String functions

How to make your data look the way you want it

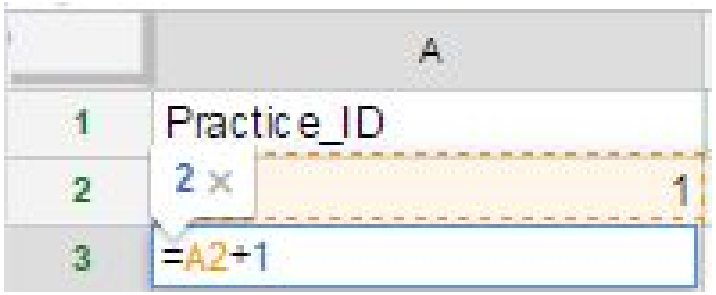
Where to find the practice data

http://bit.ly/22xKXfU

Please download the file, don’t open it. If you just open it your edits will apply to everyone!

Creating a unique ID

One handy thing that Sheets will do for you is auto-fill a series. Let's use this to create a unique ID for a table. This is a number that corresponds to each observation in the data. There should be no repetition of ID's.



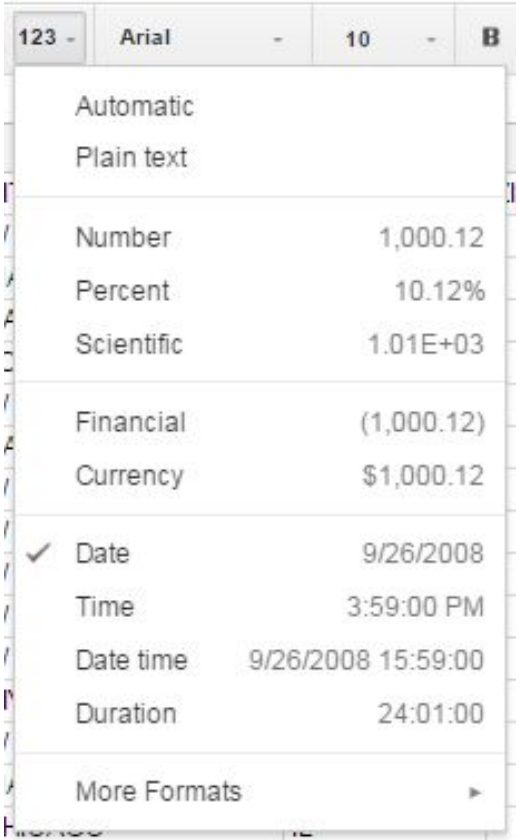
- Insert a row to the left of the table
- Name the row something helpful. Suggestion: unique_ID
- In the first cell type a 1
- In the next cell type an equals sign, and then click on cell A1. Then type +1. Hit enter.
- A3 should now be equal to 2.
- Then click in the lower right corner of the cell to extend it all the way down the column.

Changing the format of a field

Sometimes google guesses the wrong format for a field and we want to change it.

In this case take a look at the DOB field. Notice a problem? Let's fix it.

- Click the 'G' above the column to select it.
- Click on the '123' button above to get the dropdown menu.
- Select 'Date'



Splitting cells

Sometimes there is too much information in a single column. Sheets has a handy, if imperfect, way of handling this.

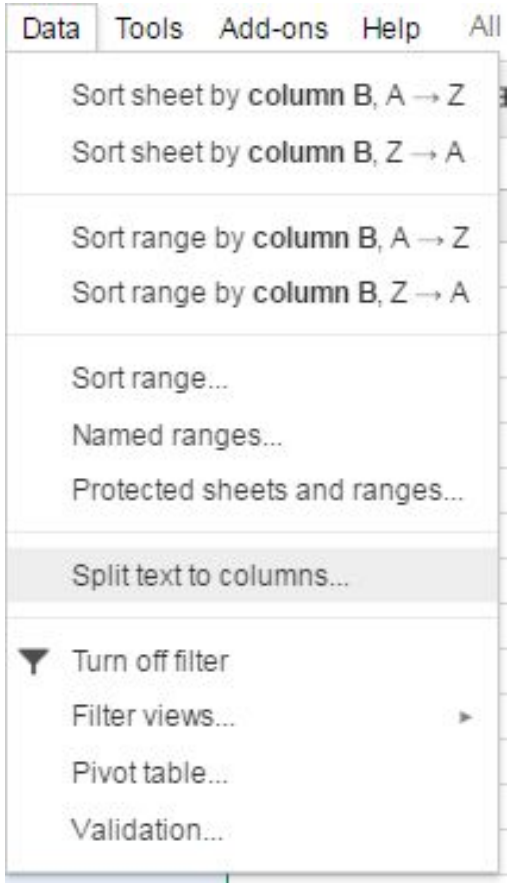
We can split the cell into columns using a delimiter. Let’s look at the NAME column. What might we want to change here?

Splitting cells

- Let’s add 4 empty columns to the right of Column B. (This is one flaw of how Sheets does this - it will overwrite columns if you don’t put in empty ones. Better to err with more than less.)
- Select Column B, then do:

  Data -> Split text to columns

- Down at the bottom, select ‘space’ as the separator



Splitting cells

- Scroll through the result.
- What are the pluses and minuses of what we get?
    - William Smith III
    - La Tonya Jones

  Sheets can help you out, but you may end up needing to do some cleaning by hand.

Pop quiz!

What do you think the CONCATENATE function does? It’s okay to use Google to find out.

LEFT/RIGHT/MIDDLE

If we know what number of digits we want to split off from a cell, we can use the LEFT, RIGHT, or MIDDLE functions.

Example: 3-digit ZIP-code

Even in cases when we have a full ZIP-code for each observation in data, it can be useful to use just the first 3-digits. This can be the case when data is sparse, or when we are trying to protect privacy.

LEFT/RIGHT/MIDDLE

Because we want the 3 left-most digits, we will use the ‘LEFT’ function.

- Select Column G, and insert a row to the left.
- Name it something useful, like ZIP3
- Click in cell F3
- Enter this function, what do you get?

=LEFT(G2,3)

- Double click to extend the function down the entire column.

Transpose

Sometimes we want to switch the columns and rows. Sometimes this is because we want to do a particular calculation, other times it's because of bad table design. Consider the following example. What might we want to change?

	A	B	C	D	E	F	G
1		Person 1	Person 2	Person 3	Person 4	Person 5	Person 6
2	Arrests	2	17	10	19	8	18
3	Convictions	14	2	3	13	7	17

Transpose

- Select a blank cell in the spreadsheet.
- Type this:
  - =TRANSPOSE(
- Then choose the cells you want transposed. If the table is small enough you can do this by holding down the mouse and dragging.
- If the table is really big, you can just enter the cell in the upper left corner : lower right corner.
  - =TRANSPOSE(A2:F9)

Transpose

You should get something like this:

	Arrests	Convictions
Person 1	13	18
Person 2	13	11
Person 3	19	10
Person 4	17	8
Person 5	14	5
Person 6	11	16

Keep exploring!