

## Table of Contents

Helper Column Solution with Join Operator and VLOOKUP .....	2
Array Formula with: INDEX and MATCH functions and a Join Array Operations. This formula requires Ctrl + Shift + Enter. 3	
Array Formula with: INDEX, INDEX and MATCH functions and a Join Array Operations. This formula does NOT require Ctrl + Shift + Enter.....	4
Cumulative List of Keyboards Throughout Class:.....	5

## Helper Column Solution with Join Operator and VLOOKUP

1) When we have two lookup values we can:

1. Add a helper column to the front of the lookup table that joins two values together from two fields in the data set that creates a unique identifier so Exact Match Lookup will work with VLOOKUP.
2. Join Two Lookup Values together in the lookup\_value argument of VLOOKUP.

• Example:

	A	B	C	D
1	Highline Excel 2016 Class 12: Two Lookup Values in VLOOKUP? Helper Column or Array Formula.			
2				
3	<b>Unique Identifier</b>	<b>Server Name</b>	<b>Event</b>	<b>Status</b>
4	ZZR45678AEVENT-1	ZZR45678A	EVENT-1	Complete
5	ZZR45678AEVENT-2	ZZR45678A	EVENT-2	Review
6	BBT5643BGEVENT-1	BBT5643BG	EVENT-1	Complete
7	BBT5643BGEVENT-2	BBT5643BG	EVENT-2	Not Yet Reviewed
8	BBT5643BGEVENT-3	BBT5643BG	EVENT-3	Not Yet Reviewed
9	N-987-HQ5SSDEVENT-1	N-987-HQ5SSD	EVENT-1	Incomplete
10	N-987-HQ5SSDEVENT-2	N-987-HQ5SSD	EVENT-2	1/2 Stage Complete
11				
12				
13			Helper Column	
14				
15	<b>Server Name</b>	<b>Event</b>	<b>Status</b>	
16	ZZR45678A	EVENT-1	=VLOOKUP(A16&B16,ServerEventTable,4,0)	
17	ZZR45678A	EVENT-2	Review	
18	BBT5643BG	EVENT-1	Complete	
19	BBT5643BG	EVENT-2	Not Yet Reviewed	
20	BBT5643BG	EVENT-3	Not Yet Reviewed	

Array Formula with: INDEX and MATCH functions and a Join Array Operations. This formula requires Ctrl + Shift + Enter.

- 1) When we have two lookup values and we are not allowed a helper column in the lookup table, we can:
  1. Join Two Lookup Values together in the lookup\_value argument of MATCH
  2. Create a Join Array Operation in the lookup\_array argument of MATCH.
  3. Use INDEX to select a value from the Status Field.
  4. Remember to enter the formula with Ctrl + Shift + Enter because lookup\_array argument of MATCH requires it to calculate the array operation correctly.

• Example:

	A	B	C	D	E	F
1	Highline Excel 2016 Class 12: Two Lookup Values in VLOOKUP? Helper Column or Array Formula.					
2						
3	<b>Unique Identifier</b>	<b>Server Name</b>	<b>Event</b>	<b>Status</b>		
4	ZZR45678AEVENT-1	ZZR45678A	EVENT-1	Complete		
5	ZZR45678AEVENT-2	ZZR45678A	EVENT-2	Review		
6	BBT5643BGEVENT-1	BBT5643BG	EVENT-1	Complete		
7	BBT5643BGEVENT-2	BBT5643BG	EVENT-2	Not Yet Reviewed		
8	BBT5643BGEVENT-3	BBT5643BG	EVENT-3	Not Yet Reviewed		
9	N-987-HQ5SSDEVENT-1	N-987-HQ5SSD	EVENT-1	Incomplete		
10	N-987-HQ5SSDEVENT-2	N-987-HQ5SSD	EVENT-2	1/2 Stage Complete		
11						
12						
13				Array Formula w CSE		
14						
15	<b>Server Name</b>	<b>Event</b>		<b>Status</b>		
16	ZZR45678A	EVENT-1		=INDEX(ServerEventTable[Status],MATCH(A16&B16,		
17	ZZR45678A	EVENT-2		ServerEventTable[Server Name]&ServerEventTable[Event],0))		
18	BBT5643BG	EVENT-1		Complete	MATCH(lookup_value, lookup_array, [match_type])	
19	BBT5643BG	EVENT-2		Not Yet Reviewed		
20	BBT5643BG	EVENT-3		Not Yet Reviewed		

