

<b>Ex.No.8</b> <b>.04.2025</b>	<b>STRING FUNCTONS</b>
-----------------------------------	------------------------

**AIM**

To perform sql operations by using string functions.

**CREATING A TABLES**

```
SQL> CREATE TABLE SYSTEM(ID NUMBER(5), NAME VARCHAR2(20), PLACE  
VARCHAR2(20));
```

Table created.

```
SQL> CREATE TABLE DEPART(D_ID NUMBER(5), D_NAME VARCHAR2(20), EMAIL  
VARCHAR(30));
```

Table created.

**INSERTING VALUES INTO TABLE**

```
SQL> INSERT INTO SYSTEM VALUES(1, 'Kavin', 'Erode');  
1 row created.
```

```
SQL> INSERT INTO SYSTEM VALUES(2, 'Shangav', 'Salem');  
1 row created.
```

```
SQL> INSERT INTO SYSTEM VALUES(3, 'Karthik', 'Chennai');  
1 row created.
```

```
SQL> INSERT INTO SYSTEM VALUES(4, 'Jegan', 'Coimbatore');  
1 row created.
```

```
SQL> INSERT INTO SYSTEM VALUES(5, 'Sanjai', 'Madurai');  
1 row created.
```

```
SQL> INSERT INTO SYSTEM VALUES(6, 'Mounish', 'Tiruppur');  
1 row created.
```

```
SQL> INSERT INTO SYSTEM VALUES(7, 'Kamalesh', 'Trichy');  
1 row created.
```

```
SQL> INSERT INTO SYSTEM VALUES(8, 'Babu', 'Namakkal');
```

1 row created.

```
SQL> INSERT INTO DEPART VALUES(201, 'AI', 'kavin.23ai@kongu.edu');
1 row created.
```

```
SQL> INSERT INTO DEPART VALUES(202, 'DS', 'shangav.23ds@kongu.edu');
1 row created.
```

```
SQL> INSERT INTO DEPART VALUES(203, 'CS', 'karthik.23cs@kongu.edu');
1 row created.
```

```
SQL> INSERT INTO DEPART VALUES(204, 'SE', 'jegan.23se@kongu.edu');
1 row created.
```

```
SQL> INSERT INTO DEPART VALUES(205, 'ML', 'sanjai.23ml@kongu.edu');
1 row created.
```

```
SQL> INSERT INTO DEPART VALUES(206, 'IOT', 'mounish.23iot@kongu.edu');
1 row created.
```

```
SQL> INSERT INTO DEPART VALUES(207, 'DA', 'kamalesh.23da@kongu.edu');
1 row created.
```

```
SQL> INSERT INTO DEPART VALUES(208, 'IT', 'babu.23it@kongu.edu');
1 row created.
```

### **ASCII (CHR):**

```
SELECT ASCII('a') AS ascii_value FROM dual;
```

```
ASCII_VALUE
-----
          97
```

### **VALUE(CHR):**

```
SELECT CHR(75) AS character FROM dual;
```

```
C
-
K
```

### **CONCAT:**

```
SELECT NAME || ' lives in ' || PLACE AS student_details FROM SYSTEM;
```

## STUDENT\_DETAILS

-----  
Kavin lives in Erode  
Shangav lives in Salem  
Karthik lives in Chennai  
Jegan lives in Coimbatore  
Sanjai lives in Madurai  
Mounish lives in Tiruppur  
Kamalesh lives in Trichy  
Babu lives in Namakkal

8 rows selected.

### UPPERCASE & LOWERCASE:

SELECT UPPER(NAME) AS upper\_name, LOWER(NAME) AS lower\_name FROM SYSTEM;

UPPER_NAME	LOWER_NAME
-----	-----
KAVIN	kavin
SHANGAV	shangav
KARTHIK	karthik
JEGAN	jegan
SANJAI	sanjai
MOUNISH	mounish
KAMALESH	kamalesh
BABU	babu

8 rows selected.

### LENGTH(STR):

SELECT NAME, LENGTH(NAME) AS name\_length FROM SYSTEM;

NAME	NAME_LENGTH
-----	-----
Kavin	5
Shangav	7
Karthik	7
Jegan	5
Sanjai	6
Mounish	7
Kamalesh	8
Babu	4

8 rows selected.

