

# NIELIT Gorakhpur

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**Course Name: O Level (1st Sem)**

**Subject: ITTNB**

**Topic: Functions [continued]**

**Date: 12-06-2020**

**Libreoffice [Calc]**

## Category of function:-

**Text functions:-** The Text functions manipulate or return text. For example.

➤ **TEXT():-** Converts a number into text according to a given format.

Syntax:

TEXT(number; format)

returns number converted to text, according to the format code specified by format.

Example format codes are found in the Format - Cells... dialogue, in the box labelled Format Code. These depend on your locale. This function should therefore not be regarded as portable.

Example:

TEXT(12.34567;"###.##") returns the text 12.35, if in your locale ###.## is a format code meaning "up to three integer digits and at most two decimal digits".

➤ **Lower():-** Converts a text string to lowercase. Syntax: LOWER(text) returns text with all characters converted to lower case.

Example: LOWER("Good MORNING") returns good morning

➤ **UPPER():-** Converts a text string to uppercase. Syntax: UPPER(text) returns text with all characters converted to upper case.

Example: UPPER("Good Morning") returns GOOD MORNING

➤ **PROPER():-** returns text with words in lowercase after a capitalized first letter. Syntax: PROPER(text) returns text with the first letter of each word capitalized, and other letters in lower case. More specifically, the first letter and any letter that follows a non-letter are capitalized.

Example:

PROPER("gooD morNING") returns Good Morning.

PROPER("john o'connor") returns John O'Connor.

➤ **LEFT()**:-Returns text from the left side of a text string. Syntax:

LEFT(text; number)

returns number characters from the left side of the text text. number defaults to 1 if omitted. Example: LEFT("output"; 3) returns out.

➤ **RIGHT()**:-Returns text from the right side of a text string. Syntax:

RIGHT(text; number) returns number characters from the right side of the text text. number defaults to 1 if omitted.

Example: RIGHT("output"; 3) returns put.

➤ **MID()**:- Returns text from the middle of a text string. Syntax:

MID(text; start; number) returns number characters from the text text, starting at position start. Example:

MID("output"; 3; 2) returns tp.

➤ **LEN()**:- Returns the length of a text string. Syntax: LEN(text) returns the number of characters in the text text, including spaces. Example:

LEN("red car") returns 7.

LEN(123.4) returns 5 (numbers are converted to text).

➤ **TRIM()**:- removes excess spaces from a text string. Syntax:

TRIM(text)

returns text with any leading or trailing spaces removed, and with any multiple spaces replaced with a single space. Example:

TRIM(" Good Morning ") returns Good Morning

**Database functions**:- The Database functions are used to extract information from Calc data tables, where data is organized in rows.

➤ **DCOUNT()**:-Counts the cells containing numbers in a column of a Calc 'database' table, in rows which meet specified criteria. Syntax:

DCOUNT(database\_table; field; criteria\_table)

where

database\_table is a range defining the data to be processed.

field is the column to count. It may be a column number (1 is the first column of the database table, 2 is the second ...), or a column header

(enclosed in quotation marks ""), or a cell referring to a column header, or 0 to include all columns.

criteria\_table is a range containing criteria, to select which rows of the database\_table to count.

Example: In this spreadsheet:

	A	B	C	D	E
1	Name	Grade	Age	Distance to School	Weight
2	Andy	3	9	150	40
3	Betty	4	10	1000	
4	Charles	3	10	300	
5	Daniel	5	11	1200	48
6	Eva	2	8	650	33
7	Frank	2	7	300	
8	Greta	1	7	200	36
9	Harry	3	9	1200	44
10	Irene	2	8	1000	42
11					
12					
13	Name	Grade	Age	Distance to School	Weight
14		2			

DCOUNT(A1:E10; 0; A13:E14) returns the number of children who are in the second grade (3).

DCOUNT(A1:E10; 5; A13:E14) returns the number of children in the second grade whose weight has been measured (2). Frank is not included, because his weight is blank (not a number).

DCOUNT(A1:E10; E1; A13:E14) also returns the number of children in the second grade whose weight has been measured (2).

DCOUNTA():- Counts the non-empty cells in a column of a Calc 'database' table, in rows which meet specified criteria.

Syntax: DCOUNTA(database\_table; field; criteria\_table)

where

database\_table is a range defining the data to be processed.

field is the column to count. It may be a column number (1 is the first column of the database table, 2 is the second ...), or a column header (enclosed in quotation marks ""), or a cell referring to a column header, or 0 to include all columns.

criteria\_table is a range containing criteria, to select which rows of the database\_table to count.

DCOUNTA(A1:E10; 0; A13:E14) returns the number of children who are in the second grade (3).

DCOUNTA(A1:E10; 5; A13:E14) returns the number of children who are in the second grade, whose weight has either been measured or marked as "no" (1). Frank is not included, because his weight is blank. Irene is included, because her weight is marked as "no", which is text.

DCOUNTA(A1:E10; E1; A13:E14) also returns the number of children in the second grade whose weight has either been measured or marked as "no" (1).

➤ **DMAX()**:- Returns the largest value in a column of a Calc 'database' table, in rows which meet specified criteria.

Syntax: DMAX(database\_table; field; criteria\_table)

where

database\_table is a range defining the data to be processed.

field is the column to examine. It may be a column number (1 is the first column of the database table, 2 is the second ...) or a column header (enclosed in quotation marks "") or a cell referring to a column header.

criteria\_table is a range containing criteria, which are used to select which rows of the database\_table to examine.

**DMAX(A1:E10; "Distance to School"; A13:E14)** returns the maximum distance to school that any child in the second grade has to travel (1000, for Irene).

**DMAX(A1:E10; 4; A13:E14)** returns the same result.

**DMAX(A1:E10; D1; A13:E14)** also returns the same result.

➤ **DMIN:-()**Returns the minimum (lowest) value in a column of a Calc 'database' table, in rows which meet specified criteria. Syntax:

**DMIN(database\_table; field; criteria\_table)**

where

database\_table is a range defining the data to be processed.

field is the column to examine. It may be a column number (1 is the first column of the database table, 2 is the second ...) or a column header (enclosed in quotation marks "") or a cell referring to a column header.

criteria\_table is a range containing criteria, which are used to select which rows of the database\_table to examine.

**DMIN(A1:E10; "Distance to School"; A13:E14)** returns the maximum distance to school that any child in the second grade has to travel (300, for Frank).

**DMIN(A1:E10; 4; A13:E14)** returns the same result.

**DMIN(A1:E10; D1; A13:E14)** also returns the same result.

➤ **DSUM()-**Sums the cells in a column of a Calc 'database' table, in rows which meet specified criteria. Syntax:

**DSUM(database\_table; field; criteria\_table)**

where

database\_table is a range defining the data to be processed.

field is the column to sum. It may be a column number (1 is the first column of the database table, 2 is the second ...) or a column header (enclosed in quotation marks "") or a cell referring to a column header.

criteria\_table is a range containing criteria, which are used to select which rows of the database\_table to sum.

DSUM(A1:E10; "Distance to School"; A13:E14) returns the combined distance to school of all children who are in the second grade (1950).

DSUM(A1:E10; 4; A13:E14) returns the same result.

DSUM(A1:E10; D1; A13:E14) also returns the same result.

**Assignment:-**

- 1-What is the text function in LibreOffice calc?
- 2-What is the Database function in LibreOffice calc explain it?