

Essential Function - Part 1

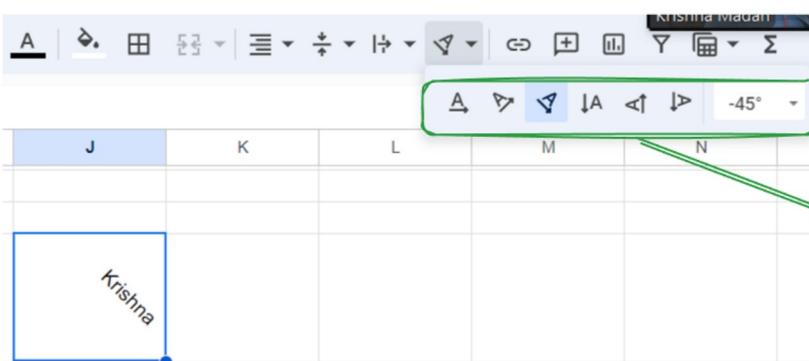
18 July 2024 21:04

Essential Functions:

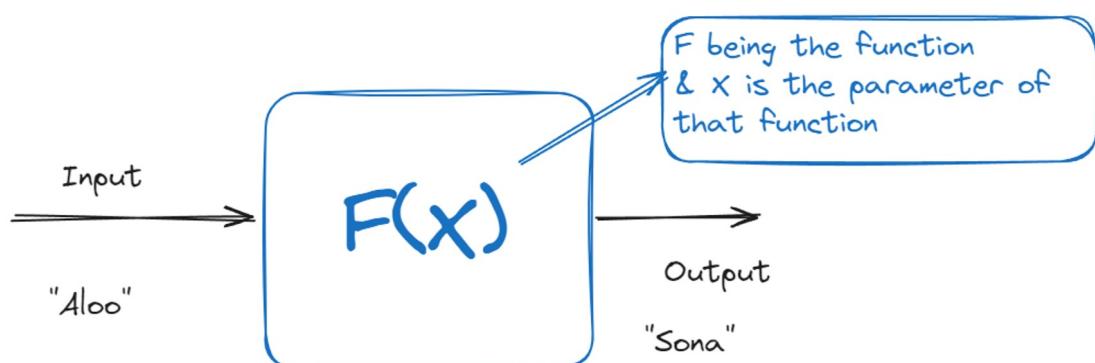
JAN	Jan	Mon	January
FEB	Feb	Tue	February
MAR	Mar	Wed	March
APR	Apr	Thu	April
MAY	May	Fri	May
JUN	Jun	Sat	June
JUL	Jul	Sun	July
AUG	Aug	Mon	August
SEP	Sep	Tue	September
OCT	Oct	Wed	October
NOV	Nov	Thu	November
DEC	Dec	Fri	December
JAN	Jan	Sat	January
	Feb	Sun	February
		Mon	March
		Tue	April
		Wed	May
		Thu	June
		Fri	July
		Sat	August
		Sun	September
		Mon	October
		Tue	November
		Wed	December

Autofill features works well with month name and days.

			overflow	wrap	clip
35	My name is Krishna Madan , I love teaching.	Male		Welcome Everyone, This lecture is all about Google Sheet, Specifically Essential Functions	



Text Rotation



"Aloo"

"Sona"

Operators :

"+", "-", "/", "*", "%"

"Relative Reference"

$f(x) = E14 + F14$

	C	D	E	F	G	H
14	Doe	John Doe	75	80	95	
15	Smith	Jane Smith	80	75	88	
16	Johnson	Mark Johnson	95	88	92	
17	Williams	Sara Williams	68	82	78	
18	Brown	Chris Brown	88	76	85	

Marks of Maths-English combined	250 ×	Total Score
155	=E14+F14+G14	
155		243
183		275
150		228
164		249

Text Concatenate = $f(x) = B14 & " " & C14$

First Name	Last Name	John Doe ×
John	Doe	=B14 & " " & C14
Jane	Smith	Jane Smith
Mark	Johnson	Mark Johnson
Sara	Williams	Sara Williams
Chris	Brown	Chris Brown

E11
Krishna

&

" "

F11
Madan

Average Score - $(\text{exam1} + \text{exam2} + \text{exam3})/3$

J14:J18	$f(x) = (E14+F14+G14)/3$
11	J
12	
13	Average score
14	83.333333333
15	

"=" is being used to activate the formulas and functions.

