ABIODUN OKE 117180166

L05b-DBS301-non-simple joins

1. Display the department name, city, street address and postal contry name for all Departments. Use the JOIN and USING form of syntax.

Sort the output by department name descending.

**ANSWER**:

SELECT department\_name, city, street\_address, postal\_code

FROM departments JOIN locations

USING (location\_id)

ORDER BY 1 DESC;

DEPARTMENT\_NAME CITY STREET\_ADDRESS POSTAL\_CODE

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Shipping South San Francisco 2011 Interiors Blvd 99236

Sales Oxford Magdalen Centre, The Oxford Science Park OX9 9ZB

Marketing Toronto 147 Spadina Ave M5V 2L7

IT Southlake 2014 Jabberwocky Rd 26192

Executive Seattle 2004 Charade Rd 98199

Contracting Seattle 2004 Charade Rd 98199

Administration Seattle 2004 Charade Rd 98199

Accounting Seattle 2004 Charade Rd 98199

2. Display full name of the employees, their hire date and salary together with their department name, but only for departments which names start with **A** or **S**. Full name should be in format of :

**First / Last.** Use the JOIN and ON form of syntax.

Sort the output by department name and then by last name.

**ANSWER**:

SELECT e.first\_name||' / '||last\_name "Full name",

e.hire\_date, e.salary, d.department\_name

FROM employees e JOIN departments d

ON e.department\_id = d.department\_id

WHERE department\_name LIKE 'A%' OR department\_name LIKE 'S%'

ORDER BY department\_name, last\_name;

**OUTPUT**:

Full name HIRE\_DATE SALARY DEPARTMENT\_NAME

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William / Gietz 94-06-07 8300 Accounting

Shelley / Higgins 94-06-07 12000 Accounting

Jennifer / Whalen 87-09-17 4400 Administration

Ellen / Abel 96-05-11 11000 Sales

Jonathon / Taylor 98-03-24 8600 Sales

Eleni / Zlotkey 00-01-29 10500 Sales

Curtis / Davies 97-01-29 3100 Shipping

Randall / Matos 98-03-15 2600 Shipping

Kevin / Mourgos 99-11-16 5800 Shipping

Trenna / Rajs 95-10-17 3500 Shipping

Peter / Vargas 98-07-09 2500 Shipping

11 rows selected

3. Rewrite the previous question by using Standard (Old -- prior to Oracle9i) Join

method.

ANSWER:

SELECT e.first\_name||' / '||last\_name "Full name",

e.hire\_date, e.salary, d.department\_name

FROM employees e, departments d

WHERE e.department\_id = d.department\_id

AND (department\_name LIKE 'A%' OR department\_name LIKE 'S%')

ORDER BY department\_name, last\_name;

OUTPUT:

Full name HIRE\_DATE SALARY DEPARTMENT\_NAME

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William / Gietz 94-06-07 8300 Accounting

Shelley / Higgins 94-06-07 12000 Accounting

Jennifer / Whalen 87-09-17 4400 Administration

Ellen / Abel 96-05-11 11000 Sales

Jonathon / Taylor 98-03-24 8600 Sales

Eleni / Zlotkey 00-01-29 10500 Sales

Curtis / Davies 97-01-29 3100 Shipping

Randall / Matos 98-03-15 2600 Shipping

Kevin / Mourgos 99-11-16 5800 Shipping

Trenna / Rajs 95-10-17 3500 Shipping

Peter / Vargas 98-07-09 2500 Shipping

11 rows selected

4. Display full name of the manager of each department in provinces Ontario,

California and Washington plus department name, city, postal code and province name. Full name should be in format as follows:

**Last, First.** Use the JOIN and ON form of syntax.

Sort the output by city and then by department name.

