Assignment-3

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L57+L58

NUMERIC FUNCTIONS:

```
SQL> create table gtr(num number(3),str varchar2(6));

Table created.
```

```
SQL> insert into gtr values(-2.2,'srinu');

1 row created.

SQL> insert into gtr values(-12.4,'ravi');

1 row created.

SQL> select abs(num) from gtr where str ='srinu';

  ABS(NUM)
----------
         2

SQL> select abs(num) from gtr where str ='ravi';

  ABS(NUM)
----------
        12

SQL> select ceil(num) from gtr where str ='ravi';

 CEIL(NUM)
----------
       -12

SQL> select cos(num) from gtr where str ='ravi';

  COS(NUM)
----------
.843853959

SQL> select cosh(num) from gtr where str ='ravi';

 COSH(NUM)
----------
81377.3957
```

```
SQL> select exp(num) from gtr where str ='ravi';

  EXP(NUM)
----------
6.1442E-06

SQL> select floor(num) from gtr where str ='ravi';

FLOOR(NUM)
----------
       -12

SQL> select power(num,3) from gtr where str ='ravi';

POWER(NUM,3)
------------
       -1728

SQL> select mod(num,3) from gtr where str ='ravi';

MOD(NUM,3)
----------
         0

SQL> select round(num,1) from gtr where str ='ravi';

ROUND(NUM,1)
------------
         -12

SQL> select trunc(num,2) from gtr where str ='ravi';

TRUNC(NUM,2)
------------
         -12
```

```
SQL> insert into gtr values(4,'abhi');

1 row created.

SQL> select sqrt(num) from gtr where str ='abhi';

 SQRT(NUM)
----------
         2
```

Character Functions:

```
SQL> create table CharFunctions(name varchar2(10), id_num number(10

Table created.

SQL> insert into CharFunctions values('guru',7034);

1 row created.

SQL> insert into CharFunctions values('THEJA',7125);

1 row created.

SQL> select initcap(name) from CharFunctions where id_num =7034;

INITCAP(NA
----------
Guru

SQL> select lower(name) from CharFunctions where id_num =7125;

LOWER(NAME
----------
theja

SQL> select upper(name) from CharFunctions where id_num =7034;

UPPER(NAME
----------
GURU
```

```
SQL> select rtrim(name,'u') from CharFunctions where id_num = 7034;

RTRIM(NAME
----------
gur

SQL> select ltrim(name,'g') from CharFunctions where id_num = 7034;

LTRIM(NAME
----------
uru

SQL> select translate(name,'g','u') from CharFunctions where id_num = 7034;

TRANSLATE(NAME,'G','U')
---------------------------------------
uuru

SQL> select replace(name,'u','f') from CharFunctions where id_num = 7034;

REPLACE(NA
----------
gfrf
```

```
SQL> select substr(name,'1','2') from CharFunctions where id_num = 7034;

SUBSTR(N
--------
gu
```

```
SQL> select lpad('g',4,'u') from CharFunctions where id_num = 7034;

LPAD
----
uuug

SQL> select rpad('g',4,'u') from CharFunctions where id_num = 7034;

RPAD
----
guuu
```

```
SQL> select chr(68) from CharFunctions where id_num = 7034;

C
-
D

SQL> select length(name) from CharFunctions where id_num = 7034;

LENGTH(NAME)
------------
           4

SQL> select decode(id_num,7034,7288) from CharFunctions where id_num = 7034;

DECODE(ID_NUM,7034,7288)
------------------------
                    7288
```

Date Functions:

```
SQL> select new_time('26-oct-2001','est','yst') from dual;

NEW_TIME(
---------
25-OCT-01
```

```
SQL> select add_months('26-oct-2001',5) from dual;

ADD_MONTH
---------
26-MAR-02

SQL> select last_day('26-oct-2001') from dual;

LAST_DAY(
---------
31-OCT-01

SQL> select months_between('26-oct-2001','26-nov-2001') from dual;

MONTHS_BETWEEN('26-OCT-2001','26-NOV-2001')
-------------------------------------------
                                         -1

SQL> select round(to_date('26-oct-2001'),'month') from dual;

ROUND(TO_
---------
01-NOV-01

SQL> select next_day('26-oct-2001','mon') from dual;

NEXT_DAY(
---------
29-OCT-01

SQL> select trunc(to_date('26-oct-2001'),'month') from dual;

TRUNC(TO_
---------
01-OCT-01

SQL> select greatest('26-oct-2001','21-aug-2001') from dual;

GREATEST('2
-----------
26-oct-2001
```

Conversion Functions:

```
SQL> select to_char(sysdate,'YYYY-MM-DD') from dual;

TO_CHAR(SY
----------
2021-03-01

SQL> select to_date(sysdate,'YYYY-MM-DD') from dual;

TO_DATE(S
---------
21-MAR-01

SQL> select to_number(26-10-2001) from dual;

TO_NUMBER(26-10-2001)
---------------------
                -1985
```

Miscellaneous Functions:

```
SQL> select uid from gtr;

       UID
----------
         5
         5
         5
         5
         5
         5
         5
         5

8 rows selected.

SQL> select user from gtr;

USER
------------------------------
SYSTEM
SYSTEM
SYSTEM
SYSTEM
SYSTEM
SYSTEM
SYSTEM
SYSTEM

8 rows selected.
```

```
SQL> select nvl(num,6) from gtr;

NVL(NUM,6)
----------
        -1
        -1
        -1
         2
        -1
        -2
       -12
         4

8 rows selected.

SQL> select vsize(6) from gtr;

  VSIZE(6)
----------
         2
         2
         2
         2
         2
         2
         2
         2

8 rows selected.
```

Group Functions:

```
SQL> desc sales_person
 Name                                      Null?    Type
 ----------------------------------------- -------- ------------------
---------
 SALESPERSON_NUMBER                                 NUMBER(10)
 SALESPERSON_NAME                                   VARCHAR2(20)
 COMM_PERCENTAGE                                    NUMBER(2)
 YEAR_HIRE                                          NUMBER(4)
 OFFICE_NUMBER                                      NUMBER(10)

SQL> select count(*) from sales_person;

  COUNT(*)
----------
         5

SQL> select count(salesperson_name) from sales_person;

COUNT(SALESPERSON_NAME)
-----------------------
                      5

SQL> select count(salesperson_name),count(office_number) from sales_per
son;

COUNT(SALESPERSON_NAME) COUNT(OFFICE_NUMBER)
----------------------- --------------------
                      5                    5

SQL> select min(comm_percentage) from sales_person;

MIN(COMM_PERCENTAGE)
--------------------
                   4

SQL> select max(year_hire) from sales_person;

MAX(YEAR_HIRE)
--------------
          2017
```

```
SQL> select avg(comm_percentage) from sales_person;

AVG(COMM_PERCENTAGE)
--------------------
                14.8

SQL> select sum(comm_percentage) from sales_person;

SUM(COMM_PERCENTAGE)
--------------------
                  74
```

```
SQL> select stddev(comm_percentage) from sales_person;

STDDEV(COMM_PERCENTAGE)
-----------------------
             10.2567051

SQL> select variance(comm_percentage) from sales_person;

VARIANCE(COMM_PERCENTAGE)
-------------------------
                    105.2
```