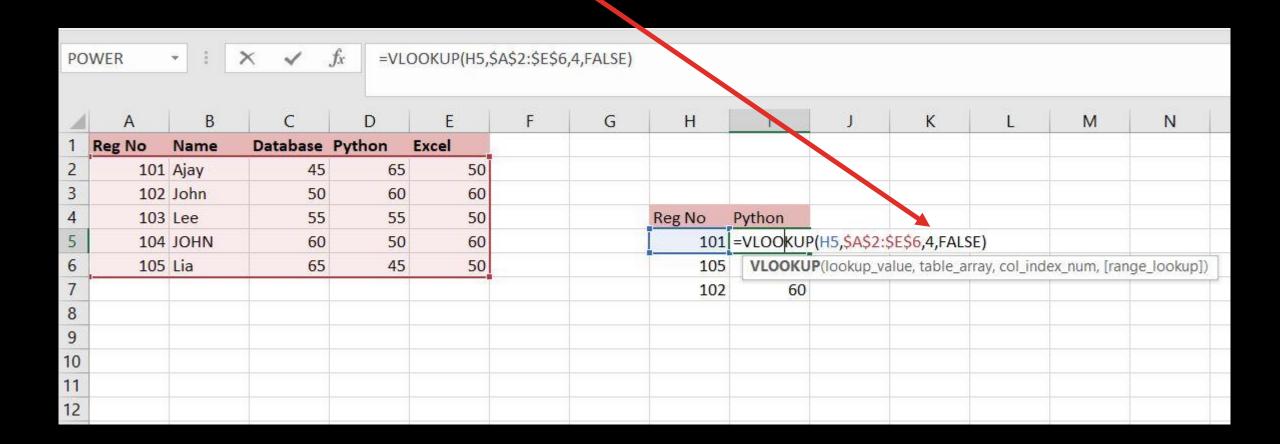
LOOKUP AND REFERENCE FUNCTIONS

VLOOKUP

This means the column number in which Python Marks are present

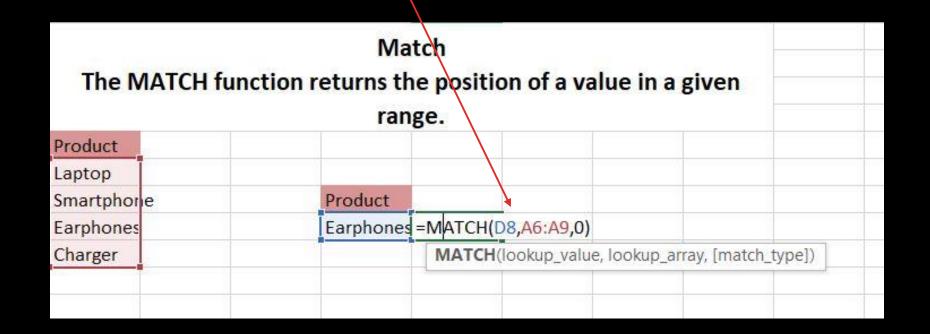


HLOOKUP

PO	WER	· : ×	✓ fx	=HLOC	OKUP(K5,\$B	\$1:\$G\$5,5)								*
1	Α	В	С	D	E	F	G	Н	1	J	K	L	М	N	0
1	RegNo	101	102	103	104	105	106								
2	Name	Ajay	John	Lee	Lia	Peter	Lee								
3	Excel	56	78	56	98	57	45								
4	Python	45	67	72	87	48	44				RegNo	Database			
5	database	23	65	38	65	84	67				103	=HLOOKUI	P(K5,\$B\$1:	\$G\$5,5)	
6											106	HLOOKU	P(lookup_\	/alue, table_	array, row
7											105	84			
8															
9															
10															
11															
12															
13															
14															
15															
16															
17															

