

Exercise 4

Functions

(4) Write the Queries using student table and employee table

(a) Conversion functions(to_char, to_number & to_date),using student table

(b) String functions(Concatenation, lpad, rpad, ltrim, rtrim, lower, upper, initcap, length, substr) using employee table.s

Objective: The objective of this program is to: know the use of the following functions:

- Conversion functions
- String functions
- Date functions

Conversion Functions: Like To_Char, To_Number, To_Date these Are Functions that help us to convert a value in one form to another form.

String functions like concatenation, Lpad, Rpad, Ltrim, Rtrim, Lower, Upper, Initcap, Length, Substr.

Date Functions Like To_Char, To_Date.

Procedure and description: Conversion functions help us to convert a value in one form to another form. For Example: a null value into an actual value, or a value from one data type to another data type like TO_CHAR, TO_NUMBER, TO_DATE.

1. Numeric Functions: These are functions that accept numeric input and Return numeric values.

2) Character or Text Functions: These are functions that accept character Input and can return both character and number values

String functions: string is traditionally a sequence of characters, either as a literal constant or as some kind of variable. The latter may allow its elements to be mutated and/or the length changed, or it may be fixed (after creation). A string is generally understood as a data type and is often implemented as an array of bytes (or words) that stores a sequence of elements, typically characters, using some character encoding.

Function	Description
substr	Returns a portion of starting at position and char long
upper	Converts to uppercase
lower	Converts to lowercase
initcap	Capitalizes the first character or each word
ltrim	Removes blanks at the left-end of a string
rtrim	Removes blanks at the right-end of a string
concat	Concatenates two strings
length	Returns the length of a string
lpad	Returns left-padded to lengt with the string
rpadd	Returns right-padded to length with the string

Table: STRING FUNCTION DESCRIPTION TABLE

Queries using Conversion functions:**Query using to_char() function**

Write a query to display the student_name (first character) and student_number(First digit) using to_char

```
select to_char(column_name) from where table_name
```

Write a query to display the current system time

```
select to_char(sysdate,'hh24:mm:ssam')from dual;
```

Query using to_date() function:**Write a query to display today's date**

```
SELECT Current Date = GETDATE ()
```

Queries using string functions:**Substr()****write a query to display the sub string for the word 'oracle' from its position 2 to 3**

```
select substr('oracle',2,3) from dual;
```

Output

```
rac
```

translate() function**Write a query to change the 'or' to 'ab' in the word 'corporation' using translate function**

```
select translate('corportion','or','ab')from dual;
```

Output

```
Cabpabtian
```

initcap() function**Write a query to maintain the first letter as caps using initcap function**

```
select initcap('oracle')from dual;
```

Output

```
Oracle
```

upper() function

Write a query to display all characters is in caps using upper function

Select upper ('oracle') from dual;

Output

ORACLE

lower() function

Write a query to display the all characters in small using lower function.

select lower ('ORACLE') from dual;

Output

oracle

lpad() function

Write a query to display 'smudde' after leaving 5 blank places using lpad function

select LPAD('smudde',11,'*')from dual;

Output

*****smudde

(where * represents here blank spaces)

rpad() function

Write a query using RPAD() function to display given string with length of 10, if string characters is less than the length then the remaining space will be filled with '#'. The string name is manipal.

```
select RPAD('manipal',10,'#')from dual;
```

Output

```
manipal#####
```

ltrim() function

Write a query to remove blanks at the left-end of a string with abc

```
select LTRIM(' abc')from dual;
```

Output

```
abc
```

rtrim() function

write a query to remove blanks at the right-end of a string with /abc

```
select RTRIM('/abc ')from dual;
```

Output

```
abc
```

Queries using date functions

write a query to display to the number of days between any two months using month() function.

```
select months_between ('23-aug-2008','16-feb-2009')from dual;
```

write a query to add the month with date and year using add months function

```
select add_months('3-jan-09',4)from dual;
```