Array Formula with: INDEX, INDEX and MATCH functions and a Join Array Operations. This formula does NOT require Ctrl + Shift + Enter

- 2) When we have two lookup values and we are not allowed a helper column in the lookup table, we can:
  1. Join Two Lookup Values together in the lookup\_value argument of MATCH
  2. Create a Join Array Operation in the lookup\_array argument of MATCH.
  3. Use INDEX to select a value from the Status Field.
  4. With the goal of avoiding Ctrl + Shift + Enter, we can put the Join Array Operation into the array argument of INDEX and put a zero ( 0 ) into the row\_num argument to allow the INDEX to make the Join Array Operation without Ctrl + Shift + Enter.
    - i. The **array** argument in INDEX can perform array operations without Ctrl + Shift + Enter.
    - ii. INDEX delivers a range of values rather than a resultant array and therefore does not require Ctrl + Shift + Enter.

• Example:

	A	B	C	D	E	F	G	
1	Highline Excel 2016 Class 12: Two Lookup Values in VLOOKUP? Helper Column or Array Formula.							
2								
3	Unique Identifier	Server Name	Event	Status				
4	ZZR45678AEVENT-1	ZZR45678A	EVENT-1	Complete				
5	ZZR45678AEVENT-2	ZZR45678A	EVENT-2	Review				
6	BBT5643BGEVENT-1	BBT5643BG	EVENT-1	Complete				
7	BBT5643BGEVENT-2	BBT5643BG	EVENT-2	Not Yet Reviewed				
8	BBT5643BGEVENT-3	BBT5643BG	EVENT-3	Not Yet Reviewed				
9	N-987-HQ5SSDEVENT-1	N-987-HQ5SSD	EVENT-1	Incomplete				
10	N-987-HQ5SSDEVENT-2	N-987-HQ5SSD	EVENT-2	1/2 Stage Complete				
11								
12								
13					Array Formula NO CSE			
14								
15	Server Name	Event			Status			
16	ZZR45678A	EVENT-1			=INDEX(ServerEventTable[Status],MATCH(A16&B16,INDEX(			
17	ZZR45678A	EVENT-2			ServerEventTable[Server Name]&ServerEventTable[Event],0),0))			
18	BBT5643BG	EVENT-1			Complete			
19	BBT5643BG	EVENT-2			Not Yet Reviewed			
20	BBT5643BG	EVENT-3			Not Yet Reviewed			

## Cumulative List of Keyboards Throughout Class:

- 1) **Esc Key:**
  - i. Closes Backstage View (like Print Preview).
  - ii. Closes most dialog boxes.
  - iii. If you are in Edit mode in a Cell, Esc will revert back to what you had in the cell before you put the Cell in Edit mode.
- 2) **F2 Key** = Puts formula in Edit Mode and shows the rainbow colored Range Finder.
- 3) **SUM Function: Alt + =**
- 4) **Ctrl + Shift + Arrow** = Highlight column (Current Region).
- 5) **Ctrl + Backspace** = Jumps back to Active Cell
- 6) **Ctrl + Z** = Undo.
- 7) **Ctrl + Y** = Undo the Undo.
- 8) **Ctrl + C** = Copy.
- 9) **Ctrl + X** = Cut.
- 10) **Ctrl + V** = Paste.
- 11) **Ctrl + PageDown** = expose next sheet to right.
- 12) **Ctrl + PageUp** = expose next sheet to left.
- 13) **Ctrl + 1** = Format Cells dialog box, or in a chart it opens Format Chart Element Task Pane.
- 14) **Ctrl + Arrow:** jumps to the bottom of the "**Current Region**", which means it jumps to the last cell that has data, right before the first empty cell.
- 15) **Ctrl + Home** = Go to Cell A1.
- 16) **Ctrl + End** = Go to last cell used.
- 17) Alt keyboards are keys that you hit in succession. Alt keyboards are keyboards you can teach yourself by hitting the Alt key and looking at the screen tips.
  - i. Create PivotTable dialog box: **Alt, N, V**
  - ii. Page Setup dialog box: **Alt, P, S, P**
  - iii. Keyboard to open Sort dialog box: **Alt, D, S**
- 18) **ENTER** = When you are in Edit Mode in a Cell, it will put thing in cell and move selected cell DOWN.
- 19) **CTRL + ENTER** = When you are in Edit Mode in a Cell, it will put thing in cell and keep cell selected.
- 20) **TAB** = When you are in Edit Mode in a Cell, it will put thing in cell and move selected cell RIGHT.
- 21) **SHIFT + ENTER** = When you are in Edit Mode in a Cell, it will put thing in cell and move selected cell UP.
- 22) **SHIFT + TAB** = When you are in Edit Mode in a Cell, it will put thing in cell and move selected cell LEFT.
- 23) **Ctrl + T** = Create Excel Table (with dynamic ranges) from a Proper Data Set.
  - i. Keyboard to name Excel Table: **Alt, J, T, A**
  - ii. **Tab** = Enter Raw Data into an Excel Table.
- 24) **Ctrl + Shift + ~ ( ` )** = General Number Formatting Keyboard.
- 25) **Ctrl + ;** = Keyboard for hardcoding today's date.
- 26) **Ctrl + Shift + ;** = Keyboard for hardcoding current time.
- 27) **Arrow Key** = If you are making a formula, Arrow key will "hunt" for Cell Reference.
- 28) **Ctrl + B** = Bold the Font
- 29) **Ctrl + \* (on Number Pad) or Ctrl + Shift + 8** = Highlight Current Table.
- 30) **Alt + Enter** = Add Manual Line Break (Word Wrap)
- 31) **Ctrl + P** = Print dialog Backstage View and Print Preview
- 32) **F4 Key** = If you are in Edit mode while making a formula AND your cursor is touching a particular Cell Reference, F4 key will toggle through the different Cell References:
  - i. **A1** = Relative
  - ii. **\$A\$1** = Absolute or "Locked"

