

Lab Activity 10

Refer to assignment 3 for Tables Boats, Sailors, Reserves

Experiment : Working with Conversion Functions & String Functions

String Functions (CONCAT, LPAD, RPAD, LTRIM, RTRIM, LOWER, UPPER, INITCAP, LENGTH, SUBSTR AND INSTR),

Date Functions (SYSDATE, NEXT_DAY, ADD_MONTHS, LAST_DAY, MONTHS_BETWEEN)

String Functions :-

1) Concatenation :- Concatenates two strings from a given list. **CONCAT (CHAR1, CHAR2)**

1) Concatenate the string 'Rajesh' with 'Raghu'

SELECT CONCAT ('Rajesh', 'Raghu') FROM DUAL;

Output :

2) Concatenate bid & bname of Boats & display along with color.

SELECT CONCAT (BID, BNAME), COLOR FROM BOATS;

Output :

2) LPAD (CHAR1, N, CHAR2) :- Returns CHAR1 left padded to length 'N' with sequence of characters in CHAR2. The default value of CHAR2 is a single blank space.

1) Left pad the string 'Rajesh' to length 30 with the set of characters in string '*'

SELECT LPAD ('Rajesh', 30, '*') FROM DUAL;

Output

2) Left pad the string bname to length 20 with '*' set of characters and string color by '\$'

Query :

Output

3) RPAD (CHAR1, N, CHAR2) :- Returns CHAR1 right padded to length 'N' with sequence of characters in CHAR2. The default value of CHAR2 is a single blank space.

1) Right pad the string 'Rajesh' to length 30 with the set of characters in string '*#'

SELECT RPAD ('Rajesh', 30, '*#') FROM DUAL;

Output

4) LTRIM (CHAR, SET) :- Returns characters from the left of CHAR by deleting all leftmost characters that appear in set.

1) Display all sailors information by removing characters of sname if starts with 'R'.

SELECT SID, LTRIM (SNAME, 'R') FROM SAILORS;

Output :

2) Display all sailors information by removing characters of boat name if starts with 'T'

Query :

Output:

- 5) **RTRIM (CHAR, SET)** :- Returns characters from the right of CHAR by deleting all rightmost characters that appear in set.

1) Display all sailors information by removing characters of sname if ends with 'i'.

SELECT SID, RTRIM (SNAME,'i') FROM SAILORS;

Output :

2) Display all Boats information by removing characters of color if ends with 'd'.

Query :

Output :

- 6) **LOWER(CHAR)** :- Converts all characters to lowercase characters in a sting CHAR.

1) Display all Boats information by showing their names in lower case.

SELECT BID, LOWER (BNAME), COLOR FROM BOATS;

Output

2) Display all Sailors information by showing their names in lower case.

Query :

Output :

- 7) **UPPER(CHAR)** :- Converts all characters to uppercase characters in a sting CHAR.

1) Display all Sailors information by showing their names in Upper case.

SELECT SID, UPPER (SNAME), AGE, RATING FROM SAILORS;

Output :

2) Display all Boats information by showing their color in Upper case.

Query :

Output :

- 8) **INITCAP(CHAR)** :- Converts first character of each word in a sting CHAR to uppercase.

1) Display all Sailors information by showing their names in Capitalizing first char.

SELECT SID, INITCAP (SNAME), AGE, RATING FROM SAILORS;

Output :

2) Capatilize first letter of each word in 'rajesh raghu'

SELECT INITCAP ('rajesh raghu') FROM DUAL;

Output :

- 9) **LENGTH (CHAR)** :- Returns the length of the string CHAR i.e. number of characters present in the given string.

1) Find the number of characters in the string 'Information Technology'

SELECT LENGTH ('Information Technology') FROM DUAL;

Output

2) Display length of string SID, SNAME from Sailors along with their values.

SELECT SID, LENGTH (SID), SNAME, LENGTH (SNAME) FROM SAILORS;

Output:

- 10) **SUBSTR (CHAR, M, N)** :- It returns substring from CHAR string starting with index M & gives N characters.

1) Display boats information by starting their names with 3rd character & show only 4 characters.

SELECT BID, SUBSTR (BNAME, 3, 4), COLOR FROM BOATS;

Output :

- 11) **REPLACE (CHAR, S, R)** :- It returns characters with every occurrences of S replaced with R. If R is not given or NULL, all occurrences of S are removed or deleted

Ex :Display BNAME by replacing '_DA' with '_MA'.

SELECT REPLACE (BNAME, 'DA', 'MA') FROM BOATS;

Output :

Lab Activity 11

Date Functions :-

- 1) **SYSDATE** :- Displays the system date for a system.

SELECT SYSDATE FROM DUAL;

Output :

SELECT TO_CHAR (SYSDATE, 'DD-MON-YYYY HH:MI:SS') FROM dual;

Output :

- 2) **NEXT_DAY (D, DAY)** :- Displays next date on DAY after date D.

Ex: Display date on Thu after 20th Feb, 2018.

SELECT NEXT_DAY ('20-FEB-2018', 'THU') FROM DUAL;

Output

- 3) **ADD_MONTHS (D, N)** :- Returns a date after adding a specified day D with specified number of months N.

Ex: Display SID, Day of Reservation by adding 20 months to given day.

SELECT SID, DAY, ADD_MONTHS (DAY, 20) FROM RESERVES;

Output :

- 4) **LAST_DAY(D)** :- Returns the date corresponding to last day of the month.

Ex: Display Sname, Day of Reservation and date corresponding to last date of the month.

**SELECT S.SNAME, DAY, LAST_DAY (DAY) FROM SAILORS S, RESERVES R
WHERE S.SID = R.SID;**

Output :

- 5) **MONTHS_BETWEEN (D1, D2)** :- Returns number of months between given two dates D1 & D2. Ex: Display SID, Day of Reservation and months between System Date & day of reservation.

SELECT SID, DAY, MONTHS_BETWEEN (SYSDATE, DAY) FROM RESERVES;

Output: