EX-3 BUILT-IN FUNCTIONS

```
Oracle Database 21c Express Edition Release 21.0.0.0.0 - Production
Version 21.3.0.0.0

SQL> CREATE TABLE Emp
  2  (
  3  eno number (3) ,
  4  ename varchar (30) ,
  5  dept varchar (50) ,
  6  salary number
  7  ) ;

Table created.

SQL> INSERT INTO Emp VALUES (1,'RAJU','PHILOSOPHY',90000) ;

1 row created.

SQL> INSERT INTO Emp VALUES (2,'AKILA','ENGLISH',80000) ;

1 row created.

SQL> INSERT INTO Emp VALUES (3,'PADMA','HISTORY',60000) ;

1 row created.

SQL> INSERT INTO Emp VALUES (4,'SANJAY','MECH',100000) ;

1 row created.

SQL> INSERT INTO Emp VALUES (5,'LATHA','BIOLOGY',50000) ;

1 row created.
```

```
SQL> SELECT * FROM Emp ;
        ENO ENAME
----------- ------------------------------
DEPT                                             SALARY
-------------------------------------------------- ----------
          1 RAJU
PHILOSOPHY                                         90000

          2 AKILA
ENGLISH                                            80000

          3 PADMA
HISTORY                                            60000


        ENO ENAME
----------- ------------------------------
DEPT                                             SALARY
-------------------------------------------------- ----------
          4 SANJAY
MECH                                              100000

          5 LATHA
BIOLOGY                                            50000


SQL> DESC Emp ;
 Name                                    Null?    Type
 ----------------------------------------- -------- ----------------------------
 ENO                                               NUMBER(3)
 ENAME                                             VARCHAR2(30)
```

```
SQL> DESC Emp ;
 Name                                      Null?    Type
 ----------------------------------------- -------- ----------------------------
 ENO                                                NUMBER(3)
 ENAME                                              VARCHAR2(30)
 DEPT                                               VARCHAR2(50)
 SALARY                                             NUMBER

SQL> SELECT avg (salary) "average salary" FROM Emp ;

average salary
--------------
         76000

SQL> SELECT min (salary) "minimum salary" FROM Emp ;

minimum salary
--------------
         50000

SQL> SELECT max (salary) "maximum salary" FROM Emp ;

maximum salary
--------------
        100000

SQL> SELECT count (eno) "number of employees" FROM Emp ;

number of employees
-------------------
                  5
```
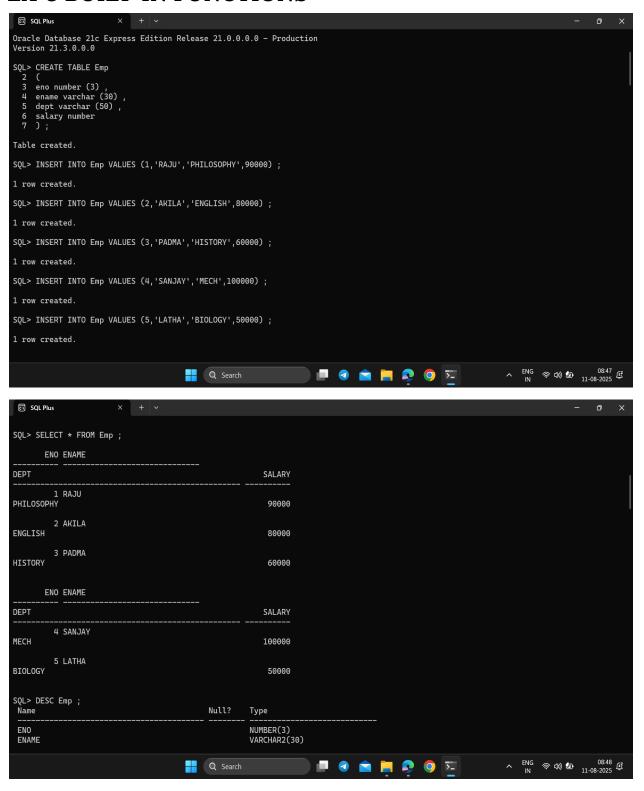
```
SQL> SELECT sum (salary) "number of salary" FROM Emp ;

number of salary
----------------
          380000

SQL> SELECT abs (20) "absolute value" FROM Dual ;

absolute value
