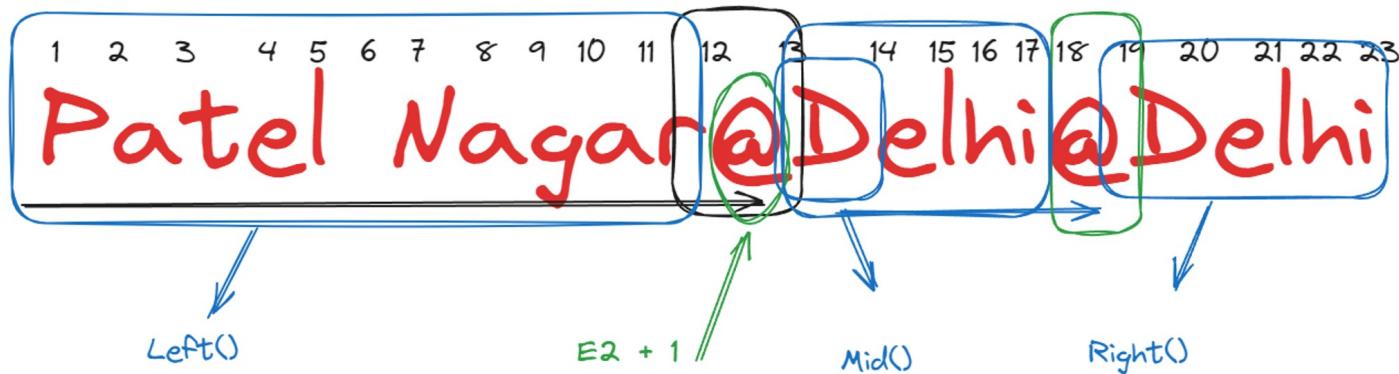


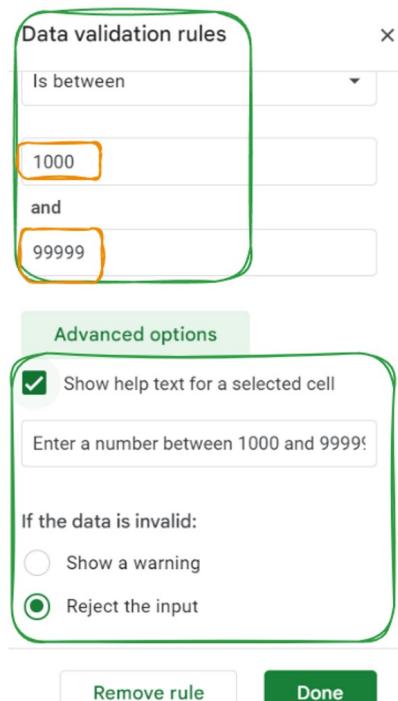
Data Validation / Lookup

30 July 2024 21:05

Data Validation / Lookup



Solving B10 - for Data Validation.

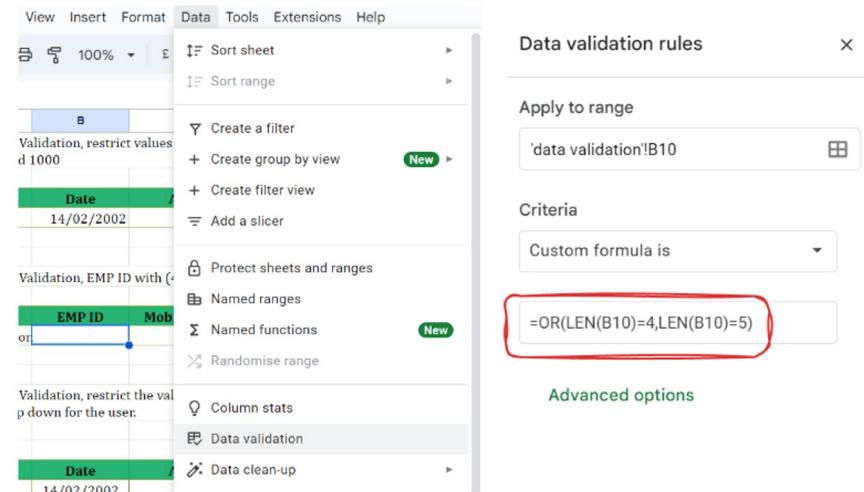


$\text{len}(99999) - 5$

99999

How to apply rule on a specific cell.

