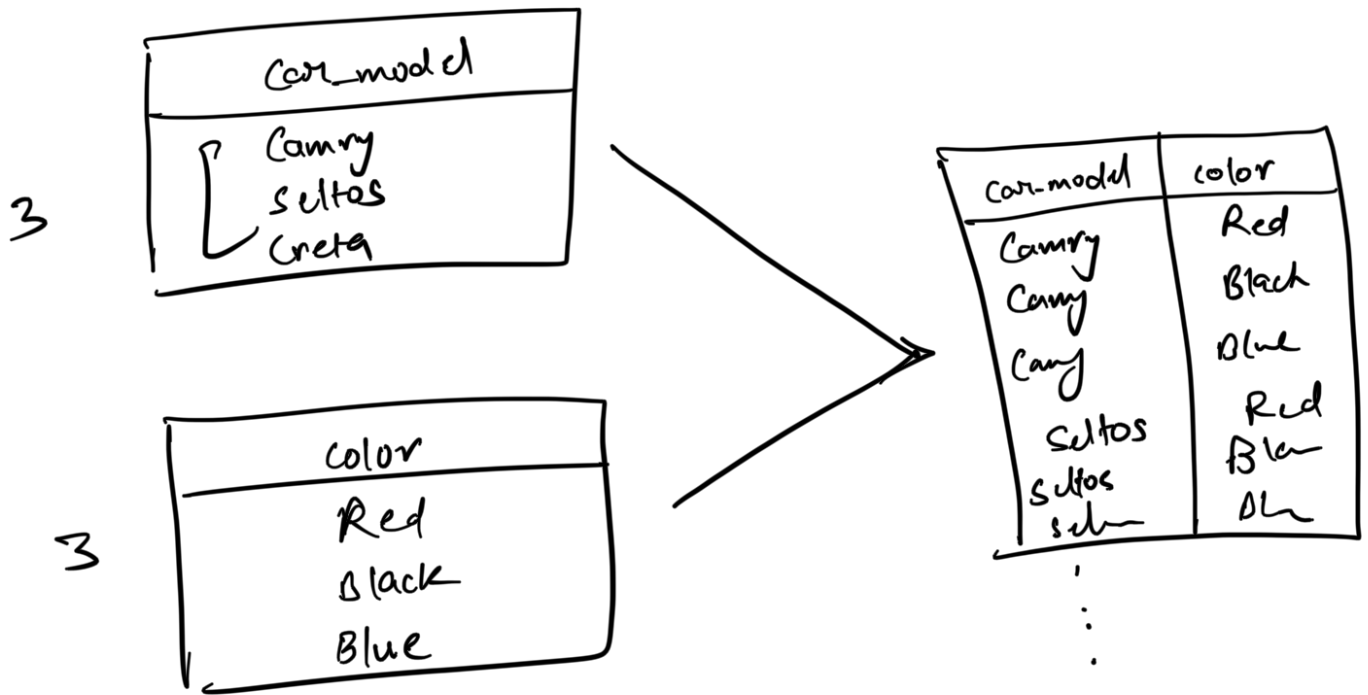
Joins Contd.

Q. We want all the details about farmer's market booths ^① and their vendor booth ^② assignment for every market date. [↑]
along with their vendor details ^{← ③}

③ tables → 1 table



10:22



4 3 ⇒ 12

Syntax

✓

SELECT
 C. car_model,
 C1. color
 FROM car_model AS C (2) Color AS C1
 CROSS JOIN color AS C1

Q:

Employee (mgr)

emp-id	name	dept-id	mgr-id
1	-	-	3
2	-	-	4
3	-	-	NULL
4	-	-	5
5	-	-	3

Annotations:
 - Red arrows point to emp-id and mgr-id headers.
 - Blue circles highlight emp-id values 1, 2, 3, 4, 5 and mgr-id values 3, 4, 5, 3.
 - Blue arrows show relationships: mgr. emp-id (from mgr-id to emp-id), mgr. name (from name to mgr-id), and emp. mgr-id (from emp-id to mgr-id).
 - A blue circle around the name column is labeled mgr. name.

Display each employee with their manager name.

emp-id	emp-name	mgr-name
1		xyz

A	B
1	2

C	D
3	4
5	6
7	8

A	B	C	D
1	2	3	4
1	2	5	6
1	2	7	8

SELF JOIN

```

SELECT
    emp. emp-id,
    emp. emp-name,
    mgr. emp-name
FROM
    employee AS emp
JOIN
    employee AS mgr
ON
    emp.mgr-id = mgr.emp-id
  
```

Diagram: A blue oval connects the `emp` alias in the `FROM` clause to the `emp` column in the `SELECT` clause. Another blue oval connects the `mgr` alias in the `JOIN` clause to the `mgr` column in the `SELECT` clause.

Correlated Subquery

```

SELECT
    emp. emp-id,
    emp. name
FROM
    employee AS e1
WHERE
    mgr-id = (
        SELECT emp-id
        FROM employee AS e2
        WHERE e2.emp-id = e1.mgr-id
    )
  
```

Diagram: A double arrow labeled "outer" points from the `WHERE` clause to the `FROM` clause. A blue oval labeled "inner" encircles the subquery. Arrows indicate the flow of data from the subquery back to the main query.

Simple Subquery → Inner query → runs first
 Outer query → runs after

Correlated Subquery * → Outer query → runs first
Inner query → runs after.

{ SELECT =
FROM tbl > tbl2 JOIN X
WHERE