Database Design II and SQL Using Oracle DBS301SEE.09112.2191 Course Documents

Review Test Submission: L3

Review Test Submission: L3

User	Mailanachchige Don Senal Goonetilaka
Course	Database Design II and SQL Using Oracle
Test	L3
Started	1/17/19 6:56 PM
Submitted	1/25/19 9:03 PM
Due Date	1/25/19 11:59 PM
Status	Needs Grading
Attempt Score	Grade not available.
Time Elapsed	194 hours, 7 minutes
Instructions	This should be completed during week 3 in order to keep up to date
Results Displayed	All Answers, Submitted Answers, Correct Answers

Question 1

Needs Grading

REMEMBER to copy the SQL and the output to the answer area

For any employees that are in departments 40, 60 and 70 display (1) last name, (2)salary, and (3) the salary if it is increased by 5%. Make sure the output is a whole number. Also add a column that subtracts the old salary from the new salary and multiplies the difference by 12.

Selected Answer:

```
SELECT last_name "Last Name", salary "Salary",
       ROUND(salary*1.05) "Salary if increased by 5%",
       (salary*1.05-salary)*12 "Old salary - new salary * 12"
FROM    employees
WHERE department_id IN(40,60,70);

Last Name                 Salary     Salary if increased by 5%    Old salary
- new salary * 12
-------------------------  ----------  -------------------------  ------
----------------------
Hunold                    9000               9450
                5400
Ernst                     6000               6300
                3600
Lorentz                   4200               4410
                2520
```

Correct Answer:

```
Your output will not have alias titles
SELECT last_name,
  salary,
  salary * 1.05 as "Increase",
  salary * .05 * 12 as "Yearly" ----- this may vary on how you
calculate
FROM employees
WHERE department_id in (40, 60, 70);
=======
LAST_NAME                    SALARY   Increase     Yearly
------------------------- ---------- ---------- ----------
Hunold                         9000       9450       5400
Ernst                          6000       6300       3600
Lorentz                        4200       4410       2520
```

Question 2

Needs Grading

Write a query to display the tomorrow's date in the following format:

September 28th of year 2006 <-- this is the format for the date you display. Your result will depend on the day when you create this query.

Label the column `Next Day`

Selected Answer:

```
SELECT TO_CHAR(SYSDATE+1, 'MONTH ddth "of year" YYYY') AS
"Next Day"
FROM DUAL;
Next Day
--------------------------
JANUARY   26th of year 2019
```

Correct Answer:

```
SELECT to_char(sysdate + 1, 'Month ddth "of year"
yyyy') as "Next Day"
FROM dual;

Next Day
---------------------------
September 02nd of year 2018
```

Question 3

Needs Grading

USE CASE statement

Write a query that displays the employee's Full Name and Job Title in the following format:
DAVIES, CURTIS is Store Clerk --- do not do all 15 job titles ... just a few will prove you know CASE
Only employees whose last name ends with S and first name starts with C or K.
Give this column an appropriate label
Sort the result by the employees' last names.

Selected Answer:

```
SELECT CASE job_id WHEN 'ST_MAN' THEN UPPER(last_name)||',
'||UPPER(first_name)||' is Store Manager' ||''
WHEN 'ST_CLERK' THEN UPPER(last_name)||', '||UPPER(first_name)||' is
Store Clerk' ||''
WHEN 'SA_REP' THEN UPPER(last_name)||', '||UPPER(first_name)||' is
Sales Representative' ||''
ELSE UPPER(last_name)||', '||UPPER(first_name)||' is an employee'
END AS "Employee Information"
FROM employees
WHERE UPPER(SUBSTR(last_name, -1, 1)) = 'S'
AND UPPER(SUBSTR(first_name, 1, 1)) IN ('C', 'K')
ORDER BY last_name;

Employee Information
------------------------------------------------------------------------
DAVIES, CURTIS is Store Clerk
GRANTS, KIMBERELY is Sales Representative
MOURGOS, KEVIN is Store Manager
```

Correct Answer:

This answer uses decode, but you need to use CASE

```
select upper(last_name) || ',' ||upper(first_name) || '
is ' ||
decode(job_id,
'IT_PROG', 'Programmer',
'AC_ACCOUNT', 'Accountant',
 'AC_MGR', 'Manager',
'ST_CLERK', 'Store Clerk',
'SA_REP', 'Sales Rep',
'ST_MAN', 'Store Manager',
'Not Known') AS "Person and Job"
from employees
where last_name like lower('%S')
and ( first_name like upper('c%') or first_name like
upper('k%'))
order by last_name;

Person and
Job
------------------------------------------------------------
-------
DAVIES,CURTIS is Store
Clerk
GRANTS,KIMBERELY is Sales
Rep
MOURGOS,KEVIN is Store Manager
```

Question 4

Needs Grading

For each employee hired in 2013, display the employee's last name, hire date and calculate the number of YEARS between TODAY and the date the employee was hired.

Label the column Number of Years Worked. Order your results by the number of years employed. Use the label to do the order by

Round the number of years employed up to the closest whole number.

