UNIVERSITÉ SIDI MOHAMED BEN ABDLLAH
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DÉPARTEMENT D'INFORMATIQUE

Compte rendu de TP

Base

Nom : El Hajjaji
Prénom : Otman

Fonctions single row:

•1. Afficher le n°, le nom, le salaire et le salaire augmenté de 15% (en valeur entière) des employés

```
SQL> select employee_id , first_name,salary,trunc(salary*0.15) from employees ;

EMPLOYEE_ID FIRST_NAME               SALARY TRUNC(SALARY*0.15)
----------- -------------------- ---------- ------------------
        100 Steven                    24000               3600
```

•2. Sur base de cette requête, ajouter une information reprenant la différence de salaire entre l'ancien et le nouveau salaire (en entier)

```
     12008              13809.2              1801
      8300                 9545              1245

107 rows selected.

SQL>  select salary ,salary+(salary*0.15) ,round(salary*0.15) from employees ;
```

3. Afficher le nom de l'employé, sa date d'engagement et sa date de révision de salaire qui est le 1er lundi après 6 mois de service (libellé « Révision », format jour, le xx mois YYYY)

```
SQL>  select last_name , hire_date,next_day(add_months(hire_date,6),'monday') "revi
sion" from employees ;

LAST_NAME                 HIRE_DATE revision
------------------------- --------- ---------
King                      17-JUN-03 22-DEC-03
```

•4. Pour chaque employé, calculer le nombre de mois écoulés entre leur date d'engagement et aujourd'hui.

•Libeller cette colonne « Mois»

•Trier le résultat de l'employé le plus ancien vers le plus récent

```
SQL>  select last_name,round(months_between(sysdate,hire_date)) as "mois"from emplo
yees order by 2 desc;

LAST_NAME                      mois
------------------------- ----------
De Haan                         203
```

•5. Afficher les employés:

•dont le nom commence par J, A ou M;

•Mettre leur nom en minuscule avec la première lettre en majuscule

•indiquer le nombre de caractères composant leur nom

```
SQL>  select initcap(last_name),length(last_name) "tail_nom" from employees where l
ast_name like 'j%' or last_name like 'a%' or last_name like 'm%' ;

no rows selected
```

•6. Ecrire une requête affichant pour chaque employé:

• <nom> gagne <salaire> par mois, mais voudrait gagner <3 x salaire>

•Libeller cette colonne « Salaire de rêve»

```
SQL> select concat(last_name, ' gagne') ,concat(salary, ' par mois') ,3*salary "sal
aire de reve" from employees ;

CONCAT(LAST_NAME,'GAGNE')
-------------------------------
CONCAT(SALARY,'PARMOIS')                          salaire de reve
------------------------------------------------- ---------------
King gagne
24000 par mois                                              72000
```

•7. Ecrire une requête affichant le nom et le salaire de tous les employés; justifier à droite le salaire sur une largeur de 15 caractères en complétant par des points. Libeller cette colonne « Salaire»

```
Gietz
8300__________


107 rows selected.

SQL> select last_name,rpad(salary,15,'_') "salaire" from employees ;
```

•8. Afficher le nom, la date d'engagement et le jour de la semaine correspondant

```
SQL> select last_name,hire_date,to_char(hire_date,'day') "jour" from employees ;

LAST_NAME                 HIRE_DATE jour
------------------------- --------- -----------------------------------
King                      17-JUN-03 tuesday
Kochhar                   21-SEP-05 wednesday
```