- Select the cell and go to Data > Data Validation.



4-5 Digit , Emp ID

Min - 1000 , Max - 99999

Apply to range

Mobile Digit - Max length 10

D with (4 to 5) digit, Mobile Number with 10 digit

Mobile Number

1 9999911111

Apply to range

'data validation'!C10

Criteria

Custom formula is

=LEN(C10) = 10

Advanced options

Apply to range

'data validation'!C10

Criteria

Is between

1000000000

and

9999999999

Advanced options

Q3.

3. Using Data Validation, restrict the values in A17 to the values in the list on the DEMO List, and provide an in-cell drop down for the user.

Account	Date	Amount
	14/02/2002	100

DEMO List

Cash
AR
Prepads
Inventory
Fixed Assets
AP
Accruals
Debt
Equity
Sales
COGS
SG&A

Mobile Number	E	F	G	H	I
1111					

(A17 to the values in the list on the DEMO List)

Select a data range

'data validation'!E17:E28

Cash
AR
Prepads
Inventory
Fixed Assets
AP
Accruals
Debt
Equity
Sales
COGS
SG&A

Cancel OK

Apply to range

'data validation'!A17

Criteria

Drop-down (from a range)

Tip: Use absolute references (e.g. =\$A\$1:\$B\$1) to lock rows and columns.

Advanced options

Remove rule Done

A17

3. Using Data Validation, restrict the values in A17 to the values in the list on the DEMO List, and provide an in-cell drop down for the user.

Account	Date	Amount
Cash	14/02/2002	100

DEMO List

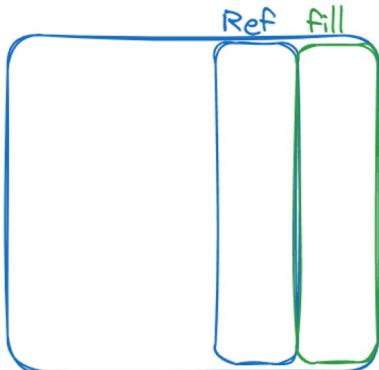
Cash
AR
Prepads
Inventory
Fixed Assets
AP
Accruals
Debt
Equity

'data validation'!E17:E28

Cash
AR
Prepads
Inventory
Fixed Assets
AP
Accruals
Debt

27		Accruals	
28		Debt	
29		Equity	
30			COGS SG&A
31			
32			

What is a Lookup.



Table

Logarithmic Table

Sheet having data.

Trigonometry

values

- Lookup :

1. V lookup [Vertical]
2. H lookup [Horizontal]
3. X lookup [All Directional]
4. Index Match [All Directional]

Drawback

V-lookup - right
Direction

V-Lookup [Vertical Lookup]

Test Cricket - Top 100 Batsman (Nov - 2010)

ID	Ratings	Name	N.Code	Nations
1	891	S.R. Tendulkar	IND	
2	874	K.C. Sangakkara	SL	
3	819	V. Sehwag	IND	
4	807	S. Chanderpaul	WI	
5	807	D.P.M.D. Jayaward	SL	
5	791	J.H. Kallis	SA	
7	787	G.C. Smith	SA	
8	767	V.V.S. Laxman	IND	
9	766	R.L. Taylor	NZ	
10	762	A.B. de Villiers	SA	
11	748	T.T. Samaraweera	SL	
12	745	H.M. Amla	SA	
13	738	M.J. Clarke	AUS	
14	735	S.M. Katich	AUS	
15	733	I.J.L. Trott	ENG	
16	731	R.T. Ponting	AUS	
17	717	G. Gambhir	IND	
17	717	Mohammad Youss	PAK	
19	710	Younus Khan	PAK	

+ Index vlookup hlookup index match date functions

NO

N.Code	Nations
IND	India
SL	Sri Lanka
WI	West Indies
SA	South Africa
NZ	New Zealand
AUS	Australia
ENG	England
PAK	Pakistan
BAN	Bangladesh

H-Lookup [Horizontal Lookup]

Commission

Builder	Doug	Dave	Brian	Larry	Rob	Morgan	Jones	Gill
Commission	3%	4%	7%	10%	12%	10%	11%	4%

Builder	Doug	Dave	Brian	Larry	Rob	Morgan	Jones	Gill
Commission	3%	4%	7%	10%	12%	10%	11%	4%

horizontal Table for reference.

