STRING FUNCTIONS

AIM

To perform sql operations by using string functions.

CREATING A TABLES

```
SQL> CREATE TABLE student3 (
2 sid VARCHAR2(10),
3 sname VARCHAR2(20),
4 scity VARCHAR2(20)
5 );
Table created.

SQL> CREATE TABLE dept (
2 dname VARCHAR2(10),
3 fname VARCHAR2(20),
4 clg VARCHAR2(20),
5 mail VARCHAR2(50)
6 );
```

Table created.

INSERTING VALUES INTO TABLE

```
SQL> INSERT INTO student3 VALUES ('cs11', 'Meena', 'Coimbatore');

1 row created.

SQL> INSERT INTO student3 VALUES ('it12', 'Vikram', 'Madurai');

1 row created.

SQL> INSERT INTO student3 VALUES ('ece13', 'Deepa', 'Chennai');

1 row created.

SQL> INSERT INTO student3 VALUES ('eee14', 'Manoj', 'Trichy');

1 row created.

SQL> INSERT INTO student3 VALUES ('eie15', 'Sneha', 'Tirunelveli');
```

```
1 row created.
SQL> INSERT INTO student3 VALUES ('cse16', 'Gokul', 'Salem');
1 row created.
SQL> INSERT INTO student3 VALUES ('it17', 'Varsha', 'Erode');
1 row created.
SQL> INSERT INTO student3 VALUES ('eee18', 'Pranav', 'Karur');
1 row created.
SQL> INSERT INTO dept VALUES ('it', 'arjun', 'cit', 'arjun@gmail.com');
1 row created.
SQL> INSERT INTO dept VALUES ('cse', 'bala', 'psg', 'bala@yahoo.com');
1 row created.
SQL> INSERT INTO dept VALUES ('ece', 'divya', 'sns', 'divya@gmail.com');
1 row created.
SQL> INSERT INTO dept VALUES ('eee', 'gokul', 'kongu', 'gokul@email.com');
1 row created.
SQL> INSERT INTO dept VALUES ('mech', 'kavin', 'bit', 'kavin@gmail.com');
1 row created.
SQL> INSERT INTO dept VALUES ('it', 'sri', 'kec', 'sri@gmail.com');
1 row created.
SQL> INSERT INTO dept VALUES ('cse', 'latha', 'srm', 'latha@outlook.com');
1 row created.
SQL> INSERT INTO dept VALUES ('eee', 'devi', 'velalar', 'devi@gmail.com');
1 row created.
ASCII(CHR):
STRING OPERATIONS USING DUAL TABLE:
ASCII(CHR):
To find the ascii value of a character:
SQL> SELECT ASCII('character') AS ascii_value FROM dual;
ASCII_VALUE
```

SQL> SELECT ASCII('s') AS ascii_value FROM dual;
ASCII_VALUE
115
VALUE(CHR):
To find the ascii character of a value:
SQL> SELECT CHR(65) AS character FROM dual;
C
A
CONCAT:
SQL> select sname ' lives in ' scity as student_detailes from student3;
STUDENT_DETAILES
Meena lives in Coimbatore
Vikram lives in Madurai
Deepa lives in Chennai
Manoj lives in Trichy
Sneha lives in Tirunelveli
Gokul lives in Salem
Varsha lives in Erode
Pranav lives in Karur
9 mayor calacted

8 rows selected.

UPPERCASE & LOWER CASE:

UPPER CASE:

SQL> select upper(sname) as name from student3;

NAME	
MEENA	
VIKRAM	
DEEPA	
MANOJ	
SNEHA	
GOKUL	
VARSHA	
PRANAV	
8 rows selected.	
LOWER CASE:	
SQL> select lower(sname) as name from student3;	
NAME	
meena	
vikram	
deepa	
manoj	
sneha	
gokul	
varsha	
pranav	
8 rows selected.	
LENGTH(STR):	
SQL> select length(sname) as length from student3;	
LENGTH	

