



جامعة سيدي محمد بن عبد الله
كلية العلوم دهر المهرار

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Université Sidi Mohamed Ben Abdellah
Faculté des Sciences Dhar Mahraz



Rapport TP2

Base de données

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Requêtes sur tables multiples

Exercices :

1. Afficher le nom, le numéro de département et le nom du département de tous les employés

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

LAST_NAME	DEPARTMENT_ID	DEPARTMENT_NAME
Whalen	10	Administration
Fay	20	Marketing
Hartstein	20	Marketing
Tobias	30	Purchasing
Colmenares	30	Purchasing
Baida	30	Purchasing
Raphaely	30	Purchasing
Khoo	30	Purchasing
Himuro	30	Purchasing
Mauris	40	Human Resources
Feeney	50	Shipping

LAST_NAME	DEPARTMENT_ID	DEPARTMENT_NAME
Fleaur	50	Shipping
Fripp	50	Shipping
Gates	50	Shipping
Gee	50	Shipping
Geoni	50	Shipping

2. Afficher le nom, le nom du département et la ville de travail de tous les employés ne possédant pas de commission

LAST_NAME	DEPARTMENT_NAME
CITY	
Gietz	Accounting
Utrecht	
Higgins	Accounting
Utrecht	
Gietz	Accounting
Venice	

LAST_NAME	DEPARTMENT_NAME
CITY	
Higgins	Accounting
Venice	
Gietz	Accounting
Whitehorse	
Higgins	Accounting
Whitehorse	

1656 rows selected.

```
SQL> SELECT employees.last_name,departments.department_name,locations.city
2 FROM employees,departments,locations
3 WHERE employees.department_id=departments.department_id
4 AND departments.location_id=locations.location_id AND commission_pct is NULL;
```

3. Afficher le job et la localité de travail des employés du département 30

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

JOB_TITLE                                CITY
-----
Purchasing Manager                      Seattle
Purchasing Clerk                        Seattle
Purchasing Clerk                        Seattle
Purchasing Clerk                        Seattle
Purchasing Clerk                        Seattle
Purchasing Clerk                        Seattle
6 rows selected.
```

Exercices :

4. Afficher le nom et le département de tous les employés dont le nom contient la lettre 'A'

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

LAST_NAME                                DEPARTMENT_NAME
-----
Atkinson                                Shipping
Austin                                  IT
Abel                                     Sales
Ade                                     Sales
```

5. Afficher le nom, le job, le numéro et le nom de département des employés travaillant à Dallas

```
SQL> SELECT employees.last_name, jobs.job_title, departments.department_id, departm
ents.department_name
  2 FROM employees, jobs, departments, locations
  3 WHERE employees.job_id=jobs.job_id AND employees.department_id=departments.
department_id
  4 AND departments.location_id=locations.location_id AND city LIKE 'London';

LAST_NAME                                JOB_TITLE                                DEPARTMENT_ID
-----
Mavris                                  Human Resources Representative            40
Human Resources
```

6. Afficher le nom de l'employé, de son responsable ainsi que leur numéro respectif

```
SQL> SELECT e.last_name "Employé",m.last_name "Responsable",e.employee_id "Employee_id", m.employee_id "Manager_id"
  2  FROM employees e,employees m
  3  WHERE e.manager_id=m.employee_id;
```

Employé	Responsable	Employee_id	Manager_id
Kumar	Cambrault	173	148
Bates	Cambrault	172	148
Smith	Cambrault	171	148
Fox	Cambrault	170	148
Bloom	Cambrault	169	148
Ozer	Cambrault	168	148
Hunold	De Haan	103	102
Banda	Errazuriz	167	147
Ande	Errazuriz	166	147
Lee	Errazuriz	165	147
Marvins	Errazuriz	164	147

Employé	Responsable	Employee_id	Manager_id
Greene	Errazuriz	163	147
Uishney	Errazuriz	162	147
Cabrio	Fripp	187	121
Dellinger	Fripp	186	121

7. Idem 6 mais voir les employés sans manager

```
SQL> SELECT employees.last_name,employees.employee_id
  2  FROM employees WHERE manager_id IS NULL;
```

LAST_NAME	EMPLOYEE_ID
King	100

Exercices :

8. Afficher le nom et le numéro de département de tous les employés et pour chaque employé, l'ensemble de ses collègues

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

LAST_NAME	DEPARTMENT_ID	colleague
Tucker	80	Zlotkey
Taylor	80	Zlotkey
Sully	80	Zlotkey
Smith	80	Zlotkey
Smith	80	Zlotkey
Sewall	80	Zlotkey
Russell	80	Zlotkey
Partners	80	Zlotkey
Ozer	80	Zlotkey
Olsen	80	Zlotkey
McEwen	80	Zlotkey

LAST_NAME	DEPARTMENT_ID	colleague
Marvins	80	Zlotkey
Livingston	80	Zlotkey
Lee	80	Zlotkey

9. Afficher le nom, le job, le nom de département, le salaire et le grade de tous les employés

```
SQL> SELECT e.last_name,j.job_title,d.department_name,e.salary,j.min_salary||'-'
|| j.max_salary as grade
2 FROM employees e,jobs j,departments d
3 WHERE e.job_id=j.job_id AND e.department_id=d.department_id;
```

LAST_NAME	JOB_TITLE

DEPARTMENT_NAME	SALARY

GRADE	

Finance	8200
4200-9000	
Higgins	Accounting Manager
Accounting	12008
8200-16000	

LAST_NAME	JOB_TITLE

DEPARTMENT_NAME	SALARY

GRADE	

Gietz	Public Accountant
Accounting	8300
4200-9000	

106 rows selected.

10. Afficher le nom et la date d'engagement des employés arrivés après BLAKE

```
SQL> SELECT last_name,hire_date
  2 FROM employees
  3 WHERE hire_date > ( SELECT hire_date FROM employees WHERE last_name LIKE
  'Johnson');

LAST_NAME          HIRE_DATE
-----
Markle              08/03/08
Philtanker          06/02/08
Zlotkey             29/01/08
Marvins             24/01/08
Lee                 23/02/08
Ade                 24/03/08
Banda               21/04/08
Kumar               21/04/08
Geoni               03/02/08
Grant               13/01/08

10 rows selected.
```

Exercices :

11. *Afficher les employés plus anciens que leur manager respectif*

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

LAST_NAME
-----
Kaufling
Raphaely
De Haan
Higgins
Baer
Mavris
Whalen
Greenberg
Austin
Faviet
Bull

LAST_NAME
-----
Sarchand
Marlow
Everett
Bell
Ladwig
OConnell
```

12. *Afficher le nom de l'employé et son salaire exprimé« graphiquement» sous la forme d'une succession d'astérisques (chaque astérisque valant 100)*

- *Trier en commençant par les salaires les plus élevés*

```

SQL> COLUMN "Salaire graphique" format a30;
SQL> SELECT last_name,salary,LPAD('*',<math>\text{salary}/100</math>,'*') AS "Salaire graphique"
  2 FROM employees
  3 ORDER BY salary DESC;_

```

LAST_NAME	SALARY	Salaire graphique
Seo	2700	*****
Mikkilineni	2700	*****
Himuro	2600	*****
Grant	2600	*****
OConnell	2600	*****
Matos	2600	*****
Colmenares	2500	*****
Marlow	2500	*****
Perkins	2500	*****
Vargas	2500	*****
Sullivan	2500	*****
Patel	2500	*****
Gee	2400	*****
Landry	2400	*****
Philtanker	2200	*****
Markle	2200	*****
Olson	2100	*****

107 rows selected.