**ANSWER**:

SELECT e.last\_name||','||e.first\_name AS "FULL NAME", d.department\_name,

l.city, l.postal\_code, l.state\_province

FROM employees e

JOIN departments d

ON e.department\_id = d.department\_id

JOIN locations L

ON d.location\_id = l.location\_id

WHERE state\_province IN ('Ontario', 'California', 'Washington')

ORDER BY city,department\_name;

**OUTPUT**:

FULL NAME DEPARTMENT\_NAME CITY POSTAL\_CODE STATE\_PROVINCE

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Gietz,William Accounting Seattle 98199 Washington

Higgins,Shelley Accounting Seattle 98199 Washington

Whalen,Jennifer Administration Seattle 98199 Washington

De Haan,Lex Executive Seattle 98199 Washington

King,Steven Executive Seattle 98199 Washington

Kochhar,Neena Executive Seattle 98199 Washington

Davies,Curtis Shipping South San Francisco 99236 California

Vargas,Peter Shipping South San Francisco 99236 California

Matos,Randall Shipping South San Francisco 99236 California

Mourgos,Kevin Shipping South San Francisco 99236 California

Rajs,Trenna Shipping South San Francisco 99236 California

Fay,Pat Marketing Toronto M5V 2L7 Ontario

Hartstein,Michael Marketing Toronto M5V 2L7 Ontario

13 rows selected

5. Rewrite the previous question by using Standard (Old -- prior to Oracle9i) Join method.

ANSWER:

SELECT e.last\_name||','||e.first\_name AS "FULL NAME", d.department\_name,

l.city, l.postal\_code, l.state\_province

FROM employees e, departments d, locations l

WHERE (e.department\_id = d.department\_id AND d.location\_id = l.location\_id)

AND state\_province IN ('Ontario', 'California', 'Washington')

ORDER BY city,department\_name;

OUTPUT:

FULL NAME DEPARTMENT\_NAME CITY POSTAL\_CODE STATE\_PROVINCE

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Gietz,William Accounting Seattle 98199 Washington

Higgins,Shelley Accounting Seattle 98199 Washington

Whalen,Jennifer Administration Seattle 98199 Washington

De Haan,Lex Executive Seattle 98199 Washington

King,Steven Executive Seattle 98199 Washington

Kochhar,Neena Executive Seattle 98199 Washington

Davies,Curtis Shipping South San Francisco 99236 California

Vargas,Peter Shipping South San Francisco 99236 California

Matos,Randall Shipping South San Francisco 99236 California

Mourgos,Kevin Shipping South San Francisco 99236 California

Rajs,Trenna Shipping South San Francisco 99236 California

FULL NAME DEPARTMENT\_NAME CITY POSTAL\_CODE STATE\_PROVINCE

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Fay,Pat Marketing Toronto M5V 2L7 Ontario

Hartstein,Michael Marketing Toronto M5V 2L7 Ontario

13 rows selected

6. Display the department name and Highest, Lowest and Average pay per each department. Name these results *High, Low* and *Avg.*

Use JOIN and ON form of the syntax.

Sort the output so that department with highest average salary are shown first.

ANSWER:

SELECT department\_name, max(salary) "High", min (salary) "Low", round(avg(salary),0) "Avg"

FROM employees e join departments d

ON (e.department\_id = d.department\_id)

GROUP BY 4 DESC;

OUTPUT:

7. 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. Include also employees who do

NOT have a manager and also employees who do NOT supervise anyone (or

you could say managers without employees to supervise).

SELECT e.last\_name "Employee", e.employee\_id "Emp#", m.last\_name "Manager", m.manager\_id "Mgr#"

FROM employees e JOIN employees m

ON e.manager\_id = m.employee\_id;

Employee Emp# Manager Mgr#

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Kochhar 101 King

De Haan 102 King

Mourgos 124 King

Zlotkey 149 King

Hartstein 201 King

Whalen 200 Kochhar 100

Higgins 205 Kochhar 100

Hunold 103 De Haan 100

Ernst 104 Hunold 102

Lorentz 107 Hunold 102

Rajs 141 Mourgos 100

Employee Emp# Manager Mgr#

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Davies 142 Mourgos 100

Matos 143 Mourgos 100

Vargas 144 Mourgos 100

Abel 174 Zlotkey 100

Taylor 176 Zlotkey 100

Grant 178 Zlotkey 100

Fay 202 Hartstein 100

Gietz 206 Higgins 101

19 rows selected