--------------
            20

SQL> SELECT round (1738.56) "round" FROM Dual ;

     round
----------
      1739

SQL> SELECT power (3,2) "power" FROM Dual ;

     power
----------
         9

SQL> SELECT sqrt (25) "square root" FROM Dual ;

square root
-----------
          5

SQL> SELECT exp (5) "exponent" FROM Dual ;
```

```
SQL> SELECT exp (5) "exponent" FROM Dual ;

  exponent
----------
148.413159

SQL> SELECT extract (year from date'2018-07-07') "year" FROM Dual ;

      year
----------
      2018

SQL> SELECT extract (month from sysdate) "month" FROM Dual ;

     month
----------
         8

SQL> SELECT greatest (4,10,20) "number" FROM Dual ;

    number
----------
        20

SQL> SELECT least (4,10,20) "number" FROM Dual ;

    number
----------
         4

SQL> SELECT mod (15,8) "number" FROM Dual ;
```

```
SQL> SELECT mod (15,8) "number" FROM Dual ;

    number
----------
         7

SQL> SELECT trunc (138.356,1) "number" FROM Dual ;

    number
----------
     138.3

SQL> SELECT floor (28.6) "number" FROM Dual ;

    number
----------
        28

SQL> SELECT ceil (38.6) "number" FROM Dual ;

    number
----------
        39

SQL> SELECT lower (ename) FROM Emp ;

LOWER(ENAME)
------------------------------
raju
akila
padma
sanjay
```

```
SQL> SELECT initcap (ename) FROM Emp ;

INITCAP(ENAME)
------------------------------
Raju
Akila
Padma
Sanjay
Latha

SQL> SELECT upper (ename) FROM Emp ;

UPPER(ENAME)
------------------------------
RAJU
AKILA
PADMA
SANJAY
LATHA

SQL> SELECT substr ('welcome',3,2) FROM Dual ;

SU
--
lc

SQL> SELECT ascii ('a') FROM Dual ;

ASCII('A')
----------
        97
```

```
LENGTH('PRIYANKA')
------------------
                 8

SQL> SELECT last_day (sysdate) FROM Dual ;

LAST_DAY(
---------
31-AUG-25

SQL> SELECT add_months (sysdate, 5) FROM Dual ;

ADD_MONTH
---------
11-JAN-26

SQL> SELECT months_between ('02-feb-1992','08-oct-1992') FROM Dual ;

MONTHS_BETWEEN('02-FEB-1992','08-OCT-1992')
-------------------------------------------
                                 -8.1935484

SQL> SELECT next_day ('04-jul-2018','tuesday') FROM Dual ;

NEXT_DAY(
---------
10-JUL-18

SQL> SELECT to_date ('04-jul-2018','dd-mm-yy') FROM Dual ;

TO_DATE('
---------
```

```
MONTHS_BETWEEN('02-FEB-1992','08-OCT-1992')
--------------------------------------------
                                  -8.1935484

SQL> SELECT next_day ('04-jul-2018','tuesday') FROM Dual ;

NEXT_DAY(
---------
10-JUL-18

SQL> SELECT to_date ('04-jul-2018','dd-mm-yy') FROM Dual ;

TO_DATE('
---------
04-JUL-18

SQL> SELECT ltrim ('table name','d') FROM Dual ;

LTRIM('TAB
----------
table name

SQL> SELECT rtrim ('table name','a') FROM Dual ;

RTRIM('TAB
----------
table name

SQL>
SQL>
```