**SECTION 10**

DP\_10.1

SUBQUERY:

SELECT job\_id

FROM jobs

WHERE job\_id IN

(SELECT jobid

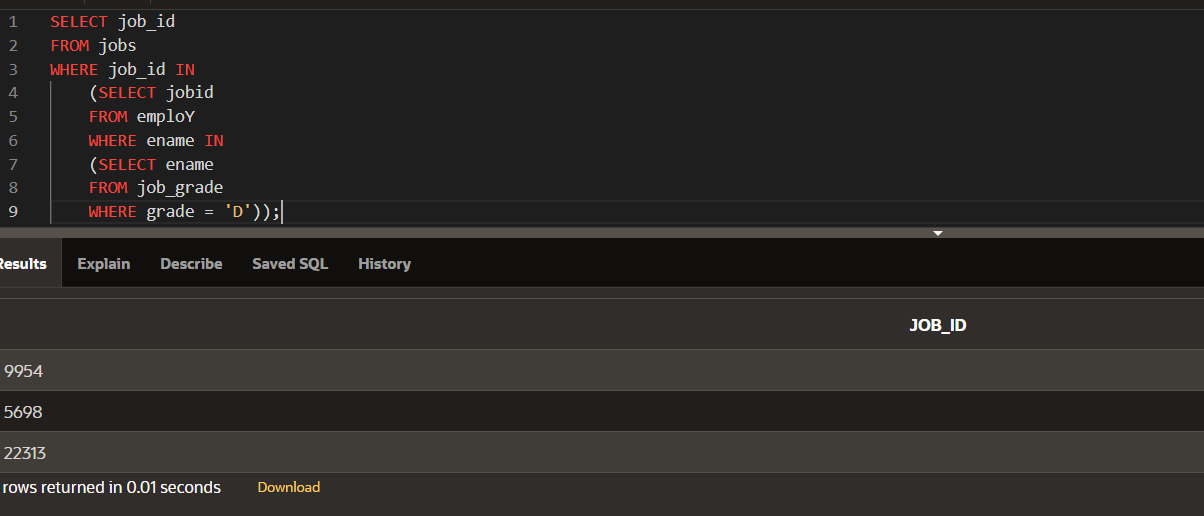
FROM emploY

WHERE ename IN

(SELECT ename

FROM job\_grade

WHERE grade = 'D'));



SUBQUERY AND NULL:

SELECT ename

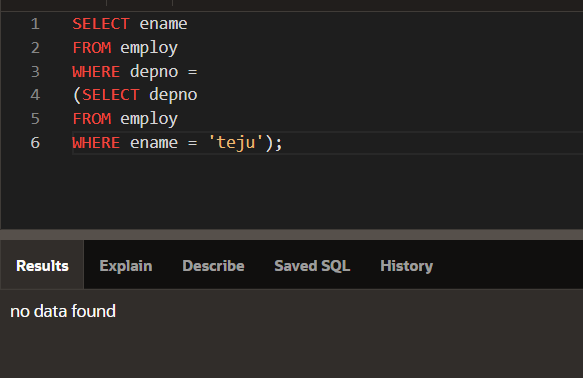
FROM employ

WHERE depno =

(SELECT depno

FROM employ

WHERE ename = 'teju');



DP\_10.2:

SUBQUERIES FROM DIFFERENT TABLES:

SELECT ename, jobid, salary, depno

FROM employ

WHERE jobid =

(SELECT jobid

FROM employ

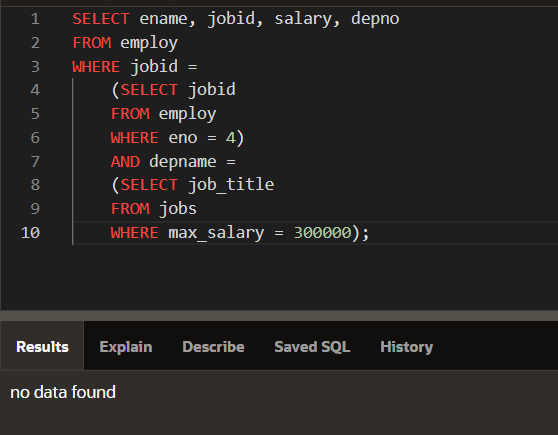
WHERE eno = 4)

AND depname =

(SELECT job\_title

FROM jobs

WHERE max\_salary = 300000);



GROUP FUNCTIONS IN SUBQUERIES:

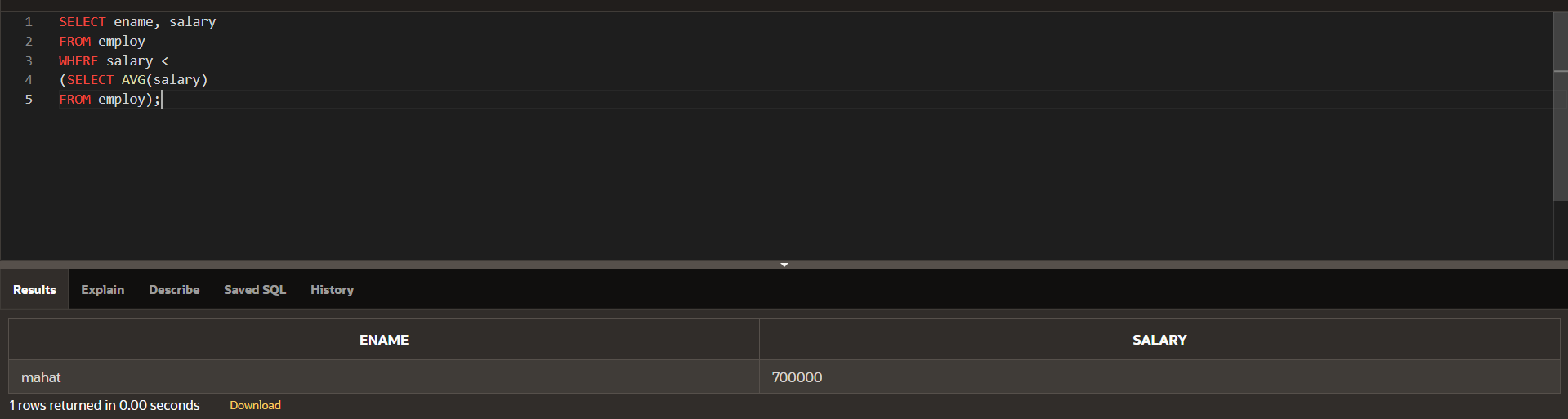
SELECT ename, salary

FROM employ

WHERE salary <

(SELECT AVG(salary)

FROM employ);



DP\_10.3:

QUERY COMPARISON:

SELECT ename

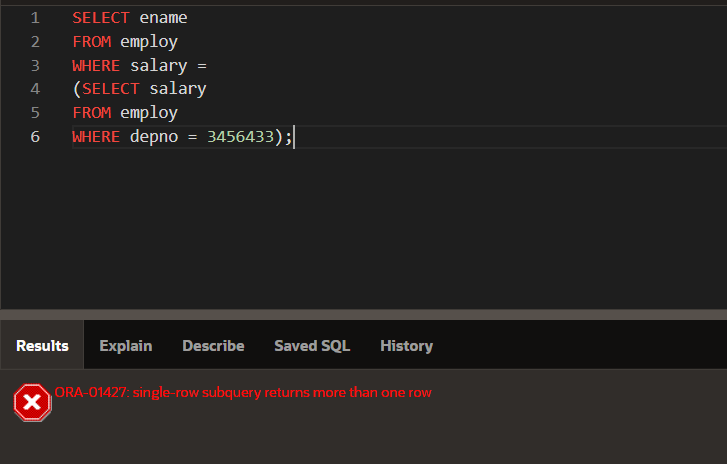
FROM employ

WHERE salary =

(SELECT salary

FROM employ

WHERE depno = 3456433);



