L2-W2-DBS301-select-range-order

**Due Friday midnight of week 2**

# Alternate lab 2 and answers

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-- Lab 2 Week 2 Solution files

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-- May 14, 2017

-- Purpose: Lab 2 - Week 2 DBS301

-- Description: To learn advanced use of the SELECT statement in Oracle SQL

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-- BASIC SELECT IN ORDER TO SEE THE DATA TO UNDERSTAND WHAT IT LOOKS LIKE

SELECT \* FROM employees;

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-- Question 1

-- Display the employee id, last name and salary of employees earning in the

-- range of $8,000 to $15,000.

-- Sort the output by top salaries first and then by last name.

SELECT

employee\_id AS "Emp ID",

last\_name AS "Last Name",

salary AS "Salary"

FROM employees

WHERE salary >= 8000 AND salary <= 15000

ORDER BY salary DESC, last\_name;

-- Advanced: add currency formatting to salary

SELECT

employee\_id AS "Emp ID",

last\_name AS "Last Name",

to\_char(salary, '$999,999.99') AS "Salary"

FROM employees

WHERE salary >= 8000 AND salary <= 15000

ORDER BY salary DESC, last\_name;

-----------------------------------------------------------------

-- Question 2

-- Modify previous query (#1) so that additional condition is to display only

-- if they work as Programmers or Sales Representatives.

-- Use same sorting as before.

SELECT

employee\_id AS "Emp ID",

last\_name AS "Last Name",

salary AS "Salary",

job\_id AS "Job ID"

FROM employees

WHERE

(salary >= 8000 AND salary <= 15000)

AND

(job\_id LIKE 'SA\_REP' OR job\_ID LIKE 'IT\_PROG')

ORDER BY salary DESC, last\_name;

-----------------------------------------------------------------

-- Question 3

-- The Human Resources department wants to find high salary and low salary

-- employees. Modify previous query (#2) so that it displays the same job

-- titles but for people who earn outside the given salary range from question 1

-- Use same sorting as before.

SELECT

employee\_id AS "Emp ID",

last\_name AS "Last Name",

salary AS "Salary",

job\_id AS "Job ID"

FROM employees

WHERE

(salary < 8000 OR salary > 15000)

AND

(job\_id LIKE 'SA\_REP' OR job\_ID LIKE 'IT\_PROG')

ORDER BY salary DESC, last\_name;

-----------------------------------------------------------------

-- Question 4

-- The company needs a list of long term employees, in order to give them a

-- thank you dinner. Display the last name, job\_id and salary of employees hired

-- before 1998. List the most recently hired employees first.

SELECT

last\_name AS "Last Name",

salary AS "Salary",

job\_id AS "Job Title",

hire\_date as "Started"

FROM employees

WHERE

(hire\_date < DATE '1998-01-01')

ORDER BY hire\_date DESC;

-----------------------------------------------------------------

-- Question 5

-- Modify previous query (#4) so that it displays only employees earning more

-- than $10,000. List the output by job title alphabetically and then by highest

-- paid employees.

SELECT

last\_name AS "Last Name",

salary AS "Salary",

job\_id AS "Job Title",

hire\_date as "Started"

FROM employees

WHERE

(hire\_date < DATE '1998-01-01')

AND

salary > 10000.0

ORDER BY Job\_ID, salary DESC;

-----------------------------------------------------------------

-- Question 6

-- Display the job titles and full names of employees whose first name contains

-- an ‘e’ or ‘E’ anywhere. The output should look like:

SELECT

Job\_id as "Job Title",

First\_Name || ' ' || Last\_Name AS "Full Name"

FROM employees

WHERE First\_Name LIKE '%e%' OR first\_name LIKE '%E%';

-----------------------------------------------------------------

-- Job Title Full name

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-- AD\_VP Neena Kochhar

-- … more rows

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-- Question 7

-- Create a report to display last name, salary, and commission percent for

-- all employees that earn a commission.

SELECT

last\_name as "Last Name",

salary as "Salary",

commission\_pct as "Commission Percent"

FROM employees

WHERE commission\_pct IS NOT NULL;

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-- Question 8

-- Do the same as question 7, but put the report in order of

-- descending salaries.

SELECT

last\_name as "Last Name",

salary as "Salary",

commission\_pct as "Commission Percent"

FROM employees

WHERE commission\_pct IS NOT NULL

ORDER BY salary DESC;

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-- Question 9

-- Do the same as 8, but use a numeric value instead of a column name to

-- do the sorting.

SELECT

last\_name as "Last Name",

salary as "Salary",

commission\_pct as "Commission Percent"

FROM employees

WHERE commission\_pct IS NOT NULL

ORDER BY 2 DESC;