

How to Use Vlookup in Excel?

In Excel, Vlookup function is used to search a value in the left-most column of the table and return the value in the same row of the range selected.

Syntax:

VLOOKUP(lookup_value, table_array, col_index_num, [range_lookup])

- **lookup_value**: the value to search based on in the first column of the table;
- **table_array**: the range of cells that contains the data, you can use a reference to a range such as A1:F20;
- **col_index_num**: the column number in the table_array argument from which the matching value must be returned;
- **range_lookup**: is optional operation, FALSE to find an exact match, and TRUE to find the approximate match.

Vlookup Using Exact Match

Syntax for Exact Match

VLOOKUP(lookup_value, table_array, col_index_num, FALSE)

The screenshot shows an Excel spreadsheet with a table of data and a VLOOKUP formula being applied. The formula bar at the top displays `=VLOOKUP(F3,A2:D7,3,FALSE)`. The table data is as follows:

	A	B	C	D
1	ID	Age	Name	Gender
2	1	32	Alex	M
3	2	43	Jone	M
4	4	65	Lucy	F
5	6	21	Fela	F
6	10	32	Bran	M
7	8	56	Anny	F
8				

To the right of the table, a smaller table shows the result of the VLOOKUP formula in cell G3:

	F	G
2	ID	Name
3	1	FALSE)
4	4	

In the above formula: **F3** is the value which you want to return its relative information, **A2:D7** is the data range you use, the number **3** indicates the column number that your matched value is returned and the **FALSE** refers to the exact match. Cell G3 will give a value of Alex.

G4				=VLOOKUP(F4,A2:D7,3,FALSE)			
	A	B	C	D	E	F	G
1	ID	Age	Name	Gender			
2	1	32	Alex	M		ID	Name
3	2	43	Jone	M		1	Alex
4	4	65	Lucy	F		!	7
5	6	21	Fela	F			#N/A
6	10	32	Bran	M			
7	8	56	Anny	F			

If your criteria value is not found in the data range, you will get an error value #N/A. In the above formula: **F4** is the value which you want to return its relative information, **A2:D7** is the data range you use, the number **3** indicates the column number that your matched value is returned and the **FALSE** refers to the exact match. Cell G4 will give an error value of #N/A.

Vlookup Using Approximate Match

Sometimes, your specified data is not in the data range, to get the nearest match with the given data, you need to use the vlookup to get an approximate match.

Syntax for Approximate Match

VLOOKUP(lookup_value, table_array, col_index_num, TRUE)

Note: To use the Vlookup function to get an approximate match value, your first column in the table must be sorted in ascending order.

	A	B	C	D	E	F	G	H	I	J
1	ID	Age	Name	Gender			ID	Age	Name	Gender
2	1	32	Alex	M			1	32	Alex	M
3	2	43	Jone	M	Sorting of 1st Column →		2	43	Jone	M
4	4	65	Lucy	F			4	65	Lucy	F
5	6	21	Fela	F			6	21	Fela	F
6	10	32	Bran	M			8	56	Anny	F
7	8	56	Anny	F			10	32	Bran	M

SUM						=VLOOKUP(F3,\$A\$2:\$D\$7,3,TRUE)	
	A	B	C	D	E	F	G
1	ID	Age	Name	Gender			
2	1	32	Alex	M		ID	Name
3	2	43	Jone	M		5	TRUE)
4	4	65	Lucy	F		12	
5	6	21	Fela	F			
6	8	56	Anny	F			
7	10	32	Bran	M			

In the above formula: **F3** is the value which you want to return its relative information, **A2:B10** is the data range you use, the number **3** indicates the column number that your matched value is returned and the **TRUE** refers to the approximate match.

The approximate match returns the next largest value that is less than your specific lookup value. Here Cell G3 will give a value as Lucy.

G5						=VLOOKUP(F5,\$A\$2:\$D\$7,3,TRUE)	
	A	B	C	D	E	F	G
1	ID	Age	Name	Gender			
2	1	32	Alex	M		ID	Name
3	2	43	Jone	M		5	Lucy
4	4	65	Lucy	F		12	Bran
5	6	21	Fela	F		20	Bran
6	8	56	Anny	F			
7	10	32	Bran	M			

In the above formula: **F4,F5** is the value which you want to return its relative information, **A2:B10** is the data range you use, the number **3** indicates the column number that your matched value is returned and the **TRUE** refers to the approximate match.

Here as the approximate match returns the next largest value that is less than your specific value, and for both 12 and 20 , the next largest value that is less than specific value is 10, cell G4 and G5 will give Bran as the value