FUNCTION IN CALC:

1)DATABASE FUNCTIONS:

A) DCOUNT() – COUNT THE CELLS OF A DATA RANGE WHOSE CONTENT MATCHES THE SEARCH CRIETERIA.

Syntax of the DCOUNT Formula(for numbers)

The generic formula for the DCOUNT function is:

```
=DCOUNT(database, field, criteria)
```

The parameters of the DCOUNT function are:

- **database – a table containing data**
- **field – a field which value we want to get**
- **criteria – a table containing conditions for selecting a result**

EX: `=DCOUNT(B2:D9, 3, B11:B12)`

B)DCOUNTA-(for all type)

The Excel DCOUNTA function counts matching records in a database using criteria and an optional field. When a field is provided, DCOUNTA counts both numeric and text values when the field value is not empty. Use DCOUNT to count only numeric values in a given field.

```
=DCOUNTA(database, field, criteria)
```

The parameters of the DCOUNTA function are:

- **database – a table containing data**
- **field – a field which value we want to get**

- **criteria – a table containing conditions for selecting a result**

c) DMAX(): The function helps find the maximum value for a specific field/column in a database for selected records based on user-specified criteria.

SYNTAX:

=DMAX(database, field, criteria)

C) DMIN()-The function helps find the minimum value for a specific field/column in a database for selected records based on user-specified criteria.

SYNTAX:

=DMIN(database, field, criteria)

E) DSUM(): **DSUM function returns the sum of values from a set of records that match criteria**

Syntax

=DSUM (database, field, criteria)

Arguments

- ***database*** **- Database range including headers.**
- ***field*** **- Field name or index to count.**
- ***criteria*** **- Criteria range including headers.**

F) DPRODUCT(): **DPRODUCT function returns the sum of values from a set of records that match criteria.**

Syntax

=DPRODUCT (database, field, criteria)

Arguments

- ***database*** **- Database range including headers.**
- ***field*** **- Field name or index to count.**
- ***criteria*** **- Criteria range including headers.**

2)DATE AND TIME FUNCTION:

A) DATE(): WRITE THE NUMBERS IN DATE AND TIME FORMAT.

SYNTAX: =DATE(YYYY,MM/DD)

B) TODAY(): GIVES THE CURRENT DATE .

SYNTAX: =TODAY() PRESS ENTER

C)NOW(): DEFINES CURRENT TIME OF THE SYSTEM.

SYNTAX: =NOW()

D) DAYSINMONTH

Calculates the number of days of the month in which the date entered occurs.

Syntax

`DAYSINMONTH(Date)`

Date is any date in the respective month of the desired year. The Date parameter must be a valid date according to the locale settings of LibreOffice.

Example

=DAYSINMONTH(A1) returns 29 days if A1 contains 1968-02-17, a valid date for February 1968

E) ISLEAPYEAR

Determines whether a year is a leap year. If yes, the function will return the value 1 (TRUE); if not, it will return 0 (FALSE).

Syntax

```
ISLEAPYEAR(Date)
```

3)logical function:

a)AND():

syntax:

=AND(logical_value_1; logical_value_2; ...logical_value_30)

Returns TRUE if all arguments are TRUE. If any element is FALSE, this function returns the FALSE value.

b)OR():

RETURNS TRUE IF ANY ONE CONDITION IS TRUE

SYNTAX:

=OR(VALUE1 , VALUE2,.....VALUEN)

C)NOT():

RETURNS FALSE IF THE VALUE IS TRUE AND RES-TURNS TRUE WHEN VALUE IS FALSE.

SYNTAX:

=NOT(CONDITION)

D)XOR():

RETURNS TRUE IF ODD NO. OF ARGUMENTS EVALUATES TO TRUE.

SYNTAX:

=XOR(VALUE1,VALUE2, VALUE3, VALUE4 , VALUE5)

RETURNS TRUE IF THREE OR FIVE ARGUMENT IS TRUE.

ELSE RETURN FALSE.

E)IF():

returns one of two values, depending on a test condition.

SYNTAX: IF(CONDITION,”VALUE1”,”VALUE2”)

4)Mathematical Function:

1)sum(): calculates the sum of the cells .

2)even(): rounds a positive number up and negative number down to the nearest even interger.

Syntax:

=Even(number)

3)Product(): multiplies the argument.

Syntax:

=product(value1,value2, value3)

Output: value1*value2*value3

4)Power():

Syntax:

POWER(BASE, EXPONENT)

RAISE BASE TO THE POWER OF EXPONENT . USE TO FIND POWER OF ANY NUMBER

5)SQRT(): RFETURNS THE SQUAREROOT OF A NUM-BER.SYNTAX:

SQRT(NUMBER)

SpreadSheet Function:

1)Vlookup: Helps to look for a value in vertically in a table.

किसी तालिका में लंबवत रूप से मान देखने में मदद करता है।

Syntax:

=Vlookup(crieteria,table name, column name, 0(true))

2)Hlookup: Helps to look for a value horizontally in a table.

तालिका में क्षैतिज रूप से मान देखने में मदद करता है।

Syntax:

=hlookup(crieteria,table name,row name, 0(true))

Array Function:

TRANSPOSE

Transposes the rows and columns of an array.

किसी array की row और columns को आपस में बदलें।

Syntax

```
TRANSPOSE(Array)
```

Array represents the array in the spreadsheet that is to be transposed.

Example

In the spreadsheet, select the range in which the transposed array can appear. If the original array has n rows and m columns, your selected range must have at least m rows and n columns. Then enter the formula directly, select the original array and press Shift+Ctrl+Enter. Or, if you are using the Function Wizard, mark the Array check box. The transposed array appears in the selected target range and is protected automatically against changes.

स्प्रैडशीट में, उस range का चयन करें जिसमें ट्रांसपोज़्ड array दिखाई दे सकती है। यदि original array में n rows और m Column हैं, तो आपकी चयनित range में कम से कम m rows और n column होने चाहिए। फिर सीधे Formula दर्ज करें, original array का चयन करें और Shift Ctrl Enter दबाएं। या, यदि आप फ़ंक्शन विज़ार्ड का उपयोग कर रहे हैं, तो array चेक बॉक्स को चिह्नित करें। ट्रांसपोज़्ड array appear in selected targeted range और परिवर्तनों के विरुद्ध स्वचालित रूप से सुरक्षित होती है।

SUMPRODUCT

Multiplies corresponding elements in the given arrays, and returns the sum of those products.

दिए गए arrays में संबंधित तत्वों को गुणा करता है, और उन products का sum देता है।

Syntax

```
SUMPRODUCT(Array1; Array2...Array30)
```

Array1, Array2...Array30 represent arrays whose corresponding elements are to be multiplied.

At least one array must be part of the argument list. If only one array is given, all array elements are summed.

Example

	A	B	C	D
1	2	3	4	5
2	6	7	8	9
3	10	11	12	13

`=SUMPRODUCT(A1:B3;C1:D3)` returns 397.

Calculation: A1*C1 + B1*D1 + A2*C2 + B2*D2 + A3*C3 + B3*D3

Text Functions in Calc:

1)upper() : convert every character of the string into uppercase.

Syntax: upper(range or cell address)

2)lower():convert every character of the string into lowercase

Syntax: lower(cell address)

3)concatenate(): combines two text into single text.

Syntax:concatenate(text1, text2,text3,...)

4)char(): converts a code number into a character

Syntax: char(number)

5)len(): finds length of the given text string.

Syntax: len(cell address)

6)rept(): repeat text given number of time.

Syntax: repeat(text, Number)