IN:

SELECT ename, create\_date

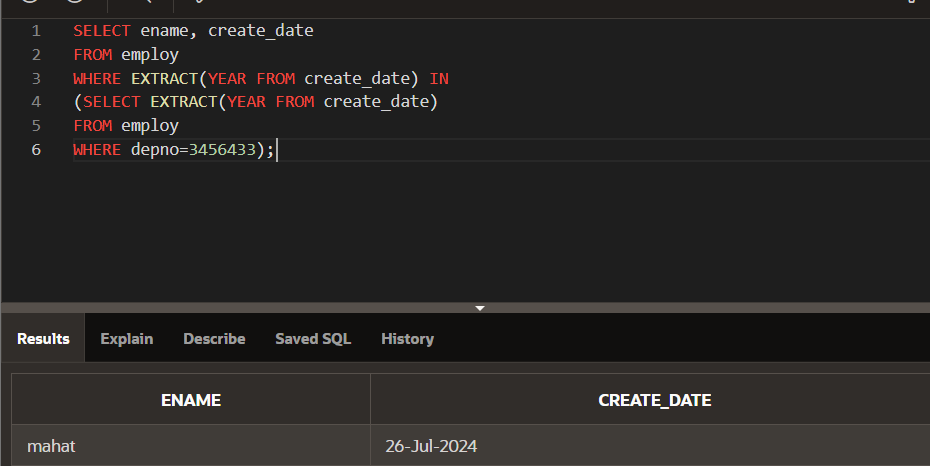
FROM employ

WHERE EXTRACT(YEAR FROM create\_date) IN

(SELECT EXTRACT(YEAR FROM create\_date)

FROM employ

WHERE depno=3456433);



ANY:

SELECT ename, create\_date

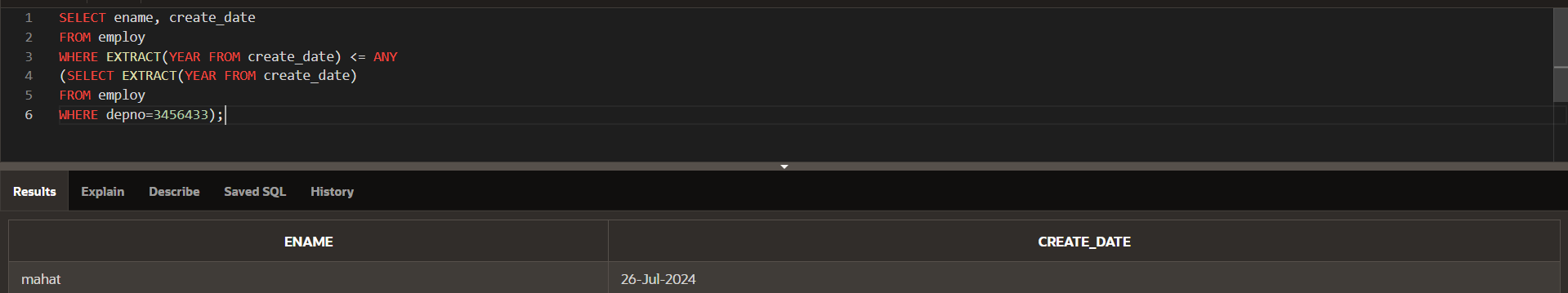
FROM employ

WHERE EXTRACT(YEAR FROM create\_date) <= ANY

(SELECT EXTRACT(YEAR FROM create\_date)

FROM employ

WHERE depno=3456433);



ALL:

SELECT ename, create\_date

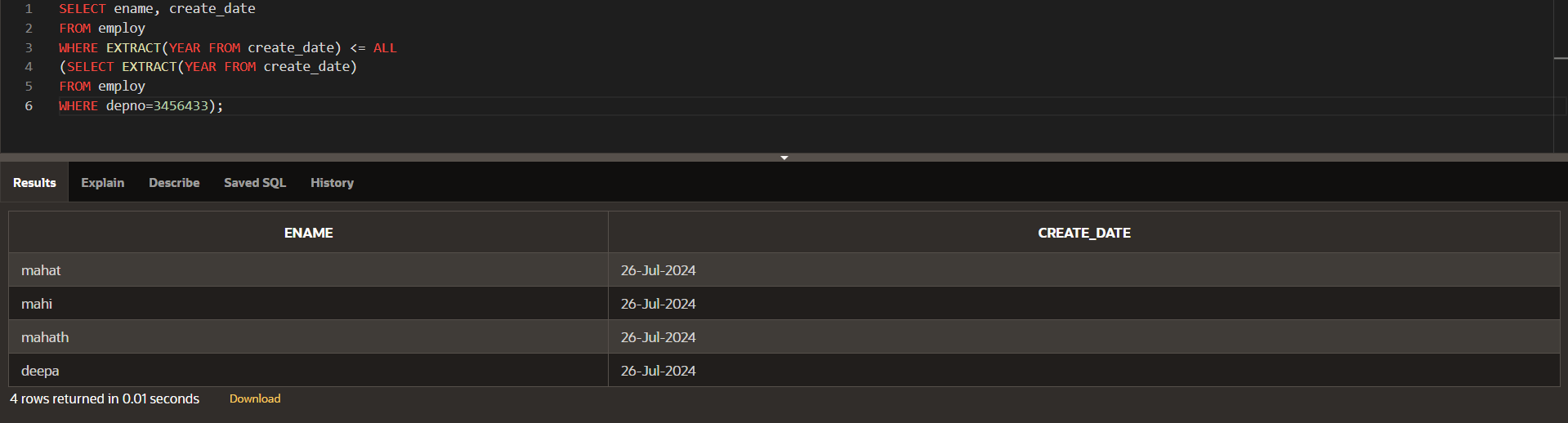
FROM employ

WHERE EXTRACT(YEAR FROM create\_date) <= ALL

(SELECT EXTRACT(YEAR FROM create\_date)

FROM employ

WHERE depno=3456433);



NULL Values:

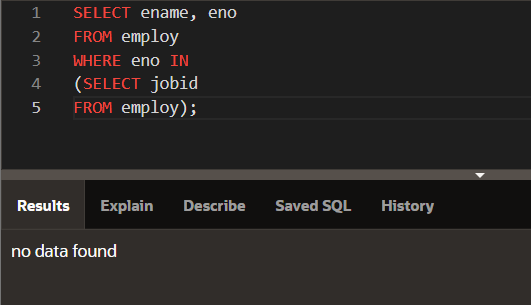
SELECT ename, eno

FROM employ

WHERE eno IN

(SELECT jobid

FROM employ);



GROUP BY and HAVING:

SELECT jobid, MIN(salary)

FROM employ

GROUP BY jobid

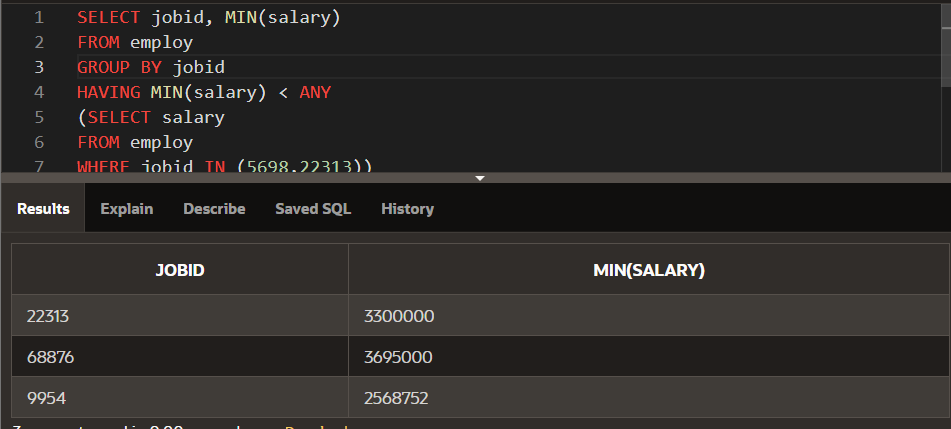
HAVING MIN(salary) < ANY

(SELECT salary

FROM employ

WHERE jobid IN (5698,22313))