13	Average score
14	83.333333333
15	81
16	91.666666667
17	76
18	83

Fruits

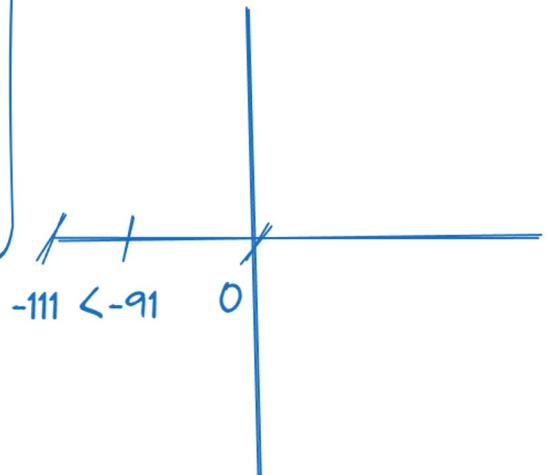
apple	orange	litchi	mango
100	50	200	150

$$= 500 / 4 \\ = 125.$$

Comparison Operator

Result - Boolean [T/F]

> (Greater than),
 < (Less Than),
 >= (Greater than and equal to),
 <= (Less Than And Equal to),
 = (equal to),
 <> (not equal to)



1. $17 > 22 \Rightarrow \text{False}$
2. $61 < 199 \Rightarrow \text{True}$
3. $9 = 9 \Rightarrow \text{True}$
4. $11 \neq 12 \Rightarrow \text{True}$
5. $91 \neq (51 * 2) - 11 \Rightarrow 91 \neq 91 \Rightarrow \text{False}$
6. $-91 > -111 \Rightarrow \text{True}$

Comparison operators			
English	Science		
80	95	=F23>85	red greater than 85 in english
75	88		FALSE
88	92		TRUE
82	78		FALSE
76	85		FALSE

Logical Operator

Logical Operators

"AND" , "OR" , "NOT"

AND LOGIC

T	T
T	F
F	T
F	F

T

F

F

F

$$\begin{array}{c} \textcircled{2} * \textcircled{2} \\ = 4 \text{ ways} \\ \underline{2} \quad \underline{2} \quad \underline{2} = 8 \end{array}$$

OR LOGIC

T	T
T	F
F	T
F	F

T

T

T

F

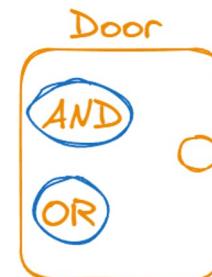
if any one statement is True my final result will be True

Both statement should true in order to get the result true

Statement1 & Statement2

Not Logic(Negate)

T - F
F - T



Or Logic is lenient as compared to AND

Logical Operators

A. AND (AND)

- Who scored above 80 in Maths and Science

fx =and(E20>80, G20>80)

"&&"

B. OR (OR)

- Who scored above 90 in Maths or English

fx =or(E20>90, F20>90)

"||"

C. NOT (NOT)

- Who didn't score above 85 in English

fx =not(F20>85)

"!"

- Who didn't score above 85 in English

fx =not(F20>85)

!"

Text Concatenation Operator

Logical operators

English	Science	Who scored above 80 in	
80	95	FALSE × ins nce =AND(D32>80, F32>80)	Who sc
75	88	FALSE	
88	92	TRUE	
82	78	FALSE	
76	85	TRUE	

=AND(

logical_expression1,

logical_expression2, ...]

optional

Many parameters

FALSE × red above 90 in maths or english
=OR(D32>90, E32>90)
FALSE
TRUE
FALSE
FALSE

TRUE × Didn't score above 85 in english
=NOT(E32>85)
TRUE
FALSE
TRUE
TRUE