Jake Carating: 157 725 177 Hekmat Hamidi: 132 645 169

Daniel Emelianenko: 100 840 172

4 104 Ernst, Bruce

ASSIGNMENT 1 - DBS301 - SEE

```
/* 1. Display the employee number, employee name, job and hire date of
     all
     employees hired in May or November of any year, with the most recently
     hired employees displayed first. Also, exclude people hired in 1994 and
     1995. Full name should be in the form Lastname, First Name with an
     alias
     called Full Name.
     Hire date should point to the last day in May or November of that year
     (NOT
     to the exact day) and be in the form like shown below with the heading
     Start
     Date. Do NOT use LIKE operator.
     You should display ONE row per output line by limiting the width of the
     Full Name to 25 characters. The output lines should look like this
     line:
     174 Abel, Ellen SA_REP [May 31st of 1996]
     */
SELECT SUBSTR(EMPLOYEE_ID,1,3) "ID", SUBSTR((LAST_NAME || ', ' ||
FIRST_NAME), 1, 25) "Full Name",
JOB_ID "Job", '[' || TO_CHAR(HIRE_DATE, 'FMMONTH') || ' ' ||
TO_CHAR(LAST_DAY(HIRE_DATE), 'DDth') |  ' of ' |
TO_CHAR(HIRE_DATE, 'YYYY') || ']' "Start Date"
 FROM EMPLOYEES
 WHERE TO CHAR(HIRE DATE, 'MM') = '05' OR TO CHAR(HIRE DATE, 'MM') = '11'
 AND TO_CHAR(HIRE_DATE, 'YYYYY') NOT IN ('1994', '1995')
ORDER BY 4 DESC
         # ID | # Full Name
                                ∯ Job
                                         Start Date
       1 124 Mourgos, Kevin
                                ST MAN [NOVEMBER 30TH of 1999]
       2 178 Grant, Kimberely SA REP [MAY 31ST of 1999]
       3 174 Abel, Ellen
                                SA REP [MAY 31ST of 1996]
```

IT PROG [MAY 31ST of 1991]

```
/* 2. List the employee number, full name, job and the modified salary
     for all
     employees whose monthly earning (without this increase) is outside the
     range $6,000 $11,000 and who are employed as Vice Presidents or
     Managers (President is not counted here).
     You should use Wild Card characters for this.
     VPs will get 30% and managers 20% salary increase.
     Sort the output by the top salaries (before this increase) firstly.
     Heading will be like Employees with increased Pay
     The output lines should look like this sample line:
     Emp# 124 : Kevin Mourgos is ST_MAN and will get a new salary of $6,960
     */
SELECT 'Emp# ' || EMPLOYEE_ID || ' : ' || FIRST_NAME || ' ' || LAST_NAME
|| ' is ' || JOB_ID || ' and will get a new salary of $' ||
CASE WHEN JOB_ID LIKE '%MAN' THEN TO_CHAR(SALARY * 1.2, '$99,999')
 WHEN JOB_ID LIKE '%VP' THEN TO_CHAR(SALARY * 1.3, '$99,999')
 WHEN JOB_ID LIKE '%MGR' THEN TO_CHAR(SALARY * 1.2, '$99,999') END
"Employees with increased Pay"
    FROM EMPLOYEES
 WHERE SALARY NOT BETWEEN 6000 AND 11000 AND JOB_ID LIKE '%MAN' OR JOB_ID
LIKE '%VP' OR JOB_ID LIKE '%MGR'
ORDER BY SALARY DESC;
Employees with increased Pay
Emp# 101 : Neena Kochhar is AD VP and will get a new salary of $ $22,100
Emp# 102 : Lex De Haan is AD VP and will get a new salary of $ $22,100
Emp# 201 : Michael Hartstein is MK MAN and will get a new salary of $ $15,600
Emp# 205 : Shelley Higgins is AC MGR and will get a new salary of $ $14,400
```

