DESCRIPTION

Table: MyNumbers

+-------------+------+

| Column Name | Type |

+-------------+------+

| num | int |

+-------------+------+

This table may contain duplicates (In other words, there is no primary key for this table in SQL).

Each row of this table contains an integer.

A **single number** is a number that appeared only once in the MyNumbers table.

Find the largest **single number**. If there is no **single number**, report null.

The result format is in the following example.

Example 1:

Input:

MyNumbers table:

+-----+

| num |

+-----+

| 8 |

| 8 |

| 3 |

| 3 |

| 1 |

| 4 |

| 5 |

| 6 |

+-----+

Output:

+-----+

| num |

+-----+

| 6 |

+-----+

Explanation: The single numbers are 1, 4, 5, and 6.

Since 6 is the largest single number, we return it.

Example 2:

Input:

MyNumbers table:

+-----+

| num |

+-----+

| 8 |

| 8 |

| 7 |

| 7 |

| 3 |

| 3 |

| 3 |

+-----+

Output:

+------+

| num |

+------+

| null |

+------+

Explanation: There are no single numbers in the input table so we return null.

SOLUTION

MySQL:

- In a subquery, select `num with one occurrence having COUNT(num) = 1 and group by num`
- For the largest single number, select max num the above subquery

```
SELECT MAX(num) num
FROM MyNumbers
WHERE num IN (
    SELECT num
    FROM MyNumbers
    GROUP BY num
    HAVING COUNT(num) = 1);
```

PostgreSQL:

- Same approach as above

```
SELECT MAX(num) num
FROM MyNumbers
WHERE num IN (
    SELECT num
    FROM MyNumbers
    GROUP BY 1
    HAVING COUNT(num) = 1
    );
```