5				
6				
5				
5				
5				
5				
6				
6				
8 rows selected				
REPLACE				
	place(sname,'Meena','Ka	vin')as name from	student3:	
~ (, , , , , , , , , , , , , , , , , , ,	,) 	,	
NAME				
Kavin				
Vikram				
Deepa				
Manoj				
Sneha				
Gokul				
Varsha				
Pranav				
8 rows selected				
SUBSTR()				
	-			
SQL> SELEC	SUBSTR(sname, 1, 3)	AS short_name FF	ROM student3;	
SHO				

	Kav
	Vik
1	Dee
	Man
1	Sne
,	Gok
-	Var
1	Pra
	8 rows selected.
i i	RPAD():
1	SQL> select rpad(sname,3,'*') as rightpad from student3 where sid='eee14';
	RIGHTPAD
	
7	Man
1	SQL> select rpad(sname,6,'*')as rightpad from student3 where sid='eee14';
1	RIGHTPAD
	
	Manoj*
1	SQL> SELECT TRIM(' Mythili ') AS trimmed FROM dual;
i	LTRIM:
1	SQL> SELECT LTRIM(' Kavin') AS ltrimmed FROM dual;
	LTRIMME
	Kavin
	RTRIM:
	SQL> select rtrim(sname) as name from student3 where scity='Coimbatore';

NAME
Meena
LEFTPAD:
SQL> select lpad(sname,5,'*')as leftpad from student3 where scity='Madurai';
LEFTPAD
Vikra
RIGHTPAD:
SQL> select rpad(sname,5,'*') as rightpad from student3 where sid='eee14';
RIGHTPAD
Manoj
SQL> select rpad(sname,3,'*') as rightpad from student3 where sid='eee14';
RIGHTPAD
Man
SQL> select rpad(sname,6,'*')as rightpad from student3 where sid='eee14';
RIGHTPAD
Manoj*
REVERSE:
SQL> select reverse(sname) from student3 where sid='cs11';
REVERSE(SNAME)
aneeM
EXTRACTING THE DOMAIN OF EMAIL:

SQL> SELECT SUBSTR(mail, INSTR(mail, '@') + 1) AS email_domain

2 FROM dept;
EMAIL_DOMAIN
gmail.com
yahoo.com
gmail.com
email.com
gmail.com
gmail.com
outlook.com
gmail.com
8 rows selected.
CHANGING THE DOMAIN NAME:
SQL> SELECT REPLACE(mail, SUBSTR(mail, INSTR(mail, '@') + 1), 'kongu.edu') AS updated_mail FROM dept WHERE mail IS NOT NULL;
UPDATED_MAIL
Kavin@kongu.edu
vikram@kongu.edu
Deepa@kongu.edu
Manoj@kongu.edu
Sneha@kongu.edu
Gokul@kongu.edu
6 rows selected.
SEARCHING OPERATIONS:
LIKE KEYWORD:

SQL> select fname as name from dept where fname like '_r%';
NAME
arjun
sri
SQL> select fname as name from dept where fname like '%u_';
NAME
arjun
gokul
Not Like:
SQL> select mail from dept where mail not like '%@yahoo.com';
MAIL
arjun@gmail.com
divya@gmail.com
gokul@email.com
kavin@gmail.com
sri@gmail.com
latha@outlook.com
devi@gmail.com
7 rows selected.
SQL> select fname as name from dept where fname not like '_r%';
NAME
bala

divya gokul kavin latha devi 6 rows selected. **NULL:** SQL> -- Mail is null SQL> select * from dept where mail is NULL; no rows selected **NOT NULL:** SQL> select * from dept where mail is not NULL; DNAME FNAME CLG **MAIL** arjun it cit arjun@gmail.com bala cse psg bala@yahoo.com divya ece sns divya@gmail.com

	FNAME		CLG
MAIL			
eee go		kongu	
gokul@em	ail.com		
mech k	avin	bit	
kavin@gm	ail.com		
	1		
it sri	K	ec	
sri@gmail.	.com		
			CLG
DNAME	FNAME		CLG
MAIL			
MAIL			
MAIL	 		
MAIL cse lat	 		
MAIL cse lat	ha look.com		
MAIL cse lat	ha look.com vi	srm	
MAIL cse late latha@outle	ha look.com vi	srm	
MAIL cse late latha@outle	ha look.com vi	srm	

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

RESULT

Thus various string operations are performed.