ORDER BY jobid;



MULTIPLE-COLUMN SUBQUERIES:

SELECT epno, jobid, depno

FROM employ

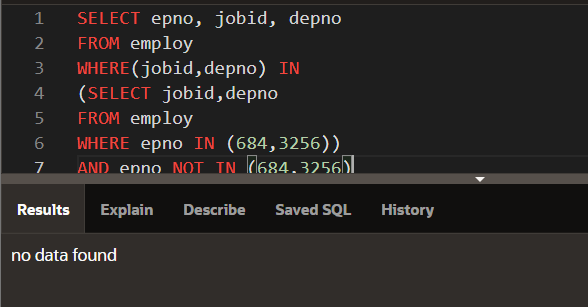
WHERE(jobid,depno) IN

(SELECT jobid,depno

FROM employ

WHERE epno IN (684,3256))

AND epno NOT IN (684,3256)



DP\_10.4:

CORRELATED SUBQUERY:

SELECT o.ename,o.salary

FROM employ o

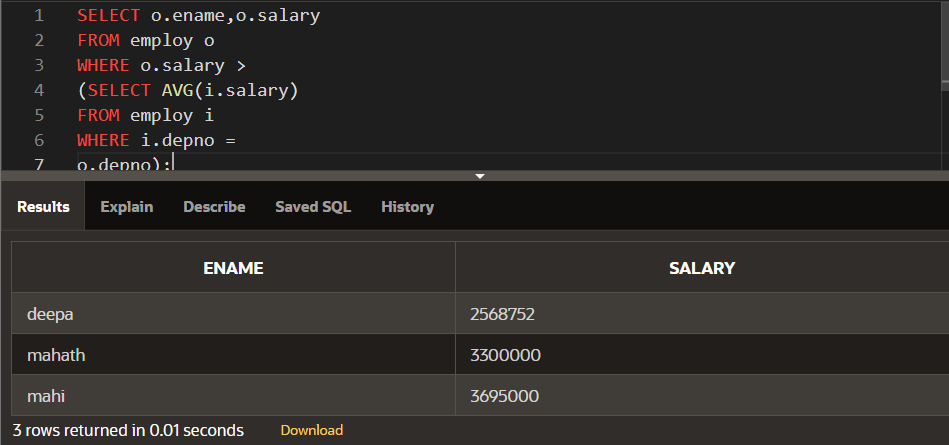
WHERE o.salary >

(SELECT AVG(i.salary)

FROM employ i

WHERE i.depno =

o.depno);



EXISTS & NOT EXISTS in Subqueries:

SELECT ename AS "Not a Manager"

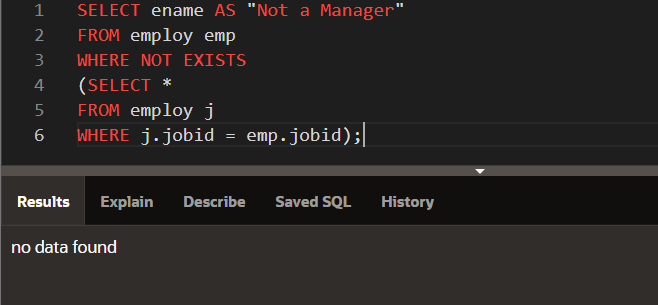
FROM employ emp

WHERE NOT EXISTS

(SELECT \*

FROM employ j

WHERE j.jobid = emp.jobid);



WITH Clause:

WITH managers AS

(SELECT DISTINCT manager\_id

FROM employees

WHERE manager\_id IS NOT NULL)

SELECT last\_name AS "Not a manager"

FROM employees

WHERE employee\_id NOT IN

(SELECT \*

FROM managers);

