**EX.NO:06 SQL STRING FUNCTIONS**

26.04.2024

**AIM:**

To perform SQL string operations by using functions.

**STRING OPERATIONS USING DUAL TABLE:**

**1.ASCII(CHR):**

SQL> select ascii('D') as ASCII\_OF\_D from dual;

ASCII\_OF\_D

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68

**2. CHR(NUMBER):**

SQL> select chr(68) from dual;

D

3. **CONCAT(string1,string2):**

SQL> select concat('DINESH','BABU') as concat from dual;

CONCAT

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DINESHBABU

**4.UPPER(STR):**

SQL> select upper('dinesh') as UPPER from dual;

UPPER

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DINESH

**5.LOWER(STR):**

SQL> select lower('DINESHBABU') as LOWER from dual;

LOWER

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dineshbabu

**6.LENGTH(STR):**

SQL> select length('DINESHBABU') as LENGTH from dual;

LENGTH

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10

**7. TRIM(STR):**

SQL> select trim(' Dineshbabu ') as TRIM from dual;

TRIM

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Dineshbabu

**8**.**REPLACE(STR):**

SQL> select replace('DINESHBABU MUTHUVEL','MUTHUVEL','M') as REPLACE fr

om dual;

REPLACE

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DINESHBABU M

**9.SUBSTR():**

SQL> select substr('DINESHBABU MUTHUVEL',1,11) as SUBSTR from dual;

SUBSTR

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DINESHBABU

**10.RPAD():**

SQL> select rpad('DINESH',4) as RPAD from dual;

RPAD

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DINE

**STRING OPERATIONS USING EMPLOYEE TABLE:**

EMPLOYEE TABLE:

SQL> select \* from employee;

EID ENAME SALARY DEPT

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1 Dinesh 20000 ECE

2 DEVI 15000 CSE

3 MAHI 12000 IT

4 VIRAT 11000 ECE

5 RAJ 10000 IT

1.CONCATENATION:

SQL> select ename ||' works at '|| dept as emp\_details from employee;

EMP\_DETAILS

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Dinesh works at ECE

DEVI works at CSE

MAHI works at IT

VIRAT works at ECE

RAJ works at IT

2.UPPER:

SQL> select upper(ename) as ename\_upper from employee;

ENAME\_UPPER

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DINESH

DEVI

MAHI

VIRAT

RAJ

3.LOWER:

SQL> select lower(ename) as ename\_lower from employee;

ENAME\_LOWE

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dinesh

devi

mahi

virat

raj

4.LENGTH OF STRING:

SQL> select length(ename) as ename\_length from employee;

ENAME\_LENGTH

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6

4

4

5

3

5.TRIM:

SQL> select trim(ename) as ename\_trimmed from employee;

ENAME\_TRIM

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Dinesh

DEVI

MAHI

VIRAT

RAJ

6.REPLACE:

SQL> select replace(ename,'DEVI','devi') as ename\_replaced from employee w

here eid=2;

ENAME\_REPLACED

devi

7.INITCAP:

SQL> select initcap(ename)as ename\_initcap from employee;

ENAME\_INIT

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Dinesh

Devi

Mahi

Virat

Raj

8.INSTR:

SQL> select instr(ename,'VIRAT') as position\_of\_VIRAT from employee;

POSITION\_OF\_VIRAT

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0

0

0

1

0

9.LEFT PAD:

SQL> select lpad(ename,5,'\*') as ename\_padded from employee;

ENAME

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Dines

\*DEVI

\*MAHI

VIRAT

\*\*RAJ

10.RPAD:

SQL> select rpad(ename,5,'\*') as ename\_padded from employee where eid=1;

ENAME

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Dines

11.REVERSE:

SQL> select reverse(ename) as ename\_reversed from employee where eid=2;

ENAME\_REVE

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**STRING OPERATIONS RELATED TO EMAIL – REGEX:**

SQL> select \* from employee;

EID ENAME SALARY DEPT EMAIL

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1 Dinesh 20000 ECE dinesh@gmail.com

2 DEVI 15000 CSE devi@gmail.com

3 MAHI 12000 IT mahi@kongu.edu

4 VIRAT 11000 ECE virat@gmail.com

5 RAJ 10000 IT raj@kongu.edu

1. EXTRACTING THE DOMAIN NAME OF EMAIL:

SQL> select ename,substr(email,instr(email,’@’)+1) as email\_domain from employee;

ENAME EMAIL\_DOMAIN

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Dinesh gmail.com

DEVI gmail.com

MAHI kongu.edu

VIRAT gmail.com

RAJ kongu.edu

2.CHECK FOR VALID EMAIL FORMAT:

SQL> SELECT eid,ename,email FROM employee WHERE REGEXP\_LIKE(EMAIL, '^[A-Za-z0-9.\_%+-]+@[A-Za-z0-9.-]+\.[A-Za-z]{2,}$');

EID ENAME EMAIL

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1 Dinesh dinesh@gmail.com

2 DEVI devi@gmail.com

3 MAHI mahi@kongu.edu

4 VIRAT virat@gmail.com

5 RAJ raj@kongu.edu

3. CHANGING DOMAIN NAME:

SQL> SELECT REPLACE(EMAIL, SUBSTR(EMAIL, INSTR(EMAIL, '@')), '@zoo.com') AS new\_email FROM employee;

NEW\_EMAIL

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dinesh@zoo.com

devi@zoo.com

mahi@zoo.com

virat@zoo.com

[raj@zoo.com](mailto:raj@zoo.com)

4.COUNTING NO.OF.EMPLOYEES BASED ON DOMAIN NAME:

SQL> select substr(email,instr(email,'@')+1) as email\_domain,count(\*) as emp

loyee\_count from employee group by substr(email,instr(email,'@')+1);

EMAIL\_DOMAIN EMPLOYEE\_COUNT

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gmail.com 3

kongu.edu 2

**SEARCHING OPERATIONS USING LIKE AND NOT LIKE KEYWORD:**

SQL> select \* from employee where ename like'D%';

EID ENAME SALARY DEPT EMAIL

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1 Dinesh 20000 ECE dinesh@gmail.com

2 DEVI 15000 CSE [devi@gmail.com](mailto:devi@gmail.com)

SQL> select \* from employee where ename not like'D%';

EID ENAME SALARY DEPT EMAIL

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3 MAHI 12000 IT [mahi@kongu.edu](mailto:mahi@kongu.edu)

4 VIRAT 11000 ECE [virat@gmail.com](mailto:virat@gmail.com)

5 RAJ 10000 IT raj@kongu.edu

SQL> select \* from employee where ename like '%h';

EID ENAME SALARY DEPT EMAIL

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1 Dinesh 20000 ECE dinesh@gmail.com

SQL> select \* from employee where ename like'\_\_n%';

EID ENAME SALARY DEPT EMAIL

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1 Dinesh 20000 ECE dinesh@gmail.com

SQL> select \* from employee where ename not like '%n%';

EID ENAME SALARY DEPT EMAIL

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2 DEVI 15000 CSE [DEVI@gmail.com](mailto:DEVI@gmail.com)

3 MAHI 12000 IT [mahi@kongu.edu](mailto:mahi@kongu.edu)

4 VIRAT 11000 ECE [VIRAT@gmail.com](mailto:VIRAT@gmail.com)

5 RAJ 10000 IT raj@kongu.edu

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**RESULT:**

Thus, the SQL string operations are perfromed successfully.