

leet code

SQL · 176

Second Highest Salary

Table: Employee

+-----+-----+	
Column Name	Type
+-----+-----+	
id	int
salary	int
+-----+-----+	

id is the primary key column for this table.

Each row of this table contains information about the salary of an employee.

Write an SQL query to report the second highest salary from the Employee table. If there is no second highest salary, the query should report null.

The query result format is in the following example.

Example 1:

Input:

Employee table:

+----+-----+	
id	salary
+----+-----+	
1	100
2	200
3	300
+----+-----+	

Output:

+-----+-----+	
SecondHighestSalary	
+-----+-----+	
200	
+-----+-----+	

We need to obtain Second Highest
Salary

Approach - 1

First Thought

Something Related to max
function

We can use Independent Subquery over
here

```
Select max(salary) from Employee  
where salary < (select max(salary)  
from Employee)
```

Working (let)

id	Salary
1	100
2	400
3	300
7	400
5	200

order of execution
for this query :-

From

where [subquery]

Select [outer query]

Select max(salary) from Employee
 where salary < (select max(salary)
 from Employee)

||

400

= Select max(salary) from Employee
 where salary < 400

Now /

id	Salary
1	100
2	300
5	200

max

300

AB

Q. 1. Amarch

Second Highest Salary

Using Limit and offset & order by

Select ifnull (Select distinct Salary from
employee order by Salary desc limit 1
offset 1) as Second Highest Salary

id	Salary
1	100
2	400
3	300
4	400
5	200

emply

Order
→

id	Salary
2	400
4	400
3	300
5	200
1	100

Distinct

id

limit, offset

Salary

3	300
---	-----

without distinct

this query will give
some repeated value
of the Max not what
we want



The Second Approach can be a
general approach for n^{th} highest
Salary