

## Exercise 8 Displaying Data from Multiple Tables Using Joins

**\*Run script HR.sql, Northwoods.sql before the exercise.**

- Write a query to retrieve student last and first names, along with each student's advisor's ID and last name.

S_ID	S_LAST	S_FIRST	F_ID	F_LAST
1	Miller	Sarah	1	Cox
2	Umato	Brian	1	Cox
3	Black	Daniel	1	Cox
4	Mobley	Amanda	2	Blanchard
5	Sanchez	Ruben	4	Sheng
6	Connolly	Michael	3	Williams

6 rows selected.

- Suppose you want to create a query that lists the last names of all faculty members who teach during the Summer 2007 term.

F_LAST	F_FIRST
Cox	Kim
Blanchard	John
Williams	Jerry

- Suppose that you want to create a query to display the CALL\_ID and GRADE values for each of student Sarah Miller's courses.

CALL_ID	G
MIS 101	A
MIS 301	A
MIS 441	B
MIS 451	B

- Write a query for the HR department to produce the addresses of all the departments. Use the LOCATIONS and COUNTRIES tables. Show the location ID, street address, city, state or province, and country in the output. Use a NATURAL JOIN to produce the results.

LOCATION_ID	STREET_ADDRESS	CITY	STATE_PROVINCE	COUNTRY_NAME
1700	2004 Charade Rd	Seattle	Washington	United States of America
1500	2011 Interiors Blvd	South San Francisco	California	United States of America
1400	2014 Jabberwocky Rd	Southlake	Texas	United States of America
1800	147 Spadina Ave	Toronto	Ontario	Canada
2600	9702 Chester Road	Stretford	Manchester	United Kingdom
2500	Magdalen Centre, The Oxford Science Park	Oxford	Oxford	United Kingdom
2400	8204 Arthur St	London		United Kingdom
2700	Schwanthalerstr. 7031	Munich	Bavaria	Germany

8 rows selected.

- The HR department needs a report of only those employees with corresponding departments. Write a query to display the last name, department number, and department name for those employees.

LAST_NAME	DEPARTMENT_ID	DEPARTMENT_NAME
King	90	Executive
Kochhar	90	Executive
De Haan	90	Executive
Hunold	60	IT
Ernst	60	IT

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.....
Hartstein                20 Marketing
Fay                      20 Marketing
Mavris                   40 Human Resources
Baer                     70 Public Relations
Higgins                  110 Accounting

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21 rows selected.

6. The HR department needs a report of employees in Toronto. Display the last name, job, department number, and the department name for all employees who work in Toronto.

LAST_NAME	JOB_ID	DEPARTMENT_ID	DEPARTMENT_NAME
Fay	MK_REP	20	Marketing
Hartstein	MK_MAN	20	Marketing

7. Create a report to display the employees' last name and employee number along with the manager's last name and manager number. Label the column Employee, Emp#, Manager and Mgr#, respectively.

Employee	Emp#	Manager	Mgr#
Hartstein	201	King	100
Zlotkey	149	King	100
Russell	145	King	100
Mourgos	124	King	100
Kaufling	122	King	100
.....			
Ernst	104	Hunold	103
Matos	143	Mourgos	124
Grant	178	Zlotkey	149
Taylor	176	Zlotkey	149
Fay	202	Hartstein	201

21 rows selected.

8. Modify the query in Question 7 to display all employees including King, who has no manager. Order the results by the employee number.

Employee	EMP#	Manager	Mgr#
King	100		
Kochhar	101	King	100
De Haan	102	King	100
Hunold	103	De Haan	102
Ernst	104	Hunold	103
.....			
Hartstein	201	King	100
Fay	202	Hartstein	201
Mavris	203	Kochhar	101
Baer	204	Kochhar	101
Higgins	205	Kochhar	101

22 rows selected.

9. Display the Student ID, First Name, Last Name and Grade of a student who scored an 'A' for the course of 'Database Management' at the Northwoods University.



S_ID	S_FIRST	S_LAST	G
2	Brian	Umato	A

10. Modify the query in Question 9 to display the Student ID, First Name, Last Name and Grade of a student who does not scored an 'A' for the course of 'Database Management' at the Northwoods University.

S_ID	S_FIRST	S_LAST	G
1	Sarah	Miller	B

