51_Nth Highest Salary Medium - Solution

Source - https://leetcode.com/problems/nth-highest-salary/description/
Running Notes -

• Write a solution to find the nth highest salary, return null.

I used the same logic as described in 50th post

```
CREATE OR REPLACE FUNCTION NthHighestSalary(N INT) RETURNS TABLE
BEGIN

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

SELECT DISTINCT(e.salary)

FROM Employee as e

ORDER BY e.salary DESC

OFFSET N-1

LIMIT 1

);
END;
$$ LANGUAGE plpgsql;
```

but the problem with this is if I use OFFSET N - 1 and N is negative then offset becomes a negative number so I need to use an IF condition that checks if the number is less than 0 it will then return NULL else it returns the results

```
CREATE OR REPLACE FUNCTION NthHighestSalary(N INT) RETURNS TABLE
BEGIN

IF N<=0
THEN RETURN QUERY(
SELECT null::INT
);
```

```
ELSE
RETURN QUERY (

-- Write your PostgreSQL query statement below.
SELECT DISTINCT(e.salary)
FROM Employee as e
ORDER BY e.salary DESC
OFFSET N-1
LIMIT 1
);
END IF;
END;
$$ LANGUAGE plpgsql;
```

there is another solution using CASE statement

```
CREATE OR REPLACE FUNCTION NthHighestSalary(N INT) RETURNS TABLE
BEGIN
    RETURN QUERY (
        -- Write your PostgreSQL query statement below.
        SELECT
        CASE
        WHEN N<=0 THEN NULL
        ELSE
            (SELECT DISTINCT(e.salary)
            FROM Employee as e
            ORDER BY e.salary DESC
            OFFSET N-1
            LIMIT 1)
        END
    );
END;
$$ LANGUAGE plpgsql;
```

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