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SEC:- D2

DATE:- 11/3/2021

DDL WORKSHEET-VII

I. Display the string 'WELCOME' as 'Welcome'.

```
F:\Downloads\ORACLE CLIENT 11.2\ORACLE CLIENT 11.2\instantclient_11_2\sqlplus.exe
SQL> SELECT INITCAP('WELCOME') FROM DUAL;

INITCAP
-----
Welcome
```

II. Display the string 'welcome' in lowercase and uppercase.

```
F:\Downloads\ORACLE CLIENT 11.2\ORACLE CLIENT 11.2\instantclient_11_2\sqlplus.exe
SQL> SELECT UPPER('welcome') FROM DUAL;

UPPER('
-----
WELCOME

SQL> SELECT LOWER('welcome') FROM DUAL;

LOWER('
-----
welcome
```

III. Remove the string 'welcome' from 'welcomeStudents' and 'Studentswelcome'.

```
F:\Downloads\ORACLE CLIENT 11.2\ORACLE CLIENT 11.2\instantclient_11_2\sqlplus.exe
SQL> SELECT LTRIM('welcomeStudents','welcome') FROM DUAL;

LTRIM('W
-----
Students

SQL> SELECT RTRIM('Studentswelcome','welcome') FROM DUAL;

RTRIM('S
-----
Students
```

IV. Differentiate Translate and Replace with examples.

```
F:\Downloads\ORACLE CLIENT 11.2\ORACLE CLIENT 11.2\instantclient_11_2\sqlplus.exe
Students

SQL> SELECT TRANSLATE('3*[2+1]/{8-4}','[]{}','()') from dual;

TRANSLATE('3*
-----
3*(2+1)/(8-4)

SQL> SELECT TRANSLATE('Mondaysaturday','Monday','Sunday') from dual;

TRANSLATE('MON
-----
Sundaysaturday

SQL> SELECT REPLACE('ABC ABC ABC','A','C') from dual;

REPLACE('AB
-----
CBC CBC CBC
```

V. Do the following functions: substr, length, instr.

- (i) Find the number of characters in the string 'Welcome Students'
- (ii) Extract the string 'Student' from the string 'Welcome Students'
- (iii) Find the 3rd occurrence position of the string 'come' in the given input
- (iv) 'Welcome Deans Welcome Faculty Welcome Students'

```
F:\Downloads\ORACLE CLIENT 11.2\ORACLE CLIENT 11.2\instantclient_11_2\sqlplus.exe
Student
SQL> SELECT LENGTH('Welcome Students') FROM DUAL;

LENGTH('WELCOMESTUDENTS')
-----
16

SQL> SELECT SUBSTR('Welcome Students',9,7) FROM DUAL;

SUBSTR(
-----
Student

SQL> SELECT INSTR('Welcome Deans Welcome Faculty Welcome Students','come',1,3) FROM DUAL;

INSTR('WELCOMEDEANSWELCOMEFACULTYWELCOMESTUDENTS','COME',1,3)
-----
34
```

VI. (i) Find the ASCII value for the letter 'S' and 's'

(ii) Find the character corresponding to '67' and '97'

```
F:\Downloads\ORACLE CLIENT 11.2\ORACLE CLIENT 11.2\instantclient_11_2\sqlplus.exe
34
SQL> SELECT ASCII('S') FROM DUAL;

ASCII('S')
-----
83

SQL> SELECT ASCII('s') FROM DUAL;

ASCII('s')
-----
115

SQL> SELECT CHR(67) FROM DUAL;

C
-
C

SQL> SELECT CHR(97) FROM DUAL;

C
-
a
```

VII. Display the rhyming names from the Student table.

```
F:\Downloads\ORACLE CLIENT 11.2\ORACLE CLIENT 11.2\instantclient_11_2\sqlplus.exe
SQL> SELECT ENAME FROM EMP WHERE SOUNDEX(ENAME)=SOUNDEX('Shubham');

ENAME
-----
Shubham
```

VIII. Find the absolute value of -117.

```
F:\Downloads\ORACLE CLIENT 11.2\ORACLE CLIENT 11.2\instantclient_11_2\sqlplus.exe
SQL> SELECT ABS(-117) FROM DUAL;

ABS(-117)
-----
      117
```

IX. Find the output of ceil(115.45), ceil(115.54), floor(115.45), and floor(115.54)

```
F:\Downloads\ORACLE CLIENT 11.2\ORACLE CLIENT 11.2\instantclient_11_2\sqlplus.exe
SQL> SELECT CEIL(115.45) FROM DUAL;

CEIL(115.45)
-----
        116

SQL> SELECT FLOOR(115.45) FROM DUAL;

FLOOR(115.45)
-----
        115
```

X. Find then square root of 625.

```
F:\Downloads\ORACLE CLIENT 11.2\ORACLE CLIENT 11.2\instantclient_11_2\sqlplus.exe
SQL> SELECT SQRT(625) FROM DUAL;

SQRT(625)
-----
        25
```

XI. Display userid and username.

```
F:\Downloads\ORACLE CLIENT 11.2\ORACLE CLIENT 11.2\instantclient_11_2\sqlplus.exe
no rows selected

SQL> SELECT UID FROM DUAL;

UID
-----
   82

SQL> SELECT USER FROM DUAL;

USER
-----
RA1811003010691
```

