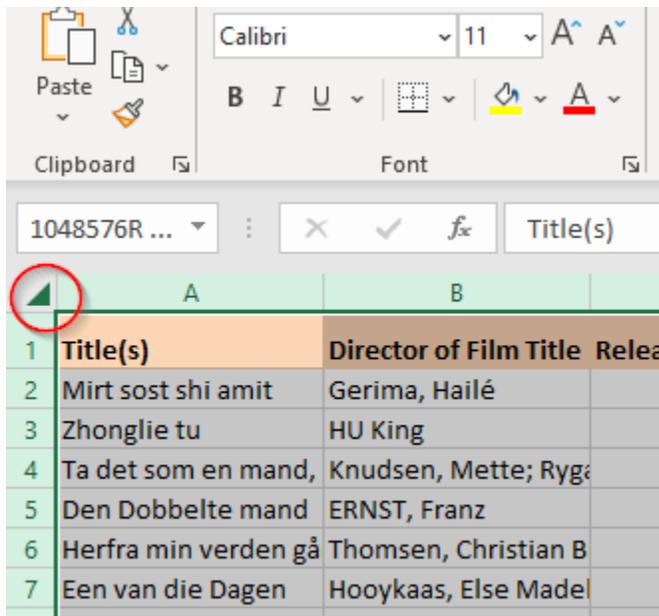


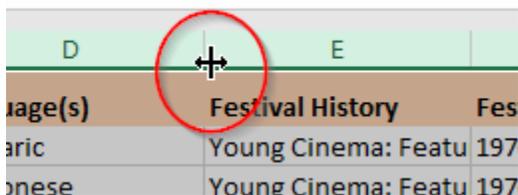
## Excel walkthrough

You can select everything in the Excel sheet by clicking on this little arrow / triangle tab in the top left here.



You probably know that you can resize columns by clicking the little lines between the column tabs up here.

If you **double click on that little line** it will automatically resize that column to fit the contents, which can be very useful as long as you don't have that one entry in the column that's like 100 chars wide.

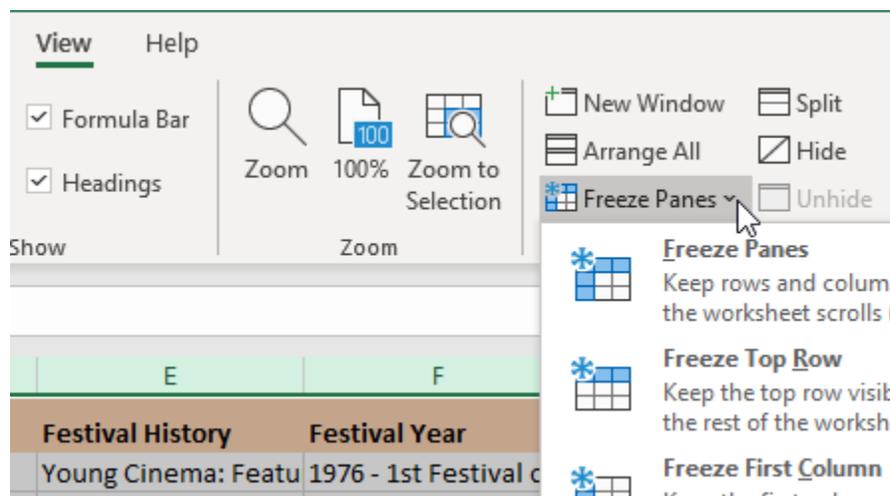


But if you select everything like I showed you and double click on one of the divider lines, it will resize every column to the width of the largest entry, all in one step.

