Réponse

```
SQL>  prompt EXERCICE  1
---------- prompt EXERCICE  1
SQL>
SQL> ALTER SESSION SET NLS_DATE_LANGUAGE = ENGLISH;
Session modifiée.
SQL>
SQL> select *
  2  from emp
  3  where job = 'MANAGER'
  4          and (deptno =20 or deptno =30);

 EMPNO ENAME      JOB         MGR HIREDATE    SAL   COMM  DEPTNO
------ ---------- --------- ------ --------- ------ ------ -------
  7566 JONES      MANAGER     7839 02/04/81   2975           20
  7698 BLAKE      MANAGER     7839 01/05/81   2850           30

SQL> --On peut aussi utiliser IN :  and deptno in (20,30)

> prompt EXERCICE  2
---------- prompt EXERCICE  2
SQL>
SQL> select ename, job, hiredate
  2  from emp
  3  where job != 'MANAGER'
  4    and hiredate between '1-JAN-81' and '31-DEC-81' ;

ENAME      JOB       HIREDATE
---------- --------- --------
FORD       ANALYST   03/12/81
ALLEN      SALESMAN  20/02/81
WARD       SALESMAN  22/02/81
MARTIN     SALESMAN  28/09/81
KING       PRESIDENT 17/11/81
TURNER     SALESMAN  08/09/81
JAMES      CLERK     03/12/81

7 lignes sélectionnées.
SQL>
> prompt EXERCICE  3
---------- prompt EXERCICE  3

SQL> select ename
  2  from emp
  3  where ename like '%M%'
  4    and ename like '%A%';

ENAME
```

```
----------
MARTIN
ADAMS
JAMES

> prompt EXERCICE  4
---------- prompt EXERCICE  4
SQL> select ename
  2  from emp
  3  where ename like '%A%A%';

ENAME
----------
ADAMS

SQL> ---------- prompt EXERCICE  5
SQL>
SQL> select *
  2  from emp
  3  where comm is not null ;

 EMPNO ENAME      JOB         MGR HIREDATE    SAL  COMM  DEPTNO
------ ---------- --------- ------ -------- ------ ----- -------
  7499 ALLEN      SALESMAN    7698 20/02/81   1600   300      30
  7521 WARD       SALESMAN    7698 22/02/81   1250   500      30
  7654 MARTIN     SALESMAN    7698 28/09/81   1250  1400      30
  7844 TURNER     SALESMAN    7698 08/09/81   1500     0      30

> prompt EXERCICE  6
---------- prompt EXERCICE  6
SQL> select ename,deptno,job,hiredate
  2  from emp
  3  order by deptno,job,hiredate desc ;

ENAME        DEPTNO JOB       HIREDATE
---------- ---------- --------- --------
MILLER           10 CLERK     23/01/82
CLARK            10 MANAGER   09/06/81
KING             10 PRESIDENT 17/11/81
SCOTT            20 ANALYST   19/04/87
FORD             20 ANALYST   03/12/81
ADAMS            20 CLERK     23/05/87
SMITH            20 CLERK     17/12/80
JONES            20 MANAGER   02/04/81
JAMES            30 CLERK     03/12/81
BLAKE            30 MANAGER   01/05/81
MARTIN           30 SALESMAN  28/09/81

ENAME        DEPTNO JOB       HIREDATE
---------- ---------- --------- --------
```

```
TURNER          30 SALESMAN  08/09/81
WARD            30 SALESMAN  22/02/81
ALLEN           30 SALESMAN  20/02/81

14 lignes sélectionnées.

> prompt EXERCICE  7
---------- prompt EXERCICE  7
SQL>
SQL> select *
  2  from emp,dept
  3  where emp.deptno = dept.deptno
  4    and loc = 'DALLAS' ;

EMPNO ENAME  JOB         MGR HIREDATE    SAL  COMM  DEPTNO  DEPTNO
DNAME
----- ------ --------- ------ -------- ------ ----- ------- ------- ---------
LOC
-------
 7902 FORD   ANALYST     7566 03/12/81   3000          20      20 RESEARCH
DALLAS

 7369 SMITH  CLERK       7902 17/12/80    800          20      20 RESEARCH
DALLAS

 7566 JONES  MANAGER     7839 02/04/81   2975          20      20 RESEARCH
DALLAS


EMPNO ENAME  JOB         MGR HIREDATE    SAL  COMM  DEPTNO  DEPTNO
DNAME
----- ------ --------- ------ -------- ------ ----- ------- ------- ---------
LOC
-------
 7788 SCOTT  ANALYST     7566 19/04/87   3000          20      20 RESEARCH
DALLAS

 7876 ADAMS  CLERK       7788 23/05/87   1100          20      20 RESEARCH
DALLAS

> prompt EXERCICE  8
---------- prompt EXERCICE  8

SQL> select emp.ename,emp.hiredate,mgr.ename,mgr.hiredate
  2  from emp,emp mgr
  3  where emp.mgr = mgr.empno
  4  and emp.hiredate < mgr.hiredate ;

ENAME      HIREDATE ENAME      HIREDATE
---------- -------- ---------- --------
```

```
SMITH      17/12/80 FORD       03/12/81
ALLEN      20/02/81 BLAKE      01/05/81
WARD       22/02/81 BLAKE      01/05/81
JONES      02/04/81 KING       17/11/81
BLAKE      01/05/81 KING       17/11/81
CLARK      09/06/81 KING       17/11/81

6 lignes sélectionnées.