XII. Print the word string 'WELCOME' as follows:

- (i) '*****WELCOME'
- (ii) 'WELCOME*****'

```
Select F:\Downloads\ORACLE CLIENT 11.2\ORACLE CLIENT 11.2\instantclient_11_2\sqlplus.exe
SQL> SELECT LPAD('Welcome',12,'*') FROM DUAL;

LPAD('WELCOM
-----
*****Welcome

SQL> SELECT RPAD('Welcome',12,'*') FROM DUAL;

RPAD('WELCOM
-----
Welcome*****
```

XIII. Find the square of a number 15.

```
F:\Downloads\ORACLE CLIENT 11.2\ORACLE CLIENT 11.2\instantclient_11_2\sqlplus.exe

SQL> SELECT POWER(15,2) FROM DUAL;

POWER(15,2)
-----
        225
```

XIV. Apply truncate and round functions to 2 decimal places for the numbers 111.784 and 111.785

```
F:\Downloads\ORACLE CLIENT 11.2\ORACLE CLIENT 11.2\instantclient_11_2\sqlplus.exe

SQL> SELECT Trunc(111.784,2) FROM DUAL;

TRUNC(111.784,2)
-----
        111.78

SQL> SELECT Trunc(111.785,2) FROM DUAL;

TRUNC(111.785,2)
-----
        111.78
```

XV. Find the remainder of 123 divided by 2 and 144 divided by 3.

```
F:\Downloads\ORACLE CLIENT 11.2\ORACLE CLIENT 11.2\instantclient_11_2\sqlplus.exe

SQL> select mod(123,2) from dual;

MOD(123,2)
-----
         1

SQL> select mod(144,3) from dual;

MOD(144,3)
-----
         0
```

XVI. Find the sin, cos, and tan value for 0, 45, 90, 180, 360.

```
F:\Downloads\ORACLE CLIENT 11.2\ORACLE CLIENT 11.2\instantclient_11_2\sqlplus.exe

SQL> select Cos(0) from dual;

      COS(0)
-----
          1

SQL> select Cos(45) from dual;

      COS(45)
-----
.525321989

SQL> select Cos(90) from dual;

      COS(90)
-----
-.44807362

SQL> select Cos(180) from dual;

      COS(180)
-----
-.59846007

SQL> select Cos(360) from dual;

      COS(360)
-----
-.28369109

SQL> select Sin(0) from dual;

      SIN(0)
-----
          0

SQL> select Sin(45) from dual;

      SIN(45)
-----
.850903525

SQL> select Sin(90) from dual;

      SIN(90)
-----
.893996664
```

```
F:\Downloads\ORACLE CLIENT 11.2\ORACLE CLIENT 11.2\instantclient_11_2\sqlplus.exe

SQL> select Sin(180) from dual;

      SIN(180)
-----
-.80115264

SQL> select Sin(360) from dual;

      SIN(360)
-----
.958915723

SQL> select Tan(0) from dual;

      TAN(0)
-----
          0

SQL> select Tan(45) from dual;

      TAN(45)
-----
1.61977519

SQL> select Tan(90) from dual;

      TAN(90)
-----
-1.9952004

SQL> select Tan(180) from dual;

      TAN(180)
-----
1.33869021

SQL> select Tan(360) from dual;

      TAN(360)
-----
-3.3801404
```

XVII. Write a query to store time value along with date.

```
F:\Downloads\ORACLE CLIENT 11.2\ORACLE CLIENT 11.2\instantclient_11_2\sqlplus.exe

SQL> SELECT TO_CHAR(SYSDATE, 'DD-MM-YY HH-MI-SS') FROM DUAL;

TO_CHAR(SYSDATE, '
-----
11-03-21 07-00-34
```

XVIII. Join the two string 'Welcome' and 'Students' using an operator.

```
SQL Plus
Version 18.4.0.0.0

SQL> SELECT 'Welcome' || 'Students' FROM DUAL;

'WELCOME' || 'STU
-----
WelcomeStudents
```

XIX. Delete the leading and trailing white spaces from the string 'Welcome'.

```
F:\Downloads\ORACLE CLIENT 11.2\ORACLE CLIENT 11.2\instantclient_11_2\sqlplus.exe
SQL> SELECT TRIM(' ' from ' Welcome ') from dual;

TRIM(' '
-----
Welcome
```

XX. Classify all the students with the following grade according to their Total_Mark.

Total_Mark	Grade
≥ 90	1
≥ 80 and < 90	2
≥ 70 and < 80	3
≥ 60 and < 70	4
≥ 50 and < 60	5
< 50	F or 0

```
SQL Plus
SQL> SELECT mark1, DECODE(TRUNC((mark1-1)/10),9,1,8,2,7,3,6,4,5,5,4,0,3,0,2,0,1,0,0,0) "GRADE" FROM Student;

MARK1    GRADE
-----
85        2
75        3
95        1
65        4
55        5
45        0
```

XXI. Compute mark1+mark2 treating null marks as zero.

```
SQL Plus
SQL> SELECT NAME, NVL(mark1,0)+NVL(mark2,0) FROM Student;

NAME                                NVL(MARK1,0)+NVL(MARK2,0)
-----
Devangi                             169
Roopu                               149
Shubham                             189
Varun                                129
Eshaan                              109
Hemanth                             89

6 rows selected.
```