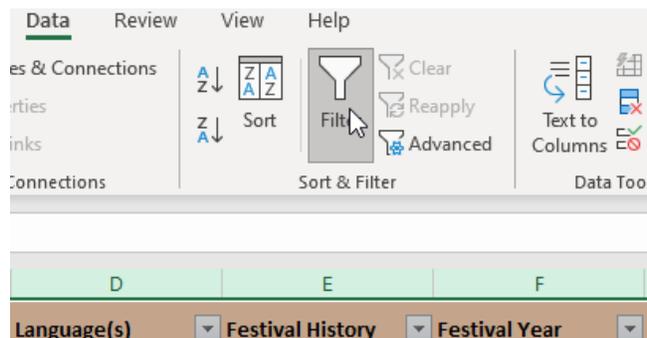
But maybe you decide you don't want things to be so wide. Another thing you can do is **single click and drag to resize a column** again – now that you've got everything selected it will automatically resize all of the columns to the exact

same width. So if you want to have all your data on the screen at once, you can shrink them all down like this. Just a very simple trick that I wish I'd learned about a little earlier.

Next trick – you may know that you can freeze rows or columns in Excel. When you're working with data it can be nice to always know what the column header is wherever you are in the worksheet. **Go to the view tab**, click the **Freeze panes button**, and tell it to freeze the first row – now you can always see the column header while you are scrolling. You can also freeze the first column, if what you want is to always see the film title.



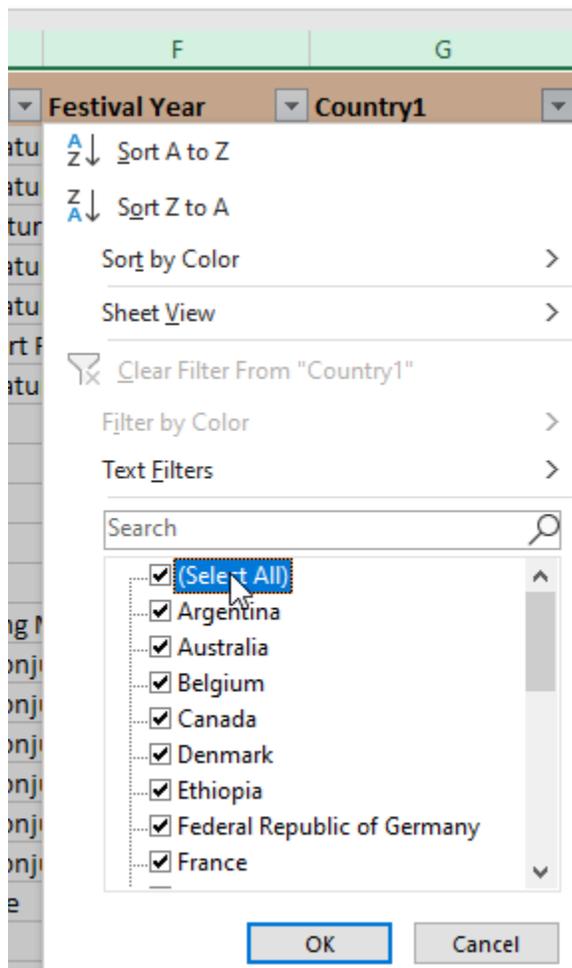
Moving into something a little more analytic – you can filter your data on characteristics in different columns, and there's a really easy way to do this. **Go to the data tab**. Click a data cell, (doesn't work if you click an empty cell) and find the **Filter** button. Every column gets this little drop-down menu at the top. And you can use these to limit and only view parts of your data. Let's say you only want to see films made in Canada.



You can filter on multiple characteristics too – let’s say you want only **Canadian films in French**. Choose one filter, then the other.

I can use filters like this to quickly narrow in on any combination of characteristics I want – so this is the place where I can start really asking questions about my data, like how many of these are there, and how many of this are also that.

Okay, let’s get back the **Canadian films in other languages**, and get back all the films using “Select All”.



By the way, if you only want to have a filter for a single column – maybe you don’t want the worksheet to be too confusing – just **select that column first, then click the filter button**. The filter will still apply to the whole worksheet, because Excel is smart enough to figure out that that’s what you probably want.