Drawback

H-Lookup - Down Direction

Syntax:

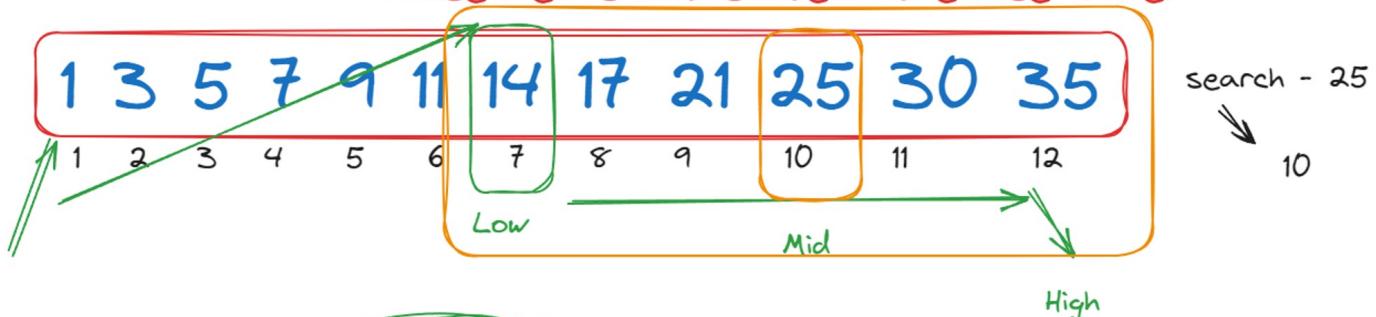
=VLOOKUP(search_key, range, index, [is_sorted])

- **search_key** : The value to search for.
- **range** : The range of cells that contains the data.
- **index** : The column index of the value to be returned.
- **is_sorted** : Optional. TRUE if the first column in the range is sorted in ascending order; FALSE if not sorted.

Not Sorted

12
15
19
17
27
25
29

False means not sorted otherwise True.



Sorted - **Binary Search** - Fast $\text{Mid} = (\text{low} + \text{high}) / 2$

Unsorted - **Linear Search**

$$= (1 + 12) / 2 = 6.5 = 6$$

$$= 7 + 12 = 19/2 = 9.5 = 10$$

2 steps.

2 steps.

Why freezing the lookup Table is Important.

Example 1 (Frozen Range):

D	E	F	G	H	I
2010]	N.Code	Nations	India		
IND		=VLOOKUP(D3, \$H\$1:\$I\$10, 2, FALSE)			
SL	Sri Lanka				
IND	India				
WI	West Indies				
SL	Sri Lanka				
SA	South Africa				
SA	South Africa				
IND	India				
NZ	New Zealand				
SA	South Africa				
SL	Sri Lanka				
SA	South Africa				

Example 2 (Moving Range):

D	E	F	G	H	I
	Nations			N.Code	Nations
	India			IND	India
	Sri Lanka			SL	Sri Lanka
	West Indies			WI	West Indies
	South Africa			SA	South Africa
	South Africa			NZ	New Zealand
	India			AUS	Australia
	New Zealand			ENG	England
	South Africa			PAK	Pakistan
	Sri Lanka			BAN	Bangladesh

Here the range is moving far.
Not easy to handle the lookup table.

=VLOOKUP(D3, \$H\$1:\$I\$10, 2, FALSE)

D	E	F
N.Code	Nations	
IND	India	
SL	Sri Lanka	
IND	India	

VLOOKUP(search_key, range, index, [is_sorted])

H-Lookup [Horizontal Lookup]

Definition:

The **HLOOKUP** function in Google Sheets searches for a value in the first row of a range and returns a value in the same column from another row.

Syntax:

```
=HLOOKUP(search_key, range, index, [is_sorted])
```

```
=HLOOKUP(search_key, range, index, [is_sorted])
```

- `search_key` : The value to search for.
 - `range` : The range of cells that contains the data.
 - `index` : The row index of the value to be returned.
 - `is_sorted` : Optional. TRUE if the first row in the `range` is sorted in ascending order; FALSE if not sorted.

Builder	Doug	Dave	Brian	Larry	Rob	Morgan	Jones	Gill
Commission	3%	4%	7%	10%	12%	10%	11%	4%

▼ | fx =HLOOKUP(B3,\$H\$3:\$P\$4,2,0)