Selected Answer:

```
select last_name, hire_date, to_char(round((sysdate - hire_date)/365)) "Years Worked"
from employees
where hire_date between ( '1-JAN-2013') and '31-DEC-2013'
order by "Years Worked";
```

LAST_NAME	HIRE_DATE	Years Worked
Sanchez	11-OCT-13	5
Brigade	21-SEP-13	5
Gruber	29-SEP-13	5
Bergsteige	08-AUG-13	5
Loo Nam	29-APR-13	6
Montoya	11-FEB-13	6
Gibbons	23-MAR-13	6
Strandherst	19-JUL-13	6
Testorok	03-MAR-13	6
LeDuc	27-JUL-13	6
Harvey	06-JUN-13	6
Grovlin	23-MAR-13	6

Correct Answer:

```
select last_name, hire_date, to_char(round((sysdate -
hire_date)/365)) "Years Worked"
from employees
where hire_date between ( '1-JAN-2013') and '31-DEC-2013'
order by "Years Worked"; -- here is a case for using
double quotes as it references an alias
LAST_NAME                 HIRE_DATE Years
Worked
------------------------- --------- --------------------
------------------
Grovlin                   23-MAR-13
5
Harvey                    06-JUN-13
5
LeDuc                     27-JUL-13
5
Bergsteige                08-AUG-13
5
Gruber                    29-SEP-13
5
Sanchez                   11-OCT-13
5
Loo Nam                   29-APR-13
5
Gibbons                   23-MAR-13
5
Strandherst               19-JUL-13
5
Brigade                   21-SEP-13 5

Testorok                  03-MAR-13 6

Montoya                   11-FEB-13
6

 12 rows selected
```

Question 5

Needs Grading

Do the same as the question above butfor how long have the employees worked, but use 2018

Selected Answer:	SELECT last_name, hire_date, ROUND(MONTHS_BETWEEN(SYSDATE, hire_date)/12) AS "Numbers of Years Worked" FROM employees WHERE TO_CHAR(hire_date, 'YYYY')= '2018' ORDER BY "Numbers of Years Worked"; no rows selected
Correct Answer:	no rows

Question 6

Needs Grading

Create a query that displays the city names, country codes and state/province names, but only for those cities that start on *s* and have at least 8 characters in their name. If city does not have a province name assigned, then put *Province Unknown*

Selected Answer:

```
SELECT city,
RPAD(country_id, 14, ' ') AS "Country Code",
NVL(state_province, 'Province Unknown') AS "Province"
FROM locations
WHERE UPPER(SUBSTR(city, 1, 1))='S'
AND LENGTH(city)>=8;
```

CITY	Country Code	Province
Southlake	US	Texas
south San Francisco	US	California
South Brunswick	US	New Jersey
Singapore	SG	Province Unknown
Stretford	UK	Manchester
Sao Paulo	BR	Sao Paulo

6 rows selected.

Correct Answer:

```
SELECT CITY, COUNTRY_ID, NVL(STATE_PROVINCE, 'UNKNOWN
PROVINCE') "PROVINCE"
FROM LOCATIONS
WHERE (CITY LIKE UPPER('S%') AND LENGTH(CITY) >= 8 );
```

sometimes the output does not appear perfect, but this is still very readable for our purposes

```
CITY                           COUNTRY_ID Province
------------------------------ ---------- -------------------------
Sao Paulo                      BR         Sao Paulo
Singapore                      SG         Unknown Province
South Brunswick           US         New Jersey
South San Francisco      US         California
Southlake                      US         Texas
Stretford                      UK         Manchester
 6 rows selected
```

Question 7

Needs Grading

Display each employee's last name, hire date, and salary review date. The salary review date is the first Wednesday after a year of service, but only for those hired after 2015.

Format the dates to appear in the format similar to
Chan 30-JUN-16 WEDNESDAY , July the Fifth of year 2017

Selected Answer:

```
SELECT last_name, hire_date,
TO_CHAR(NEXT_DAY(ADD_MONTHS(hire_date, 12), 'WEDNESDAY'),
'DAY Month "the" fmDdspth "of year" YYYY')
AS "Salary Review Date"
FROM employees
WHERE TO_NUMBER(TO_CHAR(hire_date, 'YYYY'))>2015;

LAST_NAME                 HIRE_DATE                 Salary Review
Date
-------------------------      ---------                 ----------------------------
----------------------
de Man                          08-MAY-17                 WEDNESDAY May
    the Ninth of year 2018
Pallomine                       27-JUL-17                  WEDNESDAY
August     the First of year 2018
Jacobs                          18-APR-17                 WEDNESDAY April
      the Twenty-Fifth of year 2018
LeBlanc                         18-APR-17                 WEDNESDAY April
      the Twenty-Fifth of year 2018
Chan                            30-JUN-16                  WEDNESDAY July
      the Fifth of year 2017
Wandiko                         18-APR-17                  WEDNESDAY April
      the Twenty-Fifth of year 2018
Gregson                         18-APR-17                  WEDNESDAY April
       the Twenty-Fifth of year 2018
7 rows selected.
```

Correct Answer:

```
SELECT last_name,
hire_date,
to_char(next_day(add_months(hire_date,12),'WED'), 'DAY "," Month "the"
Ddthsp "of year" YYYY') "Review Day"
FROM EMPLOYEES
WHERE hire_date > '31-DEC-2015'; -- or some other combination
LAST_NAME                 HIRE_DATE Review Day
------------------------- --------- ----------------------------------------------------
de Man                    08-MAY-17 WEDNESDAY , May       the Ninth of year
2018
Pallomine                  27-JUL-17 WEDNESDAY , August    the First of year
2018
Jacobs                    18-APR-17 WEDNESDAY , April     the Twenty-Fifth of
year 2018
LeBlanc                    18-APR-17 WEDNESDAY , April     the Twenty-Fifth of
year 2018
Chan                      30-JUN-16 WEDNESDAY , July      the Fifth of year
2017
Wandiko                    18-APR-17 WEDNESDAY , April     the Twenty-Fifth of
year 2018
Gregson                    18-APR-17 WEDNESDAY , April     the Twenty-Fifth of
year 2018
 7 rows selected
```

Saturday, February 2, 2019 4:28:25 PM EST

← **OK**