For my next couple of exercises I'm going to move over to another dataset. This is a survey of environmental issues done in the U.S. – in Carteret county in North Carolina – and it's made available as one of the sample datasets with NVivo. I'm going to be demonstrating some simple formulas.

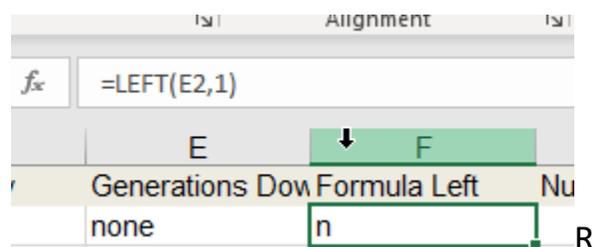
## Formulas

Now, Excel likes numbers. You can do all sorts of things with numbers – like average them. Now this survey had a question for how many generations a person's family had been “down east” that is lived in the area – so if they answered three or more their great grandparents had been living there, Let's say I want to find the average. Unfortunately the column is stored as text. Also one of the categories is “3 or more” which is kind of imprecise. You can't really average “none” with “3 or more” , but we're going to just pretend that says three. Not that a real researcher would ever do anything like that.

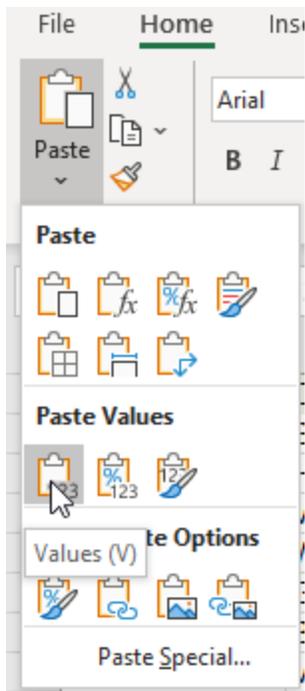
So we are going to create a numeric column by taking the first character (substring) of the text column Generations Down East – we just want number of generations

First, we'll create a new column to put the answer in (remember, never overwrite the original data!) Then click in the new column F and enter =LEFT(E2, 1)

The “=” tells Excel you are about to enter a formula and you'll move automatically to the formula bar.



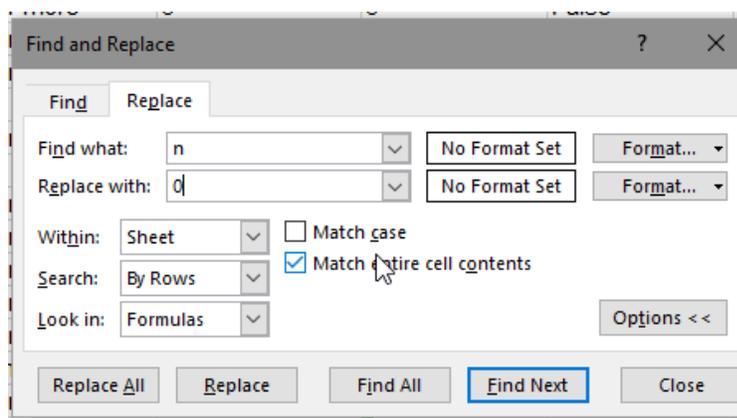
Now, you want to find and replace all the “n”s with “0”s, but it doesn't work, because each cell actually has a formula in it, not the result that's being displayed. You deal with this by **creating another new column, copying the formula column, and pasting into the new column using “Paste Values”** option under the Paste button on the “Home” tab.



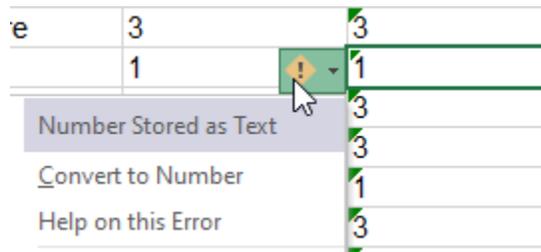
Name column “N Generations” and use find and replace to replace the “n”s with “0”s (either **ctrl+f** or use the **Find and Select** button on the Home tab.