SQL>
> prompt EXERCICE  9
---------- prompt EXERCICE  9

SQL> select emp.ename,emp.hiredate
  2  from emp,emp blake
  3  where blake.ename = 'BLAKE'
  4  and blake.hiredate > emp.hiredate;

ENAME      HIREDATE
---------- --------
SMITH      17/12/80
ALLEN      20/02/81
WARD       22/02/81
JONES      02/04/81

SQL> --a voir initialement :and blake.hiredate < emp.hiredate;

> prompt EXERCICE  10
---------- prompt EXERCICE  10
SQL>
SQL> select *
  2  from emp
  3  where hiredate =(select hiredate
  4                   from emp
  5                   where ename = 'FORD')
  6    and ename !='FORD' ;

EMPNO ENAME  JOB         MGR HIREDATE    SAL  COMM  DEPTNO
----- ------ --------- ------ -------- ------ ----- -------
 7900 JAMES  CLERK      7698 03/12/81    950           30

> prompt EXERCICE  11
---------- prompt EXERCICE  11
SQL>
SQL> select *
  2  from emp
  3  where hiredate < all (select hiredate
  4                        from emp
  5                        where deptno = 10 );

EMPNO ENAME  JOB         MGR HIREDATE    SAL  COMM  DEPTNO
```

```
----- ------ --------- ------ -------- ------ ----- -------
 7698 BLAKE  MANAGER     7839 01/05/81   2850          30
 7566 JONES  MANAGER     7839 02/04/81   2975         20
 7521 WARD   SALESMAN    7698 22/02/81   1250   500     30
 7499 ALLEN  SALESMAN    7698 20/02/81   1600   300     30
 7369 SMITH  CLERK       7902 17/12/80    800          20

> prompt EXERCICE  12
---------- prompt EXERCICE  12

SQL> select x.ename
  2  from emp x
  3  where x.sal>    (select sal
  4                   from emp
  5                   where x.mgr = emp.empno)
  6  and x.mgr is not null ;

ENAME
----------
FORD
SCOTT

> prompt EXERCICE  13

SQL> select job, count (*) NB_EMP
  2  from emp
  3  group by job
  4  order by count (*) desc ;

JOB         NB_EMP
--------- ----------
SALESMAN         4
CLERK            4
MANAGER          3
ANALYST          2
PRESIDENT        1

> prompt EXERCICE  14
---------- prompt EXERCICE  14

SQL> select ename,sal,deptno
  2  from emp
  3  where (deptno,sal) in   (select deptno,max(sal)
  4                           from emp
  5                           group by deptno) ;

ENAME           SAL     DEPTNO
---------- ---------- ----------
FORD            3000         20
BLAKE           2850         30
```

```
SCOTT          3000        20
KING           5000        10

SQL>

> prompt EXERCICE  15
---------- prompt EXERCICE  15

SQL> select job,avg(sal) avgsal
  2  from emp
  3  group by job
  4  having avg(sal) =     (select min(avg(sal))
  5                        from emp
  6                        group by job) ;

JOB         AVGSAL
--------- ----------
CLERK        1037,5


> prompt EXERCICE  16
---------- prompt EXERCICE  16
SQL>
SQL> update EMP X
  2  set SAL = SAL + (select EMP.SAL*0.05
  3                   from EMP
  4                   where ENAME = 'KING')
  5  where job = 'MANAGER' ;

3 lignes mises à jour.

SQL> select ENAME, JOB, SAL from EMP ;

ENAME      JOB            SAL
---------- --------- ----------
FORD       ANALYST        3000
SMITH      CLERK           800
ALLEN      SALESMAN       1600
WARD       SALESMAN       1250
JONES      MANAGER        3225
MARTIN     SALESMAN       1250
BLAKE      MANAGER        3100
CLARK      MANAGER        2700
SCOTT      ANALYST        3000
KING       PRESIDENT      5000
TURNER     SALESMAN       1500

ENAME      JOB            SAL
---------- --------- ----------
ADAMS      CLERK          1100
```

```
JAMES      CLERK          950
MILLER     CLERK         1300

14 lignes sélectionnées.

SQL> rollback;
Annulation (rollback) effectuée.

> prompt EXERCICE  17
---------- prompt EXERCICE  17

SQL> insert into     SALGRADE
  2  select DEPTNO, min (SAL), max (SAL)
  3  from EMP
  4  group by DEPTNO ;

3 lignes créées.

SQL> select * from SALGRADE ;

    GRADE      LOSAL      HISAL
---------- ---------- ----------
         1        700       1200
         2       1201       1400
         3       1401       2000
         4       2001       3000
         5       3001       9999
        30        950       2850
        10       1300       5000
        20        800       3000

8 lignes sélectionnées.
SQL> rollback;
Annulation (rollback) effectuée.

> prompt EXERCICE  18
---------- prompt EXERCICE  18

SQL> delete from EMP
  2  where SAL <     (select avg (SAL)
  3                  from EMP X
  4                  where X.DEPTNO = EMP.DEPTNO) ;

8 lignes supprimées.

SQL> select * from EMP ;

EMPNO ENAME  JOB         MGR HIREDATE    SAL  COMM  DEPTNO
----- ------ --------- ------ -------- ------ ----- -------
 7902 FORD   ANALYST     7566 03/12/81   3000           20
```

```
 7499 ALLEN  SALESMAN    7698 20/02/81   1600   300      30
 7566 JONES  MANAGER     7839 02/04/81   2975            20
 7698 BLAKE  MANAGER     7839 01/05/81   2850            30
 7788 SCOTT  ANALYST     7566 19/04/87   3000            20
 7839 KING   PRESIDENT        17/11/81   5000            10

6 lignes sélectionnées.
SQL> rollback;
Annulation (rollback) effectuée.

SQL> ALTER SESSION SET NLS_DATE_LANGUAGE = FRENCH;
Session modifiée.
```