



## Experiment 7: Execution of string, comparison and set operations.

### Aim:

Execution of string, comparison and set operations.

### Theory:

#### **STRING FUNCTIONS:**

**Concat:** CONCAT returns char1 concatenated with char2. Both char1 and char2 can be any of the datatypes

```
SQL>SELECT CONCAT('ORACLE','CORPORATION')FROM DUAL;  
ORACLECORPORATION
```

**Lpad:** LPAD returns expr1, left-padded to length n characters with the sequence of characters in expr2.

```
SQL>SELECT LPAD('ORACLE',15,'*')FROM DUAL;  
*****ORACLE
```

**Rpad:** RPAD returns expr1, right-padded to length n characters with expr2, replicated as many times as necessary.

```
SQL>SELECT RPAD ('ORACLE',15,'*')FROM DUAL;  
ORACLE*****
```

**Ltrim:** Returns a character expression after removing leading blanks.

```
SQL>SELECT LTRIM('SSMITHSS','S')FROM DUAL;  
MITHSS
```

**Rtrim:** Returns a character string after truncating all trailing blanks

```
SQL>SELECT RTRIM('SSMITHSS','S')FROM DUAL;  
SSMITH
```

**Lower:** Returns a character expression after converting uppercase character data to lowercase.

```
SQL>SELECT LOWER('DBMS')FROM DUAL;  
dbms
```

**Upper:** Returns a character expression with lowercase character data converted to uppercase

```
SQL>SELECT UPPER('dbms')FROM DUAL;
```

## DBMS

**Length:** Returns the number of characters, rather than the number of bytes, of the given string expression, excluding trailing blanks.

```
SQL>SELECT LENGTH('DATABASE')FROM DUAL;  
8
```

**Substr:** Returns part of a character, binary, text, or image expression.

```
SQL>SELECT SUBSTR('ABCDEFGHJIJ'3,4)FROM DUAL;  
CDEF
```

**Instr:** The INSTR functions search string for substring. The function returns an integer indicating the position of the character in string that is the first character of this occurrence.

```
SQL>SELECT INSTR('CORPORATE FLOOR','OR',3,2)FROM DUAL;  
14
```

## COMPARISION OPERATORS:

**(=):** Checks if the values of two operands are equal or not, if yes then condition becomes true.

**(!=):** Checks if the values of two operands are equal or not, if values are not equal then condition becomes true.

**(<>):** Checks if the values of two operands are equal or not, if values are not equal then condition becomes true.

**(>):** Checks if the value of left operand is greater than the value of right operand, if yes then condition becomes true

**(<):** Checks if the value of left operand is less than the value of right operand, if yes then condition becomes true.

**(>=):** Checks if the value of left operand is greater than or equal to the value of right operand, if yes then condition becomes true.

**(<=):** Checks if the value of left operand is less than or equal to the value of right operand, if yes then condition becomes true.

### **SET OPERATORS:**

The Set operator combines the result of 2 queries into a single result. The following are the operators:

- Union
- Union all
- Intersect
- Minus

**Union:** Returns all distinct rows selected by both the queries

**Union all:** Returns all rows selected by either query including the duplicates.

**Intersect:** Returns rows selected that are common to both queries. **Minus:** Returns all distinct rows selected by the first query and are not by the second

**Conclusion:** To be written by the students.