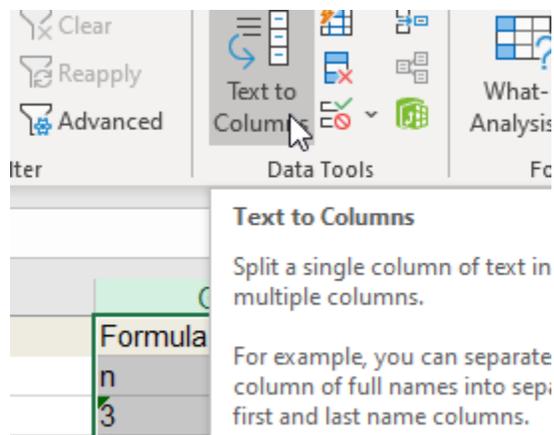
When you do this, click the “Options” button and select “Match entire cell contents” unless you want “never” in your data changed to “0ever”.



But the numbers are still stored as text because that was the original format of the column – basically, Excel at some point recorded internally that the things in this column were to be treated as text not numbers, and is stubbornly holding on to that idea despite all evidence to the contrary. There are a few ways to convert – you can do one at a time with this little button that shows up next to the column:



But a method that always works is to use the **Text to columns function on the data tab**. This function is normally used for splitting a column into multiple columns based on some delimiter, which can be useful if you, say, have two names in a field separated by a semicolon. But it also works for this. Just go through the wizard not selecting anything until the last step, and make sure **“General”** is selected as the output format.

