

DBMS LAB 08

Performance Date: 18/10/ 2023

Submission Date: 25/10/ 2023

Title: SUBQUERY

Problem Statements SQL query based on subquery

Write the following SQL query.

1. Write a query to display the name (first name and last name) for those employees who gets more salary than the employee whose ID is 163.
2. Write a query to display the name (first name and last name), salary, department id, job id for those employees who works in the same designation as the employee works whose id is 169.
3. Write a query to display the name (first name and last name), salary, department id for those employees who earn such amount of salary which is the smallest salary of any of the departments.
4. Write a query to display the employee id, employee name (first name and last name) for all employees who earn more than the average salary.
5. Write a query to display the employee name (first name and last name), employee id and salary of all employees who report to Payam.
6. Write a query to display the department number, name (first name and last name), job and department name for all employees in the Finance department.
7. Write a query to display all the information of an employee whose salary and reporting person id is 3000 and 121 respectively.
8. Display all the information of an employee whose id is any of the number 134, 159 and 183.
9. Write a query to display all the information of the employees whose salary is within the range 1000 and 3000.
10. Write a query to display all the information of the employees whose salary is within the range of smallest salary and 2500.

Theory:

(1) SELECT first_name, last_name
FROM employees WHERE salary > (SELECT salary FROM
employees WHERE employee_id = 163);

Output

FIRST_NAME	LAST_NAME
Steven	King
Neena	Kochhar
Lex	De Haan
Nancy	Greenberg
Den	Raphaely
John	Russell
Karen	Partners
Alberto	Errazuriz
Gerald	Cambrault
Eleni	Zlotkey
Peter	Tucker
Janette	King
Clara	Vishney
Lisa	Ozer
Harrison	Bloom
Tayler	Fox
Ellen	Abel
Michael	Hartstein
Hermann	Baer
Shelley	Higgins

(2)
SELECT e.first_name, e.last_name, e.salary, e.department_id, e.job_id
FROM employees e WHERE e.job_id = (SELECT job_id FROM employees
WHERE employee_id = 169);

Output:

FIRST_NAME	LAST_NAME	SALARY	DEPARTMENT_ID	JOB_ID
Peter	Tucker	10000	80	SA_REP
David	Bernstein	9500	80	SA_REP
Peter	Hall	9000	80	SA_REP
Christopher	Olsen	8000	80	SA_REP
Nanette	Cambrault	7500	80	SA_REP
Oliver	Tuvault	7000	80	SA_REP
Janette	King	10000	80	SA_REP
Patrick	Sully	9500	80	SA_REP
Allan	McEwen	9000	80	SA_REP
Lindsey	Smith	8000	80	SA_REP
Louise	Doran	7500	80	SA_REP
Sarath	Sewall	7000	80	SA_REP

(3) SELECT first_name, last_name, salary, department_id
FROM employees WHERE salary = (SELECT MIN(salary) FROM employees);

Output:

FIRST_NAME	LAST_NAME	SALARY	DEPARTMENT_ID
TJ	Olson	2100	50

(4) SELECT employee_id, first_name, last_name
FROM employees WHERE salary > (SELECT AVG(salary) FROM employees);

Output:

EMPLOYEE_ID	FIRST_NAME	LAST_NAME
100	Steven	King
101	Neena	Kochhar
102	Lex	De Haan
103	Alexander	Hunold
108	Nancy	Greenberg
109	Daniel	Faviet
110	John	Chen
111	Ismael	Sciarra
112	Jose Manuel	Urman

(5) SELECT e.first_name, e.last_name, e.employee_id, e.salary
FROM employees e WHERE e.manager_id = (SELECT employee_id FROM employees WHERE last_name = 'Payam');

Output:

no data found

(6) SELECT d.department_id, e.first_name, e.last_name, e.job_id,
d.department_name
FROM employees e JOIN departments d ON e.department_id = d.department_id
WHERE d.department_name = 'Finance';

DEPARTMENT_ID	FIRST_NAME	LAST_NAME	JOB_ID	DEPARTMENT_NAME
100	Nancy	Greenberg	FI_MGR	Finance
100	Daniel	Faviet	FI_ACCOUNT	Finance
100	John	Chen	FI_ACCOUNT	Finance
100	Ismael	Sciarra	FI_ACCOUNT	Finance
100	Jose Manuel	Urman	FI_ACCOUNT	Finance
100	Luis	Popp	FI_ACCOUNT	Finance

