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Experiment 8

Date:23.10.2024

WORKING WITH MULTIPLE TABLES

1. Write a query to display the last name, department number, and department name for all Employees.

SELECT e.last_name, e.department_id, d.department_name

FROM employees e

JOIN departments d

ON e.department_id = d.department_id;

LAST_NAME	DEPARTMENT_ID	DEPARTMENT_NAME
King	10	Administration
Davies	80	Sales
Smith	80	Sales

1. Create a unique listing of all jobs that are in department 80. Include the location of the department in the output.

SELECT DISTINCT e.job_id, l.city

FROM employees e

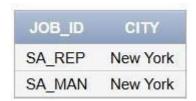
JOIN departments d

ON e.department_id = d.department_id

JOIN locations I

ON d.location_id = I.location_id

WHERE e.department_id = 80;



2. Write a query to display the employee last name, department name, location ID, and city of all employees who earn a commission

SELECT e.last_name, d.department_name, d.location_id, l.city

FROM employees e

JOIN departments d

ON e.department_id = d.department_id

JOIN locations I

ON d.location_id = I.location_id

WHERE e.commission_pct IS NOT NULL;

LAST_NAME	DEPARTMENT_NAME	LOCATION_ID	CITY
Davies	Sales	2	New York
Smith	Sales	2	New York

2. Display the employee last name and department name for all employees who have an a(lowercase) in their last names. P

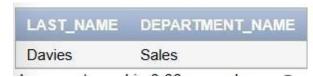
SELECT e.last_name, d.department_name

FROM employees e

JOIN departments d

ON e.department_id = d.department_id

WHERE LOWER(e.last_name) LIKE '%a%';



5. Write a query to display the last name, job, department number, and department name for all employees who work in Toronto.

SELECT e.last_name, e.job_id, e.department_id, d.department_name

FROM employees e

JOIN departments d

ON e.department_id = d.department_id

JOIN locations I

ON d.location id = I.location id

WHERE I.city = 'Toronto';

LAST_NAME	JOB_ID	DEPARTMENT_ID	DEPARTMENT_NAME
King	AD_PRES	10	Administration

6. Display the employee last name and employee number along with their manager's last name and manager number. Label the columns Employee, Emp#, Manager, and Mgr#, Respectively

SELECT e.last_name AS Employee, e.employee_id AS Emp#,

m.last_name AS Manager, m.employee_id AS Mgr#

FROM employees e

LEFT JOIN employees m

ON e.manager_id = m.employee_id;

EMPLOYEE	EMP#	MANAGER	MGR#
Johnson	4	King	1
Davies	2	King	1
Williams	5	Davies	2
Smith	3	Davies	2
King	1	-	87

7. Modify lab4_6.sql to display all employees including King, who has no manager. Order the results by the employee number.

SELECT e.last_name, e.employee_id, m.last_name AS Manager

FROM employees e

LEFT JOIN employees m

ON e.manager_id = m.employee_id

ORDER BY e.employee_id;

LAST_NAME	EMPLOYEE_ID	MANAGER
King	1	5 + -5
Davies	2	King
Smith	3	Davies
Johnson	4	King
Williams	5	Davies

8. Create a query that displays employee last names, department numbers, and all the employees

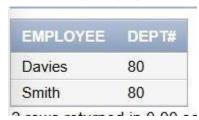
who work in the same department as a given employee. Give each column an appropriate label

SELECT e.last_name AS Employee, e.department_id AS Dept# FROM employees e

JOIN employees emp

ON e.department_id = emp.department_id

WHERE emp.employee_id = 2; -- Replace with a specific employee ID



9. Show the structure of the JOB_GRADES table. Create a query that displays the name, job, department name, salary, and grade for all employees

DESCRIBE job_grades;

SELECT e.last_name, e.job_id, d.department_name, e.salary, jg.grade_level

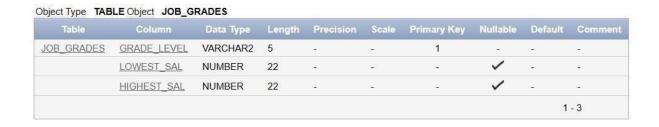
FROM employees e

JOIN departments d

ON e.department_id = d.department_id

JOIN job_grades jg

ON e.salary BETWEEN jg.lowest_sal AND jg.highest_sal;



no data found

10. Create a query to display the name and hire date of any employee hired after employee Davies.

SELECT e.last_name, e.hire_date

FROM employees e

WHERE e.hire_date > (SELECT hire_date FROM employees WHERE last_name = 'Davies');

LAST_NAME	HIRE_DATE
Smith	04/23/2006
Williams	12/01/2007

11. Display the names and hire dates for all employees who were hired before their managers, along with their manager's names and hire dates. Label the columns Employee, Emp Hired, Manager, and Mgr Hired, respectively.

SELECT e.last_name AS Employee, e.hire_date AS "Emp Hired",

m.last_name AS Manager, m.hire_date AS "Mgr Hired"

FROM employees e

JOIN employees m

ON e.manager_id = m.employee_id WHERE

e.hire_date < m.hire_date;

no data found