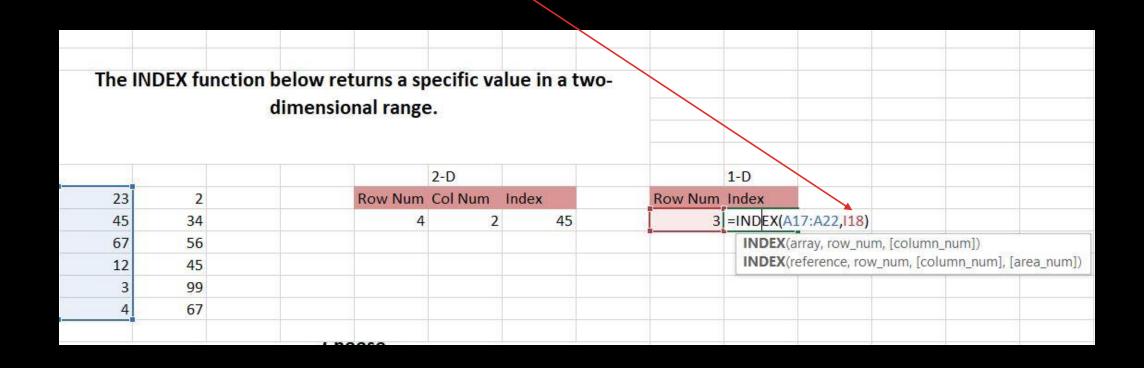
MATCH FUNCTION

Reference to the cell which contains the value we want to search



INDEX

1 dimensional Index function in which we specify range of data and row number and we get data in result

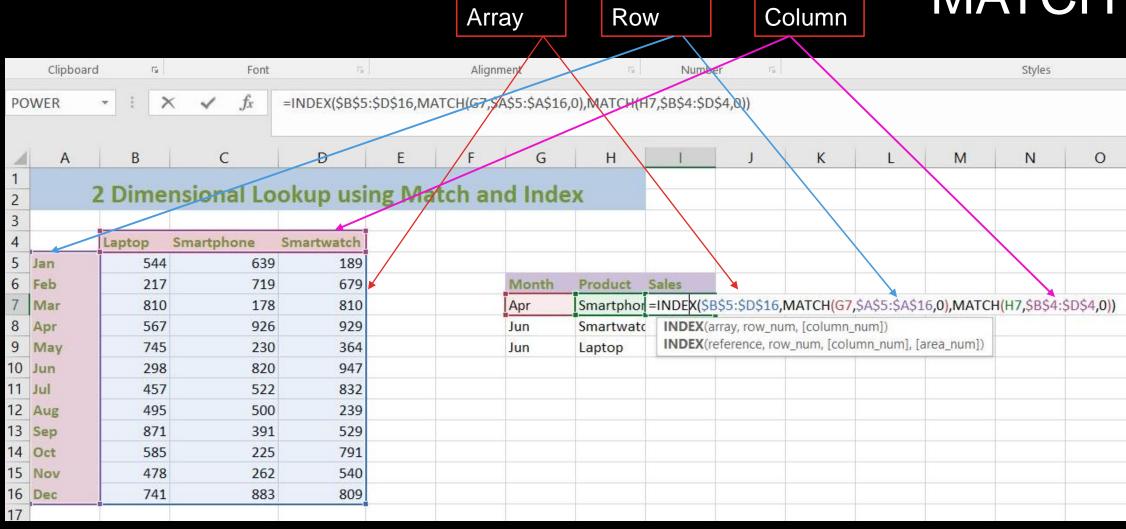


2 Dimensional Index: Here we specify range of two dimensional data, row number and column number and we get result as value

INDEX

IE IIVL	ZEX TUIICUOII	below returns a specification dimensional range		aiue III a	two-				
			2-D				1-D		
23	2	Row Num	Col Num	Index		Row Num	Index		
45	34	4	2	=INDEX(A17:B22,E18,F18) 67					
67	56			-		um, [column_	num])		
12	45			INDEX(reference, ro	ow_num, [colu	ımn_num], [a	rea_num])	
3	99								
4	67								