Emp# 124 : Kevin Mourgos is ST MAN and will get a new salary of \$ \$6,960

```
/* 3. Display the employee last name, salary, job title and manager# of
all
employees not earning a commission OR if they work in SALES
department, but only if their total monthly salary with $1000 included
bonus
and commission (if earned) is greater than $15,000.
Let's assume that all employees receive this bonus.
If an employee does not have a manager, then display the word NONE
instead. This column should have an alias Manager#.
Display the Total annual salary as well in the form of $135,600.00 with
the
heading Total Income. Sort the result so that best paid employees are
shown
first. The output lines should look like this sample line:
De Haan 17000 AD_VP 100 $216,000.0
*/
```

```
SELECT T2.LAST_NAME, T2.SALARY "Salary", T2.JOB_ID "ID", T2.MANAGER_ID ||
CASE WHEN T2.MANAGER_ID IS NULL THEN 'NONE' END "Manager#",
T0_CHAR(((T2.SALARY + 1000) * 12) * (1 +
NVL(T2.COMMISSION_PCT,0)),'$999,999.99') "Total Income" FROM EMPLOYEES T1
RIGHT JOIN EMPLOYEES T2 ON T1.EMPLOYEE_ID = T2.MANAGER_ID
WHERE (T2.COMMISSION_PCT IS NULL OR T2.DEPARTMENT_ID = 80) AND (((T2.SALARY + 1000)) * (1 + NVL(T2.COMMISSION_PCT,0))) > 15000
ORDER BY "Salary" DESC;
```

Salary	ID	Manager#	Total Income
24000	AD_PRES	NONE	\$300,000.00
17000	AD_VP	100	\$216,000.00
17000	AD_VP	100	\$216,000.00
11000	SA REP	149	\$187,200.00
	24000 17000 17000	Salary ID 24000 AD_PRES 17000 AD_VP 17000 AD_VP 11000 SA_REP	24000 AD_PRES NONE 17000 AD_VP 100 17000 AD_VP 100

```
/* 4. Display Department_id, Job_id and the Lowest salary for this
combination
under the alias Lowest Dept/Job Pay, but only if that Lowest Pay falls
in the
range $6000 - $18000.
Exclude people who work as some kind of Representative job from this
query and departments IT and SALES as well.
    Sort the output according to the Department_id and then by Job_id.
    You MUST NOT use the Subquery method.
    */

SELECT DEPARTMENT_ID || ' ' || JOB_ID || ' ' || MIN(SALARY) "Lowest
Dept/Job_Pay" FROM EMPLOYEES
```

```
Dept/Job Pay" FROM EMPLOYEES

GROUP BY DEPARTMENT_ID, JOB_ID HAVING MIN(SALARY) BETWEEN 6000 AND 18000

AND

JOB_ID NOT LIKE '%REP' AND DEPARTMENT_ID NOT IN ('60','80')

ORDER BY DEPARTMENT_ID, JOB_ID;
```

```
/* 5. Display last_name, salary and job for all employees who earn more
    than all lowest paid employees per department outside the US locations.
    Exclude President and Vice Presidents from this query.
    Sort the output by job title ascending.
    You need to use a Subquery
    */

SELECT LAST_NAME, SALARY, JOB_TITLE FROM EMPLOYEES
    JOIN JOBS USING (JOB_ID)
    WHERE SALARY > ANY (SELECT MIN(SALARY) FROM EMPLOYEES
    GROUP BY DEPARTMENT_ID
    HAVING DEPARTMENT_ID IN(SELECT DEPARTMENT_ID FROM DEPARTMENTS WHERE
LOCATION_ID IN
    (SELECT LOCATION_ID FROM LOCATIONS WHERE COUNTRY_ID != 'US')))
    AND JOB_ID NOT IN ('AD_PRES','AD_VP')
ORDER BY JOB_TITLE;
```

1	\$ LAST_NAME	SALARY	
1	Higgins	12000	Accounting Manager
2	Hartstein	13000	Marketing Manager
3	Hunold	9000	Programmer
4	Gietz	8300	Public_Accountant
5	Zlotkey	10500	Sales_Manager
6	Taylor	8600	Sales_Representative
7	Abel	11000	Sales_Representative
8	Grant	7000	Sales_Representative

```
/* 6. Who are the employees (show last_name, salary and job) who work
either in
IT or MARKETING department and earn more than the worst paid person in
the ACCOUNTING department.
Sort the output by the last name alphabetically.
You need to use ONLY the Subquery method (NO joins allowed).
*/
```