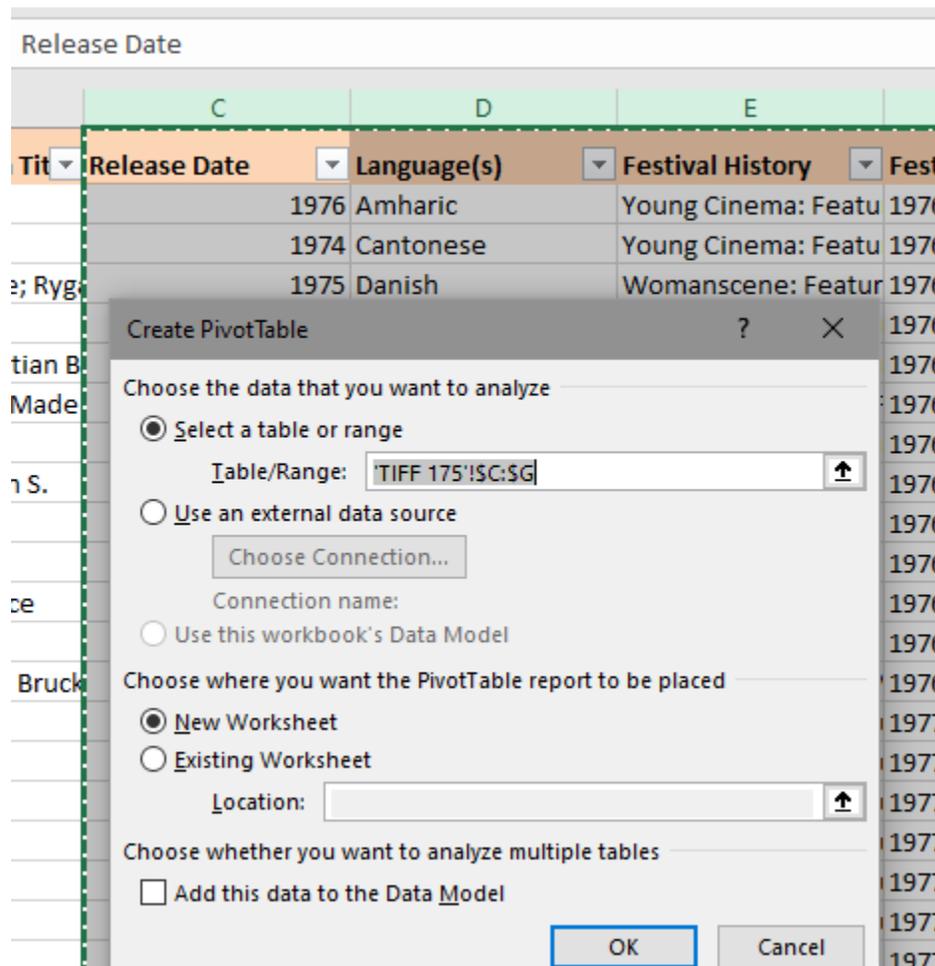


## Pivot tables

Pivot tables are handy for doing some quick data analysis and building tables. This is very basic analysis – no statistics.

Pivot tables are on the **Insert** tab

Select the columns that have the data you want to put in your pivot table. Note that you need to select a continuous range – if the columns you want are on opposite sides of the spreadsheet you need to select everything in between as well. But you don't need to use all of them in your table!



This takes you to a screen where you can actually select the data you want in your table”

## PivotTable Fields

Choose fields to add to report:



Search 

- Release Date
- Language(s)
- Festival History
- Festival Year
- Country1

More Tables...

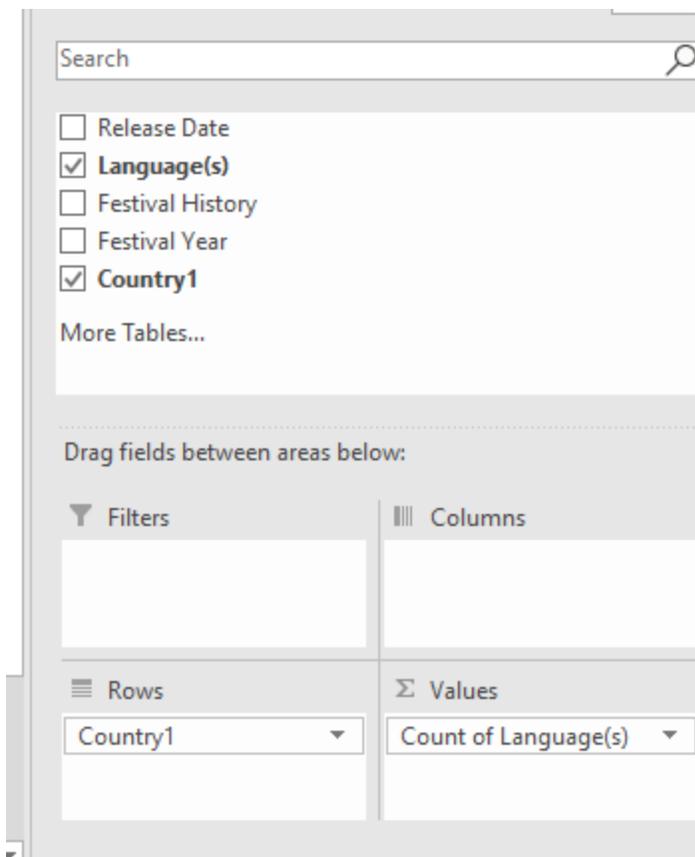
Drag fields between areas below:

 Filters

 Columns

 Rows

 Values

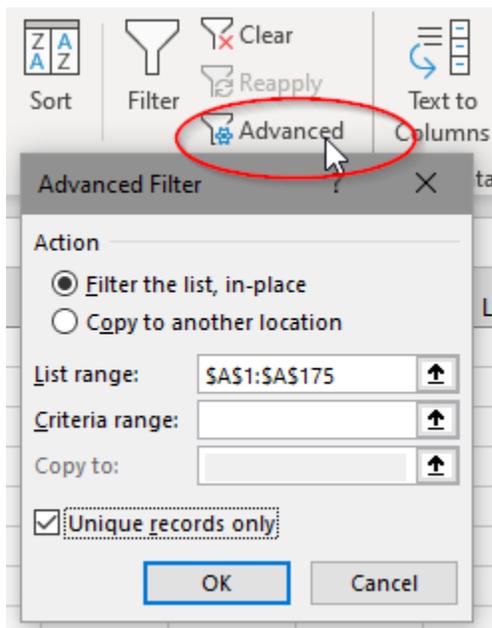


Result:

