

Problem 177: Nth Highest Salary

Problem Information

Difficulty: Medium

Acceptance Rate: 0.00%

Paid Only: No

Problem Description

Table:

Employee

+-----+-----+ | Column Name | Type | +-----+-----+ | id | int | | salary | int |
+-----+-----+ id is the primary key (column with unique values) for this table. Each row of
this table contains information about the salary of an employee.

Write a solution to find the

n

th

highest

distinct

salary from the

Employee

table. If there are less than

n

distinct salaries, return

null

.

The result format is in the following example.

Example 1:

Input:

Employee table: +---+-----+ | id | salary | +---+-----+ | 1 | 100 | | 2 | 200 | | 3 | 300 |
+---+-----+ n = 2

Output:

+-----+ | getNthHighestSalary(2) | +-----+ | 200 |
+-----+

Example 2:

Input:

Employee table: +---+-----+ | id | salary | +---+-----+ | 1 | 100 | +---+-----+ n = 2

Output:

+-----+ | getNthHighestSalary(2) | +-----+ | null |
+-----+

Code Snippets

MySQL:

```
CREATE FUNCTION getNthHighestSalary(N INT) RETURNS INT
BEGIN
  RETURN (
    # Write your MySQL query statement below.
  );

```

```
) ;  
END
```

MS SQL Server:

```
CREATE FUNCTION getNthHighestSalary(@N INT) RETURNS INT AS  
BEGIN  
RETURN (  
/* Write your T-SQL query statement below. */  
  
) ;  
END
```

PostgreSQL:

```
CREATE OR REPLACE FUNCTION NthHighestSalary(N INT) RETURNS TABLE (Salary INT)  
AS $$  
BEGIN  
RETURN QUERY (  
-- Write your PostgreSQL query statement below.  
  
) ;  
END;  
$$ LANGUAGE plpgsql;
```

Oracle:

```
CREATE FUNCTION getNthHighestSalary(N IN NUMBER) RETURN NUMBER IS  
result NUMBER;  
BEGIN  
/* Write your PL/SQL query statement below */  
  
RETURN result;  
END;
```

Pandas:

```
import pandas as pd  
  
def nth_highest_salary(employee: pd.DataFrame, N: int) -> pd.DataFrame:
```

Solutions

MySQL Solution:

```
CREATE FUNCTION getNthHighestSalary(N INT) RETURNS INT
BEGIN
RETURN (
# Write your MySQL query statement below.

);
END
```

MS SQL Server Solution:

```
CREATE FUNCTION getNthHighestSalary(@N INT) RETURNS INT AS
BEGIN
RETURN (
/* Write your T-SQL query statement below. */

);
END
```

PostgreSQL Solution:

```
CREATE OR REPLACE FUNCTION NthHighestSalary(N INT) RETURNS TABLE (Salary INT)
AS $$

BEGIN
RETURN QUERY (
-- Write your PostgreSQL query statement below.

);

END;
$$ LANGUAGE plpgsql;
```

Oracle Solution:

```
CREATE FUNCTION getNthHighestSalary(N IN NUMBER) RETURN NUMBER IS
result NUMBER;
BEGIN
```

```
/* Write your PL/SQL query statement below */

RETURN result;
END;
```

Pandas Solution:

```
import pandas as pd

def nth_highest_salary(employee: pd.DataFrame, N: int) -> pd.DataFrame:
```