```
SQL> SELECT *
  2  FROM EMPLOYEES
  3  WHERE COMMISSION_PCT IS NULL
  4  ORDER BY LAST_NAME DESC;

EMPLOYEE_ID FIRST_NAME           LAST_NAME
----------- -------------------- -------------------------
EMAIL                       PHONE_NUMBER         HIRE_DATE JOB_ID        SALA
RY
------------------------- -------------------- ---------- ---------- --------
--
COMMISSION_PCT MANAGER_ID DEPARTMENT_ID
-------------- ---------- -------------
        200 Jennifer              Whalen
JWHALEN                     515.123.4444         17-SEP-87 AD_ASST          44
00
                    101            10
```

2-

```
SQL> SELECT
  2      FIRST_NAME,
  3      LAST_NAME,
  4      SALARY,
  5      DEPARTMENT_ID,
  6      DENSE_RANK() OVER (PARTITION BY DEPARTMENT_ID ORDER BY SALARY DESC)
 as dense_rank_num
  7  FROM EMPLOYEES;
```

```
SQL> SELECT
  2      FIRST_NAME,
  3      LAST_NAME,
  4      SALARY,
  5      DEPARTMENT_ID,
  6      RANK() OVER (PARTITION BY DEPARTMENT_ID ORDER BY SALARY
DESC) as rank_num
  7  FROM EMPLOYEES;
```

```
SQL> SELECT
  2      FIRST_NAME,
  3      LAST_NAME,
  4      SALARY,
  5      DEPARTMENT_ID,
  6      ROW_NUMBER() OVER (PARTITION BY DEPARTMENT_ID ORDER BY S
ALARY DESC) as row_num
  7  FROM EMPLOYEES;
```

3)

```
SQL> SELECT
  2      LAST_NAME || ' ' || FIRST_NAME as "nom et prénom",
  3      DEPARTMENT_ID as "numéro département"
  4  FROM EMPLOYEES
  5  WHERE DEPARTMENT_ID = 30;

nom et prénom                                      numéro département
-------------------------------------------------- ------------------
Raphaely Den                                                       30
Khoo Alexander                                                     30
Baida Shelli                                                       30
Tobias Sigal                                                       30
Himuro Guy                                                         30
```

4)

```
SQL> SELECT
  2      DEPARTMENT_ID as "ID DEPT",
  3      SUBSTR(DEPARTMENT_NAME, 1, 3) || '.' as "NOM DEPT",
  4      LOCATION_ID as "LOCATION"
  5  FROM DEPARTMENTS
  6  WHERE DEPARTMENT_ID IN (10, 20, 30, 40, 50);

   ID DEPT NOM DEPT        LOCATION
---------- ------------- ----------
        10 Adm.                1700
        20 Mar.                1800
        30 Pur.                1700
        40 Hum.                2400
        50 Shi.                1500
```

5)

```
SQL> SELECT
  2      FIRST_NAME || ' ' || LAST_NAME as employee_name,
  3      CASE
  4          WHEN EXTRACT(YEAR FROM HIRE_DATE) = 1998 THEN 'NEEDS
 REVIEW'
  5          ELSE 'NOT THIS YEAR'
  6      END as REVIEW
  7  FROM EMPLOYEES;

EMPLOYEE_NAME                                      REVIEW
-------------------------------------------------- -------------
Steven King                                        NOT THIS YEAR
```

6)

```
SQL> SELECT
  2        FIRST_NAME,
  3        LAST_NAME,
  4        EXTRACT(YEAR FROM HIRE_DATE) as annee,
  5        TO_CHAR(HIRE_DATE, 'Month') as mois,
  6        TO_CHAR(HIRE_DATE, 'Q') as trimestre
  7  FROM EMPLOYEES
  8  ORDER BY EXTRACT(YEAR FROM HIRE_DATE) DESC;

FIRST_NAME             LAST_NAME                          ANNEE
-------------------- ------------------------ ----------
MOIS                                      T
----------------------------------- -
Hazel                  Philtanker                         2000
February                                 1
```

7)

```
SQL> SELECT
  2        LAST_NAME || ' ' || FIRST_NAME as "nom et prénom",
  3        ROUND(MONTHS_BETWEEN(SYSDATE, HIRE_DATE)) as "Ancienneté
"
  4  FROM EMPLOYEES
  5  WHERE DEPARTMENT_ID = 30;

nom et prénom                                    Ancienneté
----------------------------------------------- ----------
Raphaely Den                                            374
Khoo Alexander                                          369
```

Partie2:

1)
```
SQL> SELECT
  2        MAX(SALARY) as salaire_maximum,
  3        MIN(SALARY) as salaire_minimum
  4  FROM EMPLOYEES;

SALAIRE_MAXIMUM SALAIRE_MINIMUM
--------------- ---------------
          24000            2100
```

2)

```
SQL> SELECT
  2         DEPARTMENT_ID,
  3         ROUND(AVG(SALARY), 2) as salaire_moyen
  4  FROM EMPLOYEES
  5  GROUP BY DEPARTMENT_ID;

DEPARTMENT_ID SALAIRE_MOYEN
------------- -------------
          100          8600
           30          4480
           90      19333.33
           20          9500
           70         10000
```

3)

```
SQL> SELECT
  2         DEPARTMENT_ID as "identifiant",
  3         COUNT(*) as "nbr d'employés"
  4  FROM EMPLOYEES
  5  GROUP BY DEPARTMENT_ID
  6  ORDER BY DEPARTMENT_ID;

identifiant nbr d'employés
----------- --------------
         10              1
         20              2
         30              5
         40              1
```

4)

```
SQL> SELECT
  2      DEPARTMENT_ID as "identifiant",
  3      COUNT(*) as "nbr d'employés"
  4  FROM EMPLOYEES
  5  GROUP BY DEPARTMENT_ID
  6  ORDER BY DEPARTMENT_ID;

identifiant nbr d'employés
----------- ---------------
         10               1
         20               2
         30               5
         40               1
         50              25
         60               5
         70               1
         80              11
         90               3
        100               6
        110               2
```

```
SQL> SELECT
  2      DEPARTMENT_ID as "identifiant",
  3      COUNT(*) as "nbr d'employés"
  4  FROM EMPLOYEES
  5  WHERE DEPARTMENT_ID IS NOT NULL
  6  GROUP BY DEPARTMENT_ID
  7  ORDER BY DEPARTMENT_ID;

identifiant nbr d'employés
----------- ---------------
         10               1
         20               2
         30               5
         40               1
         50              25
         60               5
         70               1
         80              11
         90               3
        100               6
        110               2
```