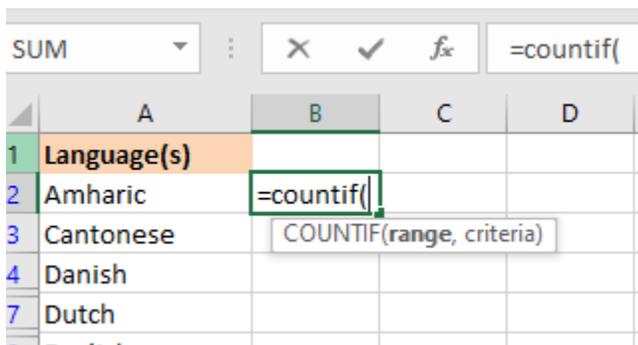
Row Labels	Count of Language(s)
Argentina	1
Australia	1
Belgium	1
Canada	38
Denmark	3
Ethiopia	1
Federal Republic of Germany	15
France	21
Germany	4
Greece	3
Hong Kong	1
Hungary	3
Iran	1
Italy	9
Japan	1
Mexico	1

Finally, I'm going to show you how to work with formulas across multiple tabs in a single worksheet. This will produce the same result as the pivot table, but there might be a reason you want to do it this way, for example to use the results as input to another formula. First we want a column in a new worksheet with one entry for each language.

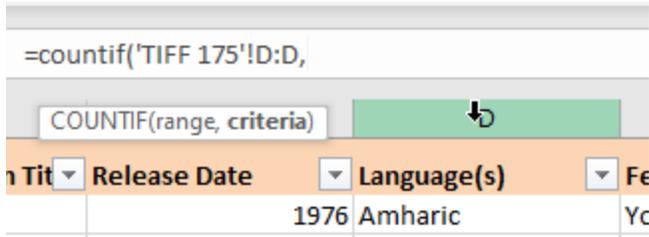
Copy language column, paste to new worksheet. Select the column, then on the data tab, next to the filter button, click **Advanced**. You want to **Filter the list in place** and return **Unique records only**.



In the next column, enter the Countif formula:



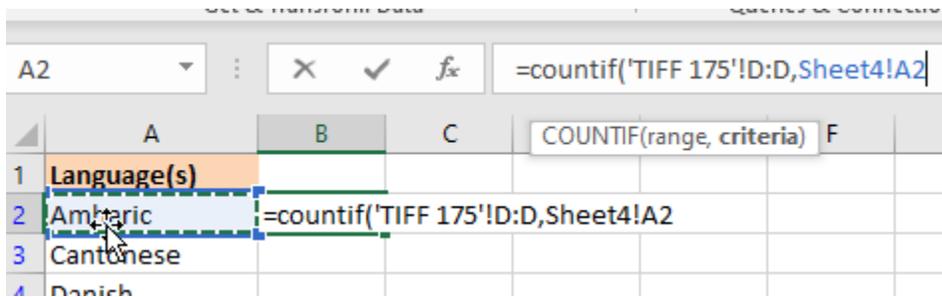
Click over to the tab with the original language column, select it, then type a comma (",")



If you don't type the comma before clicking away from this worksheet, you'll get a mess.

Click back to the new worksheet, add the criteria either by clicking on or typing A2, close the formula with `)`.

Note that Excel automatically enters the worksheet reference.



Next populate the rest of the cells with the formula either by dragging down or double-clicking on the little handle next to the cell:

