18BCB0142
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Ex.3

The table from the previous exercises is used

1.

```
SQL>
SQL> SELECT FIRST_NAME, LAST_NAME from emp where SALARY BETWEEN 30000 and 70000;

FIRST_NAME      LAST_NAME
--------------- ---------------
Joyce           PAN
Frankin         Wong
Jenifer         Wallace
John            Smith
Ramesh          Narayan
```

2.

```
SQL>
SQL>
SQL> SELECT FIRST_NAME , LAST_NAME from emp where SUPERVISOR_SSN is NULL;

no rows selected

SQL>
```

3.

```
SQL> SELECT TO_CHAR(BIRTHDAY, 'DDTH FMMONTH YYY') FROM emp;

TO_CHAR(BIRTHDAY,'DDTHFMMONTHYYY')
-----------------------------------------
09TH JUNE 968
07TH FEBRUARY 973
08TH DECEMBER 972
20TH JUNE 987
09TH JANUARY 987
15TH SEPTEMBER 985

6 rows selected.
```

4.

```
SQL>
SQL> SELECT FIRST_NAME, LAST_NAME from emp where BIRTHDAY<='31-DEC-1978';

FIRST_NAME      LAST_NAME
--------------- ---------------
Doug            Gilbert
Joyce           PAN
Frankin         Wong

SQL>
```

5.

Using the existing table

```
SQL> SELECT DEPARTMENT_NAME from DEPARTMENT where DEPARTMENT_NAME LIKE 'M%';

no rows selected

SQL>
```

6.

```
SQL>
SQL> SELECT DEPARTMENT_NAME FROM dept WHERE DEPARTMENT_NAME LIKE '%e';

DEPARTMENT_NAME
---------------
Finance
```

7.

8.

```
SQL> SELECT UPPER(DEPARTMENT_NAME) FROM dept;

UPPER(DEPARTMEN
---------------
SALES
ADMINISTRATION
HEADQUARTER
FINANCE
IT

SQL> SELECT LOWER(DEPARTMENT_NAME) FROM dept;

LOWER(DEPARTMEN
---------------
sales
administration
headquarter
finance
it

SQL>
```

9.

```
SQL> SELECT SUBSTR(DEPARTMENT_NAME,0,4) FROM dept;

SUBSTR(DEPARTMEN
----------------
Sale
Admi
Head
Fina
IT

SQL>
SQL> SELECT SUBSTR(DEPARTMENT_NAME,-4,4) FROM dept;

SUBSTR(DEPARTMEN
----------------
ales
tion
rter
ance


SQL>
```

10.

```
SQL> SELECT SUBSTR(ADDRESS,5,12) FROM emp;

SUBSTR(ADDRESS,5,12)
----------------------------------------
nai
ore
i
nai
rai
alore

6 rows selected.

SQL>
```

11.

```
SQL>
SQL> SELECT ADD_MONTHS(MANAGER_START_DATE, 3) FROM dept;

ADD_MONTH
---------

03-APR-12
16-MAR-15
18-AUG-13
12-SEP-15

SQL>
```

12.

```
SQL> SELECT ROUND(AGE,2) FROM emp;
SELECT ROUND(AGE,2) FROM emp
```

13.

```
SQL> SELECT LAST_DAY(MANAGER_START_DATE) FROM dept;

LAST_DAY(
---------

31-JAN-12
31-DEC-14
31-MAY-13
30-JUN-15

SQL>
```

14.

```
SQL> SELECT SUBSTR('HARIIN',0,4) FROM DUAL;

SUBS
----
HARI

SQL>
```

15.

```
SQL> SELECT REPLACE('HARINI','NI','SH') FROM DUAL;

REPLAC
------
HARISH

SQL>
```

16.

```
SQL> SELECT LENGTH(DEPARTMENT_NAME) FROM dept;

LENGTH(DEPARTMENT_NAME)
-----------------------
                      5
                     14
                     11
                      7
                      2

SQL>
```

17.

```
SQL> SELECT ADD_MONTHS(SYSDATE,10) FROM DUAL;

ADD_MONTH
---------
31-AUG-20

SQL>
```

18.

```
SQL> SELECT NEXT_DAY(SYSDATE,'FRIDAY') FROM DUAL;

NEXT_DAY(
---------
01-NOV-19

SQL>
```

19. using the table 'project' defined from the previous exercise

```
SQL> SELECT LPAD(PROJECT_NAME,12,'*')LPD FROM project;

LPD
------------------------------------------------
****Projecta
****ProjectB
****ProjectC
****ProjecTD
****ProjectA

SQL>
```

EXERCISE 4:

We use the values of the previous tables

1.

```
SQL> SELECT COUNT(DISTINCT DEPARTMENT_NUMBER) FROM emp;

COUNT(DISTINCTDEPARTMENT_NUMBER)
--------------------------------
                               5

SQL>
```

2.

```
SQL> SELECT DEPARTMENT_NUMBER, MIN(SALARY), MAX(SALARY) FROM emp GROUP BY DEPARTMENT_NUMBER;

DEPARTMENT_NUMBER MIN(SALARY) MAX(SALARY)
----------------- ----------- -----------
              124       30000       30000
                1       80000       80000
                2       40000       43000
                5       70000       70000
                3       38000       38000

SQL>
```

3.

```
SQL> SELECT AVG(SALARY) from emp;

AVG(SALARY)
-----------
 50166.6667

SQL>
```

4.

```
SQL> SQL> SQL> SELECT COUNT(FIRST_NAME) FROM emp WHERE AGE>30;
SELECT COUNT(FIRST_NAME) FROM emp WHERE AGE>30
```

5.

```
SQL> SELECT AVG(SALARY), DEPARTMENT_NAME FROM emp INNER JOIN dept ON emp.DEPARTMENT_NUMBER = dept.DEPARTMENT_NUMBER GROUP BY DEPARTMENT_NAME;

AVG(SALARY) DEPARTMENT_NAME
----------- ---------------
      80000 Headquarter
      41500 Administration
      38000 Finance

SQL>
```

6.

```
SQL> SELECT DEPARTMENT_NAME, COUNT(*) from dept,emp where dept.DEPARTMENT_NUMBER = emp.DEPARTMENT_NUMBER group by DEPARTMENT_NAME HAVING COUNT(*) > 2;

no rows selected

SQL>
```

7.

```
SQL> SELECT AVG(SALARY) FROM emp GROUP BY DEPARTMENT_NUMBER;

AVG(SALARY)
-----------
      30000
      80000
      41500
      70000
      38000

SQL>
```

8.

```
SQL> SELECT COUNT(FIRST_NAME), DEPARTMENT_NAME from emp INNER JOIN dept ON emp.DEPARTMENT_NUMBER = dept.DEPARTMENT_NUMBER where DEPARTMENT_NAME='Finance' OR DEPARTMENT_NAME = 'Administration' GROUP BY DEPARTMEN
T_NAME;

COUNT(FIRST_NAME) DEPARTMENT_NAME
----------------- --------------
                2 Administration
                1 Finance

SQL>
```

9.

```
SQL> SELECT FIRST_NAME FROM emp ORDER BY BIRTHDAY;

FIRST_NAME
---------------
Doug
Frankin
Joyce
Ramesh
John
Jenifer

6 rows selected.

SQL>
```