Requêtes sur tables multiples:

```
Higgins                                   110 Accounting

106 rows selected.

SQL> SELECT e.last_name,e.department_id,d.department_name
  2  FROM departments d,employees e
  3  WHERE d.department_id=e.department_id;
```

```
Higgins                                   110 Seattle
Gietz                                     110 Seattle

72 rows selected.

SQL> SELECT e.last_name,d.department_id,l.city
  2  FROM employees e, departments d,locations l
  3  WHERE e.department_id=d.department_id
  4  AND l.location_id=d.location_id
  5  AND commission_pct IS NULL;
```

```
SQL> SELECT e.last_name,j.job_title,l.city
  2  FROM employees e,departments d,locations l,jobs j
  3  WHERE e.department_id=d.department_id
  4  AND e.job_id=j.job_id
  5  AND l.location_id=d.location_id
  6  AND d.department_id=30;

LAST_NAME                 JOB_TITLE
------------------------- ----------------------------------
CITY
------------------------------
Raphaely                  Purchasing Manager
Seattle
```

```
SQL> SELECT e.last_name,d.department_id,d.department_name
  2  FROM departments d,employees e
  3  WHERE d.department_id=e.department_id
  4  AND e.last_name LIKE '%A%';

LAST_NAME                 DEPARTMENT_ID DEPARTMENT_NAME
------------------------- ------------- --------------------
Atkinson                             50 Shipping
Austin                               60 IT
Abel                                 80 Sales
Ande                                 80 Sales
```

```
SQL> SELECT e.last_name,j.job_title,d.department_id,d.department_name,l.city
  2  FROM employees e,departments d,jobs j,locations l
  3  WHERE e.department_id=d.department_id
  4  AND j.job_id=e.job_id
  5  AND d.location_id IN (SELECT location_id FROM locations WHERE city='Toronto
');

LAST_NAME                 JOB_TITLE                          DEPARTMENT_ID
------------------------- ---------------------------------- -------------
DEPARTMENT_NAME               CITY
----------------------------- ------------------------------
Hartstein                 Marketing Manager                             20
Marketing                     Whitehorse

Hartstein                 Marketing Manager                             20
Marketing                     Venice
```

```
SQL> SELECT e.last_name,e.employee_id,m.last_name,m.manager_id
  2  FROM employees e,employees m
  3  WHERE e.employee_id=m.manager_id;

LAST_NAME                 EMPLOYEE_ID LAST_NAME                 MANAGER_ID
------------------------- ----------- ------------------------- ----------
Zlotkey                           149 Abel                              149
Errazuriz                         147 Ande                              147
```

```
SQL> SELECT e.last_name,e.employee_id,m.last_name,m.manager_id
  2  FROM employees e,employees m
  3  WHERE e.employee_id(+)=m.manager_id;

LAST_NAME                 EMPLOYEE_ID LAST_NAME                 MANAGER_ID
------------------------- ----------- ------------------------- ----------
Cambrault                         148 Kumar                             148
Cambrault                         148 Bates                             148
```

```
Ande                                 80 Zlotkey
Abel                                 80 Zlotkey

3298 rows selected.

SQL> SELECT e.last_name,e.department_id,c.last_name
  2  FROM employees e,employees c
  3  WHERE e.department_id=c.department_id;
```

```
SQL> SELECT e.last_name,d.department_name,j.job_id,e.salary
  2  FROM employees e,jobs j,departments d
  3  WHERE d.department_id=e.department_id
  4  AND j.job_id=e.job_id;

LAST_NAME                 DEPARTMENT_NAME                JOB_ID     SALARY
------------------------- ------------------------------ ---------- ----------
Whalen                    Administration                 AD_ASST          4400
Hartstein                 Marketing                      MK_MAN          13000
Fay                       Marketing                      MK_REP           6000
Raphaely                  Purchasing                     PU_MAN          11000
```

```
SQL> SELECT e.last_name,e.hire_date
  2  FROM employees e, employees b
  3  WHERE b.last_name='Grant'
  4  AND e.hire_date > b.hire_date;

LAST_NAME                 HIRE_DAT
------------------------- --------
Markle                    08/03/08
Philtanker                06/02/08
```

```
Baer                      De Haan
Higgins                   De Haan

5659 rows selected.

SQL> SELECT e.last_name,m.last_name
  2  FROM employees e,employees m
  3  WHERE e.hire_date>m.hire_date;
```

```
**


107 rows selected.

SQL> SELECT last_name,lpad(' ',salary/100,'*')
  2  FROM employees;
```

```
SQL> SELECT e.last_name "employee",m.last_name "manager"
  2  FROM employees e,employees m
  3  WHERE e.hire_date>m.hire_date
  4  AND m.manager_id=e.employee_id;

employee                  manager
------------------------- -------------------------
King                      De Haan
Hunold                    Austin
Kochhar                   Greenberg
```

Fonctions de groupe:

```
SQL> SELECT MAX(salary)
  2  FROM employees;

MAX(SALARY)
-----------
      24000

SQL> SELECT MIN(salary)
  2  FROM employees;

MIN(SALARY)
-----------
       2100

SQL> SELECT SUM(salary)
  2  FROM employees;

SUM(SALARY)
-----------
     691416

SQL> SELECT AVG(salary)
  2  FROM employees;

AVG(SALARY)
-----------
 6461,83178
```

```
SQL> SELECT j.job_title,Max(e.salary) "max",Min(e.salary) "min",AVG(e.salary) "m
oyenn",SUM(e.salary) "somme"
  2  FROM employees e,jobs j
  3  GROUP BY j.job_title;

JOB_TITLE                                 max        min     moyenn      somme
---------------------------------- ---------- ---------- ---------- ----------
Accounting Manager                      24000       2100 6461,83178     691416
Sales Representative                    24000       2100 6461,83178     691416
```

```
SQL> SELECT j.job_title,count(*)
  2  FROM employees e,jobs j
  3  GROUP BY j.job_title;

JOB_TITLE                          COUNT(*)
---------------------------------- ----------
Accounting Manager                        107
Sales Representative                      107
Purchasing Clerk                          107
Programmer                                107
Public Relations Representative           107
```

```
SQL> SELECT count(*)
  2  FROM employees
  3  WHERE manager_id is not null;

  COUNT(*)
----------
       106
```

```
SQL> SELECT Min(salary),Max(salary),Max(salary)-Min(salary) "difference"
  2  FROM employees;

MIN(SALARY) MAX(SALARY) difference
----------- ----------- ----------
       2100       24000      21900
```

```
SQL> SELECT manager_id,MIN(salary)
  2  FROM employees
  3  WHERE salary<1000
  4  AND manager_id is not null
  5  GROUP BY manager_id;

no rows selected
```

```
SQL> SELECT d.department_name "departement",l.city "localisation",count(*) "nomb
res",AVG(e.salary) "somme"
  2  FROM employees e,departments d,locations l
  3  WHERE d.department_id=e.department_id
  4  AND l.location_id=d.location_id
  5  GROUP BY d.department_name,l.city;

departement                    localisation                    nombres
------------------------------ ------------------------------ ----------
     somme
```