2WAY LOOKUP USING INDEX AND MATCH



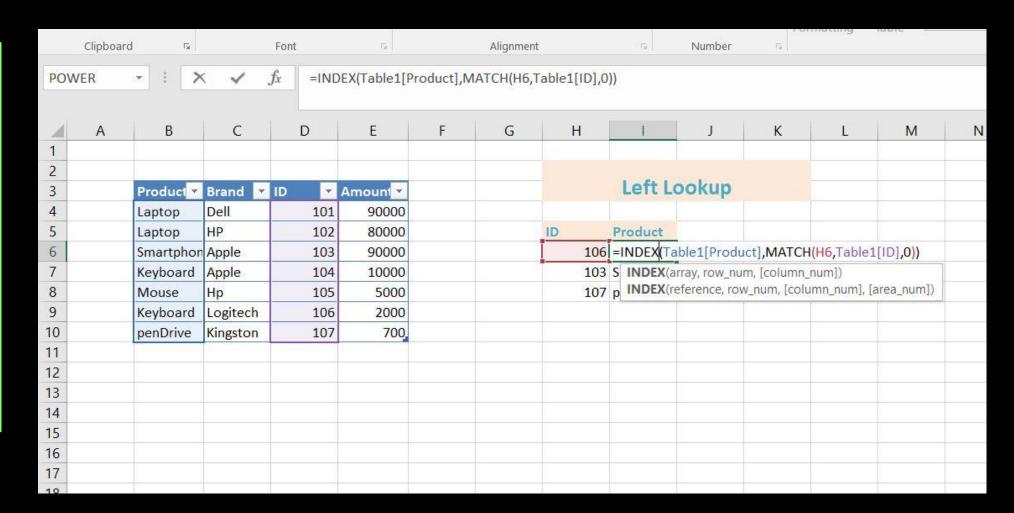
CASE SENSITIVE LOOKUP USING INDEX, MATCH AND EXACT

Execute this by pressing Ctrl-Shift-Enter because this is an array formula as John will be compared with complete column Name.

	Clipboard	Fa		Font	5		Alignm	ent	15	Number	Fi		15/015
PO	WER	+	× .	f_x =INI	DEX(E4:E8,M	ATCH(T	RUE,EXACT	(G4,B4:B8),0))				
1	Α	В	С	D	E	F	G	Н	1	J	K	L	М
1													
2													
3	Reg No	Name	Database	Python	Excel								
4	101	Ajay	45	65	50		JOHN	=INDEX(E4	:E8,MATCH	H(TRUE,EXA	CT(<mark>G4,</mark> B4:E	38),0))	
5	102	John	50	60	60					m, [column_r		14.00	
6	103	Lee	55	55	50			INDEX(r	eference, rov	w_num, [colur	nn_num], [a	area_num])	
7	104	JOHN	60	50	60								
8	105	Lia	65	45	50								
9													
10													
11													
12													
13													
14													
15													
16													

LEFT LOOKUP: USING INDEX AND MATCH

With Vlookup we can only search from left to right, in order to search from right to left, use combination of index and match. As match will return a position, and use this as an input to index and get an output



TWO COLUMN LOOKUP

POW	ER	· : >	< ~	fx =INE	DEX(Table13[Amount],	MATCH(F	15&I5,Table:	L3[Product]&Table13[I	Brand],0))				
4	Α	В	С	D	E	F	G	Н	1	J	K	L	М	N	0
1									,						
2					2	Column	Looku	ıp							
3															
4		Produc *	Brand 💌	ID 🔻	Amoun			Product	Brand	Amount					
5		Laptop	Dell	101	90000			Keyboard	Apple	=INDEX(Ta	able13[Am	nount],MAT	CH(H5&I5,1	able13[Pro	duct]&Table
6		Laptop	HP	102	80000			Keyboard	Logitech	INDEX(a	rray, row_r	num, [column	_num])		
7		Smartphor	Apple	103	90000					INDEX(r	eference, r	ow_num, [col	umn_num],	[area_num])	
8		Keyboard	Apple	104	10000										
9		Mouse	Нр	105	5000										
10		Keyboard	Logitech	106	2000										
11		penDrive	Kingston	107	700,										
12															
13															