SELECT LAST_NAME, SALARY, JOB_ID FROM EMPLOYEES

WHERE DEPARTMENT_ID IN (SELECT DEPARTMENT_ID FROM DEPARTMENTS WHERE

DEPARTMENT_NAME IN ('IT', 'Marketing'))

AND SALARY > (SELECT MIN(SALARY) FROM EMPLOYEES WHERE DEPARTMENT_ID =

(SELECT DEPARTMENT_ID FROM DEPARTMENTS WHERE DEPARTMENT_NAME =

'Accounting'))

ORDER BY LAST_NAME;

LAST_NAME	SALARY	JOB_ID
Hartstein	13000	MK_MAN
Hunold	9000	IT_PROG

/* 7. Display alphabetically the full name, job, salary (formatted as a currency amount incl. thousand separator, but no decimals) and department number for each

employee who earns less than the best paid unionized employees (i.e. not the president nor any manager nor any VP), and who work in either SALES or MARKETING department.

Full name should be displayed as Firstname Lastname and should have the heading Employee. Salary should be left-padded with the & symbol till the width of 10 characters.

It should have an alias Salary. You should display ONE row per output line by limiting the width of the Employee to 25 characters.

The output lines should look like this sample line:

Jonathon Taylor SA_REP &&&& \$8,600 80 */

SELECT SUBSTR(FIRST_NAME || ' ' || LAST_NAME,1,25) "Employee", JOB_ID
"Job",

LPAD(TO_CHAR(SALARY,'\$99,900'),12,'&') "Salary", DEPARTMENT_ID FROM
EMPLOYEES

WHERE SALARY < ANY (SELECT MAX(SALARY) FROM EMPLOYEES WHERE JOB_ID NOT IN ('AD_PRES', 'AD_VP', 'SA_MAN', 'ST_MAN', 'AC_MGR', 'MK_MAN'))

AND DEPARTMENT_ID IN (SELECT DEPARTMENT_ID FROM DEPARTMENTS WHERE DEPARTMENT_NAME IN ('Sales','Marketing'))

ORDER BY 1

1	Eleni Zlotkey	SA_MAN	2222	\$10,500	80	
2	Jonathon Taylor	SA_REP	2222	\$8,600	80	
3	Pat Fay	MK_REP	2222	\$6,000	20	

/* "Tricky One"

8. Display department name, city and number of different jobs in each department. If city is null, you should print Not Assigned Yet. This column should have alias City.

Column that shows # of different jobs in a department should have the heading # of Jobs You should display ONE row per output line by limiting the width of the City to 25 characters.

You need to show complete situation from the EMPLOYEE point of view, meaning include also employees who work for NO department (but do NOT display empty departments)

and from the CITY point of view meaning you need to display all cities without departments as well.

You need to use Join method. */

SELECT DEPARTMENT_NAME, SUBSTR(NVL(CITY,'Not Assigned Yet'),0,25) "City",
COUNT(E.JOB_ID) "# of Jobs"
FROM DEPARTMENTS D
RIGHT JOIN EMPLOYEES E
ON E.DEPARTMENT_ID = D.DEPARTMENT_ID
FULL JOIN LOCATIONS L
ON L.LOCATION_ID = D.LOCATION_ID
GROUP BY DEPARTMENT_NAME, SUBSTR(NVL(CITY,'Not Assigned Yet'),0,25)

DEPARTMENT_NAME	City	# of Jobs
	Venice	0
	Tokyo	0
IT	Southlake	3
	Sydney	0
	London	0
	Whitehorse	0
	Bombay	0
	Stretford	0
	Mexico City	0
Accounting	Seattle	2
	Beijing	0
Sales	Oxford	3
	Munich	0
Shipping	South San Francisco	5
Administration	Seattle	1
	Sao Paulo	0
	Hiroshima	0
Executive	Seattle	3
	Singapore	0
	Bern	0
	Utrecht	0
	Roma	0
	South Brunswick	0
Marketing	Toronto	2
	Geneva	0
	Not Assigned Yet	1
26 rows selected		

