

Problem Statement:

Given a table EMPLOYEES with the following schema:

EMP_ID	DEPT_ID	SALARY	JOIN_DATE
101	1	5000	2020-06-15
102	2	7000	2021-07-10
103	1	4500	2019-03-25
104	3	6000	2022-08-01
105	2	7500	2018-01-12
106	1	4800	2023-04-22

Task:

Write a SQL query to retrieve the **second highest salary in each department**.

- If a department has only one employee, return NULL for that department.
- The output should include DEPT_ID, SECOND_HIGHEST_SALARY.

◆ Expected Output Example:

DEPT_ID	SECOND_HIGHEST_SALARY
1	4800
2	7000
3	NULL

** QUERY:

```
WITH RANK_SAL AS(
SELECT *,
RANK() OVER (PARTITION BY DEP_ID, ORDER BY SALARY DESC) AS SAL_RANK
FROM EMPLOYEES
)
```

```
, SCND_SALARIES AS (  
  SELECT DEP_ID, SALARY AS SCD_HIGH_SAL  
  FROM RANK_SAL  
  WHERE SAL_RANK = 2  
)  
SELECT A.DEP_ID, B.SCD_HIGH_SAL AS SECOND_HIGHEST_SALARY  
FROM (  
  SELECT DISTINCT DEP_ID AS DEP_ID  
  FROM RANK_SAL  
) AS A  
LEFT JOIN SCND_SALARIES AS B  
ON A.DEP_ID = B.DEP_ID  
;
```