### **REPLACE(STR):**

```
SELECT REPLACE(NAME, 'Karthik', 'Karthikeyan') AS replaced_name FROM SYSTEM;
```

REPLACED\_NAME

-----

Kavin

Shangav

Karthikeyan

Jegan

Sanjai

Mounish

Kamalesh

Babu

8 rows selected.

### **SUBSTR():**

```
SELECT SUBSTR('kavin rocks', 7, 5) AS substring FROM dual;
```

SUBST

----

Rocks

### **RPAD() & LPAD():**

```
SELECT RPAD(NAME, 10, '*') AS right_pad, LPAD(NAME, 10, '*') AS left_pad FROM SYSTEM;
```

RIGHT\_PAD

LEFT\_PAD

-----

-----

Kavin\*\*\*\*\*

\*\*\*\*\*Kavin

Shangav\*\*\*

\*\*\*Shangav

Karthik\*\*\*

\*\*\*Karthik

Jegan\*\*\*\*\*

\*\*\*\*\*Jegan

Sanjai\*\*\*\*\*

\*\*\*\*\*Sanjai

Mounish\*\*\*

\*\*\*Mounish

Kamalesh\*\*

\*\*Kamalesh

Babu\*\*\*\*\*

\*\*\*\*\*Babu

8 rows selected.

### **LTRIM & RTRIM:**

```
SELECT LTRIM(' KAVIN') AS ltrimmed, RTRIM('KAVIN ') AS rtrimmed FROM dual;
```

```
LTRIM RTRIM
```

```
----  
KAVIN KAVIN
```

### **REVERSE:**

```
SELECT REVERSE(NAME) AS reversed_name FROM SYSTEM;
```

```
REVERSED_NAME
```

```
-----  
nivaK  
vagnahS  
kihtraK  
nageJ  
iajnaS  
hsinuoM  
hselamaK  
ubaB
```

8 rows selected.

### **EXTRACTING THE DOMAIN OF EMAIL:**

```
SELECT SUBSTR(EMAIL, INSTR(EMAIL, '@') + 1) AS email_domain FROM DEPART WHERE  
EMAIL IS NOT NULL;
```

```
EMAIL_DOMAIN
```

```
-----  
kongu.edu  
kongu.edu  
kongu.edu  
kongu.edu  
kongu.edu  
kongu.edu  
kongu.edu  
kongu.edu
```

8 rows selected.

### **CHANGING THE DOMAIN NAME:**

```
SELECT REPLACE(EMAIL, SUBSTR(EMAIL, INSTR(EMAIL, '@') + 1), 'gmail.com') AS  
updated_mail FROM DEPART;
```

UPDATED\_MAIL

-----

kavin.23ai@gmail.com

shangav.23ds@gmail.com

karthik.23cs@gmail.com

jegan.23se@gmail.com

sanjai.23ml@gmail.com

mounish.23iot@gmail.com

kamalesh.23da@gmail.com

babu.23it@gmail.com

8 rows selected.

### **SEARCHING OPERATIONS:**

#### **LIKE KEYWORD:**

```
SELECT D_NAME FROM DEPART WHERE D_NAME LIKE 'D%';
```

D\_NAME

-----

DS

DA

```
SQL> SELECT D_NAME FROM DEPART WHERE D_NAME LIKE '_A%';
```

D\_NAME

-----

DA

```
SQL> SELECT D_NAME FROM DEPART WHERE D_NAME NOT LIKE 'S%';
```

D\_NAME

-----

AI

DS

CS

ML

IOT

DA

IT

7 rows selected.

**NULL:**

SELECT \* FROM DEPART WHERE EMAIL IS NULL;

no rows selected

**NOT NULL:**

SELECT \* FROM DEPART WHERE EMAIL IS NOT NULL;

D_ID D_NAME	EMAIL
-----	-----
201 AI	kavin.23ai@kongu.edu
202 DS	shangav.23ds@kongu.edu
203 CS	karthik.23cs@kongu.edu
204 SE	jegan.23se@kongu.edu
205 ML	sanjai.23ml@kongu.edu
206 IOT	mounish.23iot@kongu.edu
207 DA	kamalesh.23da@kongu.edu
208 IT	babu.23it@kongu.edu

8 rows selected.

CONTENTS	MARKS ALLOTED	MARKS OBTAINED
Aim,Algorithm,SQL,PL/SQL	30	
Execution and Result	20	
Viva	10	
Total	60	

## **RESULT**

Thus, multiple string operations were carried out. These operations facilitated the effective manipulation, formatting, and searching of string data according to various conditions.