Highline Excel 2016 Class 26: Macro Recorder

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Macro Recorder Examples in this video

1) Absolute Reference Macro: Format report that always has the same number of columns and rows
2) Absolute & Relative Reference Macro: Format report that that has an unknown number of rows
3) Relative Reference Macro to convert vertical records into a proper data set with horizontal records
4) Search for VBA Code online: Function to spell out numbers as words
5) Search for VBA Code online: Add or count cells with red fill
6) Form Control Button to Add Record to Existing Proper Data Set

Macro Recorder Notes

7) Code in Excel is called VBA (Visual Basic Application)
   - Macro is a synonym for VBA
   - VBA = Visual Basic Application = Macro = written code that executes commands to do things in Excel.

8) If you do not know how to write code, you can use the Macro Recorder.
   - When you hit the Record Macro button:
     1. It is like a tape recorder
     2. Whatever you do in Excel, the Macro Recorder writes the VBA Code for you.

9) Code is good for two reasons:
   1. If you have repetitive tasks that you want to automate (like formatting a month report). That way you can just click a button and the report is formatted
   2. There are some things you want to do (like have a function spell out a word), that the commands in the ribbons can't do.
      For us, non-code writers, we can search Google for the code.

10) You must use the ".xlsm" extension in order to use Macros.
   1. File extension: use ".xlsm". "m" means Macro
   2. File extension "xlsx" will not allow Macros.
   3. In Excel 2003, the file extension .xls works with VBA or without VBA.

11) To have full access to features for the Macro Recorder, we must show Developer Ribbon.
   - Right-click ribbon, Customize Ribbon, check box for Developer tab.

12) To turn on the Macro Recorder
   - To turn on the Macro Recorder use the "Record Macro button in the Code group in the Developer Ribbon (or the Record Macro button on the left side of the Status Bar).
   - Be sure to Turn off the Macro Recorder when you are done

13) Relative / Absolute Button:
   - The "Use Relative Reference" button in the Code Group in the Developer Ribbon. The "Use Relative Reference" button is a toggle that toggles between Absolution and Relative References. When the button is yellow/orange in color, the Marco is recording Relative Cell References in the Macro. When it is not yellow/orange, it is recording Absolute References.
   - Relative Macros record Relative movement of the selected cell (OFFSET function..
   - Absolute Macros record Absolute movement of the selected cell (RANGE function).

14) Security Level:

- You must also set the security level in the Code Group in the Developer Ribbon to "Disable all Macros with notification"; then each time you open the workbook, click the "Options" button that appears when you open the workbook, then click "Enable".

15) Keyboards:

- Alt + F11: opens VBA Editor Window so you can write code.
- Alt + F8: Opens list of macros you can run.
- "In the VBA editor:
    1. Ctrl + R = "Project Explorer"
    2. F4 = Properties Pane.
    3. Alt, I, M = Insert New Module

16) Where to store your Macro:

- If you store Macros in "This workbook", they are only available in this workbook
- If you store Macros in "Personal workbook", they are stored in the hidden workbook named "Personal" and the Macros will be available in all workbooks on your computer. To edit a Macro in a Personal workbook, you must unhide the workbook using the "Unhide" button in the Window Group on the View Ribbon.

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. **A1** = 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

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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

54) Data Validation Dialog Box: **Alt, D, L**

55) **F11** = Create Chart on a new sheet

56) **Alt + F11** = Create Chart on currently selected sheet.

57) New Format Rule dialog box: **Alt, H, L, N**

58) Delete conditional Formatting Rule: **Alt, O, D, D**

59) Manage Rule dialog box keyboard: **Alt, O, D**

60) "Format values where this formula is true": **Alt, H, L, N, PageDown, Tab**

61) Shift + F11 = Insert a New Sheet

62) Ctrl + F1 = Toggle Ribbon Tabs on and off

63) Ctrl + Alt + F5 = Refresh All Data in Excel Workbook.

64) Zoom to Selection = **Alt, W, G**
65) Ctrl + F = Find
66) Ctrl + H = Find and Replace
67) Advanced Filter keyboard: Alt, A, Q or Alt, D, F, A
68) Alt + F11: opens VBA Editor Window so you can write code.
69) Alt + F8: Opens list of macros you can run.
70) "In the VBA editor:
    i.   Ctrl + R = "Project Explorer"
    ii. F4 = Properties Pane.
    iii. Alt, I, M = Insert New Module