(7) SELECT * FROM employees WHERE salary = 3000 AND manager_id = 121;

Output:

EMPLOYEE_ID	FIRST_NAME	LAST_NAME	EMAIL	PHONE_NUMBER	HIRE_DATE	JOB_ID	SALARY	COMMISSION_PCT	MANAGER_ID	DEPARTMENT_ID
187	Anthony	Cabrio	ACABRIO	650.509.4876	07-FEB-99	SH_CLERK	3000	-	121	50

(8) SELECT * FROM employees WHERE employee_id IN (134, 159, 183);

Output:

EMPLOYEE_ID	FIRST_NAME	LAST_NAME	EMAIL	PHONE_NUMBER	HIRE_DATE	JOB_ID	SALARY	COMMISSION_PCT	MANAGER_ID	DEPARTMENT_ID
134	Michael	Rogers	MROGERS	650.127.1834	26-AUG-98	ST_CLERK	2900	-	122	50
159	Lindsey	Smith	LSMITH	011.44.1345.729268	10-MAR-97	SA_REP	8000	.3	146	80
183	Girard	Geoni	GGEONI	650.507.9879	03-FEB-00	SH_CLERK	2800	-	120	50

(9) SELECT * FROM employees WHERE salary BETWEEN 1000 AND 3000;

Output:

EMPLOYEE_ID	FIRST_NAME	LAST_NAME	EMAIL	PHONE_NUMBER	HIRE_DATE	JOB_ID	SALARY	CO
116	Shelli	Baida	SBAIDA	515.127.4563	24-DEC-97	PU_CLERK	2900	-
117	Sigal	Tobias	STOBIAS	515.127.4564	24-JUL-97	PU_CLERK	2800	-
118	Guy	Himuro	GHIMURO	515.127.4565	15-NOV-98	PU_CLERK	2600	-
119	Karen	Colmenares	KCOLMENA	515.127.4566	10-AUG-99	PU_CLERK	2500	-
126	Irene	Mikkilineni	IMIKKILI	650.124.1224	28-SEP-98	ST_CLERK	2700	-
127	James	Landry	JLANDRY	650.124.1334	14-JAN-99	ST_CLERK	2400	-
128	Steven	Markle	SMARKLE	650.124.1434	08-MAR-00	ST_CLERK	2200	-
130	Mozhe	Atkinson	MATKINSO	650.124.6234	30-OCT-97	ST_CLERK	2800	-
131	James	Marlow	JAMRLOW	650.124.7234	16-FEB-97	ST_CLERK	2500	-
132	TJ	Olson	TJOLSON	650.124.8234	10-APR-99	ST_CLERK	2100	-

(10) SELECT * FROM employees WHERE salary >= (SELECT MIN(salary) FROM employees) AND salary <= 2500;

Output:

EMPLOYEE_ID	FIRST_NAME	LAST_NAME	EMAIL	PHONE_NUMBER	HIRE_DATE	JOB_ID	SALARY	CO
119	Karen	Colmenares	KCOLMENA	515.127.4566	10-AUG-99	PU_CLERK	2500	-
127	James	Landry	JLANDRY	650.124.1334	14-JAN-99	ST_CLERK	2400	-
128	Steven	Markle	SMARKLE	650.124.1434	08-MAR-00	ST_CLERK	2200	-
131	James	Marlow	JAMRLOW	650.124.7234	16-FEB-97	ST_CLERK	2500	-
132	TJ	Olson	TJOLSON	650.124.8234	10-APR-99	ST_CLERK	2100	-
135	Ki	Gee	KGEE	650.127.1734	12-DEC-99	ST_CLERK	2400	-
136	Hazel	Philtanker	HPHILTAN	650.127.1634	06-FEB-00	ST_CLERK	2200	-
140	Joshua	Patel	JPATEL	650.121.1834	06-APR-98	ST_CLERK	2500	-
144	Peter	Vargas	PVARGAS	650.121.2004	09-JUL-98	ST_CLERK	2500	-
182	Martha	Sullivan	MSULLIVA	650.507.9878	21-JUN-99	SH_CLERK	2500	-
191	Randall	Perkins	RPERKINS	650.505.4876	19-DEC-99	SH_CLERK	2500	-