Day 17
SET Operators - (Part 3)
MINUS

Aditya Shenoy

What is a **MINUS** Operator?

- The **MINUS** OPERATOR compares the results of two queries and returns distinct rows from the result set of the first query that does not appear in the result set of the second query.

MySQL does not support MINUS operator.

General Syntax :

```
(SELECT column_list
FROM table_1)
MINUS
(SELECT column_list
FROM table_2);
```
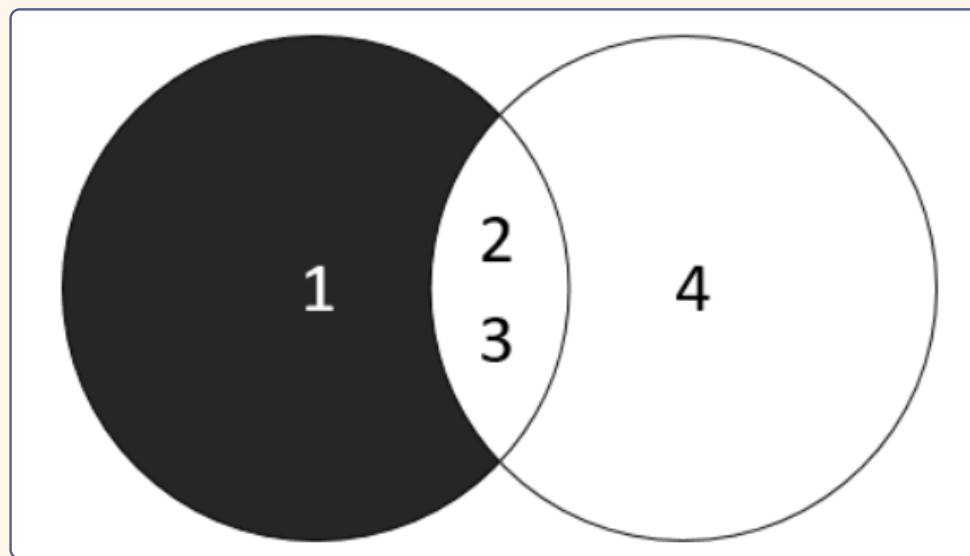
Key Points:

1. The number and order of columns in both select_list1 and select_list2 must be the same.
2. The data types of the corresponding columns in both queries must be compatible.

MINUS Operator

The following diagram illustrates the **INTERSECT** operator:

- The left query produces a result set of (1,2,3).
- The right query returns a result set of (2,3,4).
- The **MINUS** operator returns the distinct rows in left query set which is not present in right query set.
  - Result : (1).

Emulate MINUS in MySQL

Creating Sample Tables :

```sql
CREATE TABLE t1 (
    id INT PRIMARY KEY
);


CREATE TABLE t2 LIKE t1;


INSERT INTO t1(id) VALUES(1),(2),(3);


INSERT INTO t2(id) VALUES(2),(3),(4);
```

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- **Emulating MINUS using LEFT JOIN**

```sql
SELECT
    t1.id
FROM
    t1
LEFT JOIN
    t2
USING(id)
WHERE
    t2.id IS NULL;
```

Output :

	id
▶	1

Illustration:

id
1
2
3

t1 table

MINUS

id
2
3
4

t2 table

⇒

id
1