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| **Ex.No.8 .04.2025** | **STRING FUNCTONS** |

**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, 'Job', '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, 'Jisoo', 'Madurai'); 1 row created.

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

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

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

1 row created.

SQL> INSERT INTO DEPART VALUES(201, 'AI', 'Job.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', 'Jisoo.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', 'Rose.23da@kongu.edu'); 1 row created.

SQL> INSERT INTO DEPART VALUES(208, 'IT', 'Jennie.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

--------------------------------------------------

Job lives in Erode

Shangav lives in Salem

Karthik lives in Chennai

Jegan lives in Coimbatore

Jisoo lives in Madurai

Mounish lives in Tiruppur

Rose lives in Trichy

Jennie 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

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JOB job

SHANGAV shangav

KARTHIK karthik

JEGAN jegan

JISOO jisoo

MOUNISH mounish

ROSE rose

JENNIE jennie

8 rows selected.

**LENGTH(STR):**

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

NAME NAME\_LENGTH

-------------------- -----------

Job 5

Shangav 7

Karthik 7

Jegan 5

Jisoo 6

Mounish 7

Rose 8

Jennie 4

8 rows selected.

**REPLACE(STR):**

SELECT REPLACE(NAME, 'Karthik', 'lisa') AS replaced\_name FROM SYSTEM;

REPLACED\_NAME

----------------------------------------

Job

Shangav

lisa

Jegan

Jisoo

Mounish

Rose

Jennie

8 rows selected.

**SUBSTR():**

SELECT SUBSTR('Job king', 7, 5) AS substring FROM dual;

SUBST

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king

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

SELECT RPAD(NAME, 10, '\*') AS right\_pad, LPAD(NAME, 10, '\*') AS left\_pad FROM SYSTEM;

RIGHT\_PAD LEFT\_PAD

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Job\*\*\*\*\* \*\*\*\*\*Job Shangav\*\*\* \*\*\*Shangav

Karthik\*\*\* \*\*\*Karthik

Jegan\*\*\*\*\* \*\*\*\*\*Jegan

jisoo\*\*\*\* \*\*\*\*Jisoo

Mounish\*\*\* \*\*\*Mounish

Rose\*\* \*\*Rose

Jennie\*\*\*\*\*\* \*\*\*\*\*\*Jennie

8 rows selected.

**LTRIM & RTRIM:**

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

LTRIM RTRIM

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Job Job

**REVERSE:**

SELECT REVERSE(NAME) AS reversed\_name FROM SYSTEM;

REVERSED\_NAME

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BoJ

vagnahS kihtraK nageJ

oosij

hsinuoM esoR

einneJ

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

------------------------------------------------

Job.23ai@gmail.com

shangav.23ds@gmail.com karthik.23cs@gmail.com [jegan.23se@gmail.com](mailto:jegan.23se@gmail.com)

Jisoo.23ml@gmail.com mounish.23iot@gmail.com

[Rose.23da@gmail.com](mailto:Rose.23da@gmail.com)

Jennie.23it@gmail.com

8 rows selected.

**SEARCHING OPERATIONS:**

**LIKE KEYWORD:**

SELECT D\_NAME FROM DEPART WHERE D\_NAME LIKE 'D%';

D\_NAME

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DS

DA

SQL> SELECT D\_NAME FROM DEPART WHERE D\_NAME LIKE '\_A%';

D\_NAME

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DA

SQL> SELECT D\_NAME FROM DEPART WHERE D\_NAME NOT LIKE 'S%';

D\_NAME

--------------------

AI

DS

CS

ML

IOT

DA

IT

1. 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

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* 1. AI Job.23ai@kongu.edu
  2. DS shangav.23ds@kongu.edu
  3. CS karthik.23cs@kongu.edu
  4. SE jegan.23se@kongu.edu
  5. ML Jisoo.23ml@kongu.edu
  6. IOT mounish.23iot@kongu.edu
  7. DA Rose.23da@kongu.edu
  8. IT jennie.23it@kongu.edu

1. rows selected.

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**RESULT**

Thus various string operations are performed. The operations helped in manipulating, formatting and searching the string data efficiently based on different conditions.