CLOSEST MATCH

~ 3	Forma	t Painter	D I U		/ · · · · = ·	= = 5= 3	≡ I E INIE	rige & Cerite	100	/0 / .00	→.0 Forma	atting * Ta	ble *	9,57		57.00
Cl	ipboard	F _a		Font	15	Al	ignment		r <u>u</u>	Number	6			5	Styles	
POWER		1 7	× • .	fx =INI	DEX(B3:B9,MA	TCH(MIN(AB	S(C3:C9-F	8)),ABS(C3:	C9-F8),0))							
4	Α	В	С	D	E	F	G	Н	1	J	K	L	M	N	0	P
1																
2		Vame	Sales													
3	Ī	mily	560				In a sales company, employees were assigned some target to complete							142		
4		ames	700													
5		Mia	720					Hov	vever, the	sales turi	ned out t	o be diffe	erent for e	very emp	loyee.	
6		ohn	490					Find o	ut the pe	rson who	has achie	eved sale	s closest t	o the targ	et sales	
7		Peter	625													
8		ee	690		Target Sales	750										
9		ia	740			=INDEX(B3:	B9,MATC	H(MIN(ABS	(C3:C9-F8)),ABS(C3:C9	-F8), 0))					
10						=INDEX(B3:B9,MATCH(MIN(ABS(C3:C9-F8)),ABS(C3:C9-F8),0)) INDEX(array, row_num, [column_num])										
11						INDEX(re	ference, ro	w_num, [colu	umn_num], [area_num])						
12																

DATE & TIME FUNCTIONS

						NI S		W .	1	
4	Α	В	С	D	E	F	G	Н	1	J
1										
2										
3							a constant and the	era e contra		
4						Date and T	ime Fun	ctions		
5										
6			How to	enter Dat	e in Excel	? Use '/' or '-'				
7				To ente	er time, use	e !:'				
8										
9		19-08-2019		16:00		19-08-2019 08:30				
10										/
11										
12										
13										
14			Calc	culating Ye	ar , Mont	n and Day				
15										
16		19-08-2019		2019						
17				8						
18				19						
19										
20										
21				To add n	umber of	days				
22										
23			22-08-2019	4						
24										
25										
26										
27										

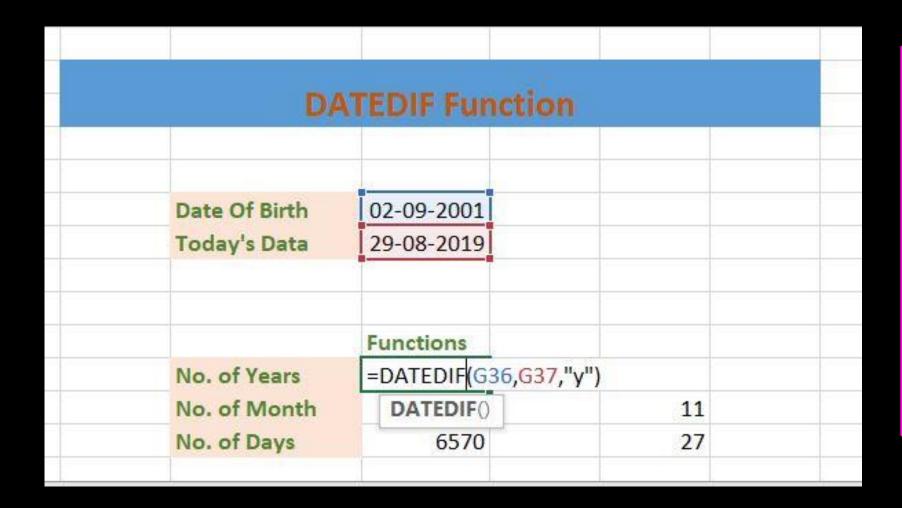
Format of date and time

To calculate year month and day: Use =YEAR(B16)

=MONTH(B16)

=DAY(B16)

To add some days to a date: use =(B16+3)



Parameters to use in datedif:

"y" : to calculate years

"m": to calculate

number of months

"d": to calculate

number of days

"ym": ignore year and days and calculate

months

"md": ignore year and month and calculate

days

To add a	number of years, n	nonths and/or	days, use t	he DATE f	unction.	
=DATE(YE	AR(B16)+4, MONTH	H(B16+3), DAY(316)+7)			
	ear, month, day)					
		Hour Function	n			
		Tour runction				
0	9:45:34	=HOUR(L23)				
1	8:54:12	HOUR(seria	l_number)			
i						
		ime Function:				
To add a nui	Ti mber of hours, minu		onds, use th	e TIME fui	nction.	
	mber of hours, minu					30)+6