- iii. **A\$1** = Mixed with Row Locked (Relative as you copy across the columns AND Locked as you copy down the rows)
  - iv. **\$A1** = Mixed with Column Locked (Relative as you copy down the rows AND Locked as you across the columns)
- 33) **Ctrl + Shift + 4** = Apply Currency Number Formatting
- 34) **Tab key** = When you are selecting a Function from the Function Drop-down list, you can select the function that is highlighted in blue by using the Tab key.
- 35) **F9 Key** = To evaluate just a single part of formula while you are in edit mode, highlight part of formula and hit the F9 key.
- i. If you are creating an Array Constant in your formula: Hit F9.
  - ii. If you are evaluating the formula element just to see what that part of the formula looks like,  
REMEMBER: to Undo with Ctrl + Z.
- 36) **Alt, E, A, A** = Clear All (Content and Formatting)
- 37) Evaluate Formula One Step at a Time Keyboard: **Alt, M, V**
- 38) Keyboard to open Sort dialog box: **Alt, D, S**
- 39) **Ctrl + Shift + L** = Filter (or **Alt, D, F, F**) = Toggle key for Filter Drop-down Arrows
- 40) **Ctrl + N** = Open New File
- 41) **F12** = Save As (Change File Name, Location, File Type)
- 42) Import Excel Table into Power Query Editor: **Alt, A, P, T**
- 43) **Ctrl + 1 (When Chart element in selected)**: Open Task Pane for Chart Element
- 44) **F4 Key** = If you are in Edit mode while making a formula AND your cursor is touching a particular Cell Reference, F4 key will toggle through the different Cell References:
- i. **A1** = Relative
  - ii. **\$A\$1** = Absolute or "Locked"
  - iii. **A\$1** = Mixed with Row Locked (Relative as you copy across the columns AND Locked as you copy down the rows)
  - iv. **\$A1** = Mixed with Column Locked (Relative as you copy down the rows AND Locked as you across the columns)
- 45) Keyboard to open Scenario Manager = **Alt, T, E**
- 46) **Ctrl + Tab** = Toggle between Excel Workbook File Windows
- 47) **Ctrl + Shift + F3** = Create Names From Selection
- 48) **Ctrl + F3** = open Name Manager
- 49) **F3** = Paste Name or List of Names
- 50) **Alt + F4** = Close Active Window
- 51) **Window Key + Up Arrow** = Maximize Active Window
- 52) **Ctrl + Shift + Enter** = Keystroke to enter Array Formulas that: 1) have a function argument that requires it, or 2) whether or not you are entering the Resultant Array into multiple cells simultaneously.
- 53) **Ctrl + /** = Highlight current Array

## New In This Video:

54) None