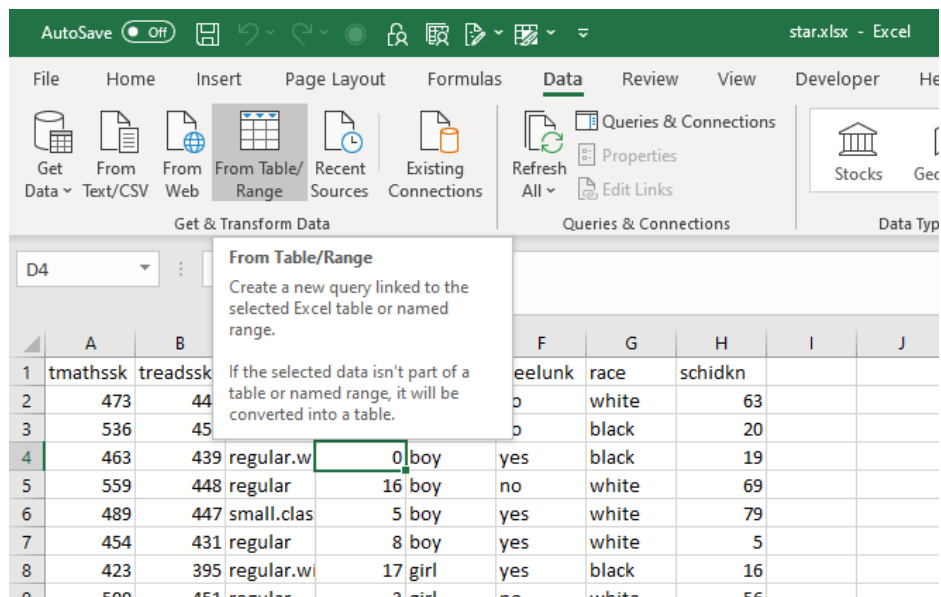


FIRST STEPS IN POWER QUERY – DEMO NOTES

Import a Table into Power Query

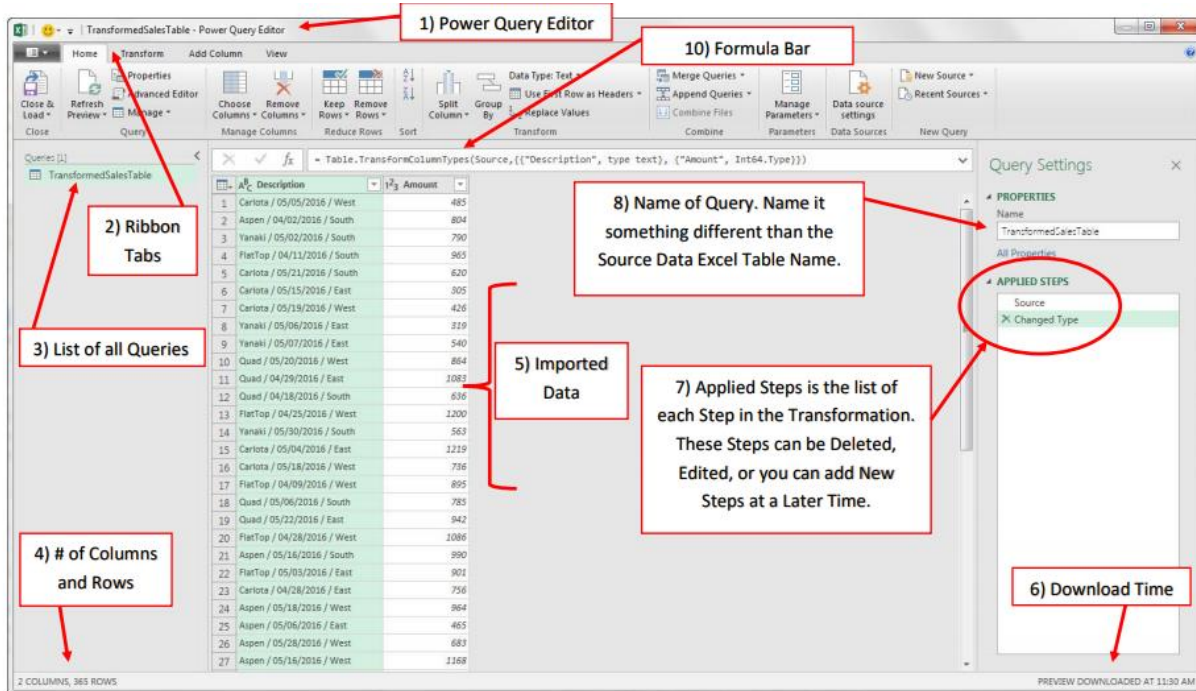
1. Leave cursor anywhere inside the range you want to select
2. On the ribbon, select Data -> From Table/Range



3. This will convert the range to a Table.
 - Ok, I think we are ready to explore Power Query, let's do so on a relatively clean dataset so we can get a nice lay of the land here and how to use the interface because it's honestly kind of disorienting and intimidating at first.
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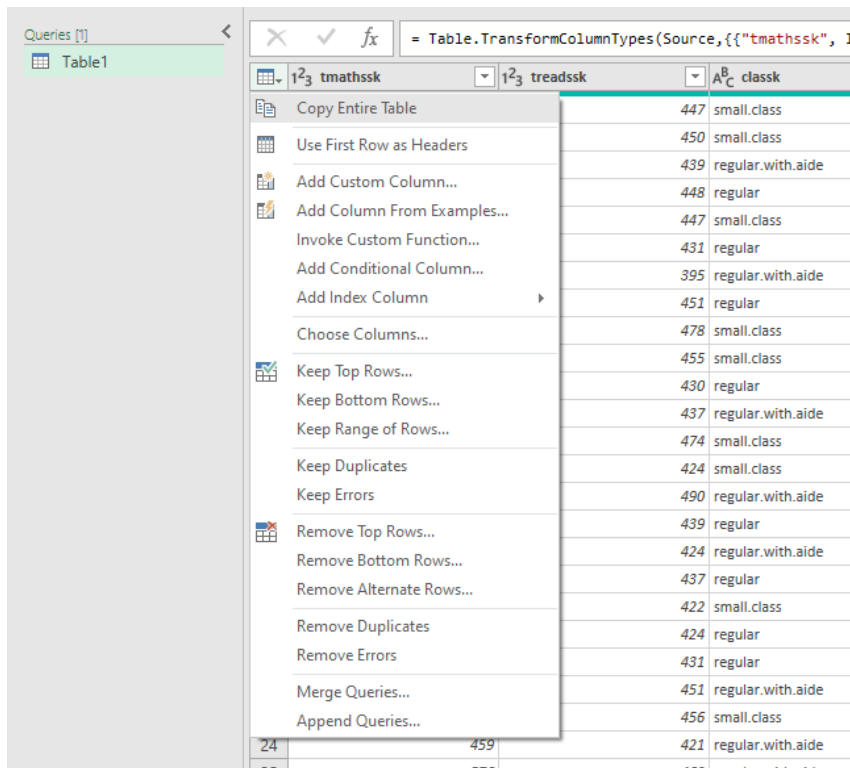


4. You will now see the Power Query Editor (source: <https://people.highline.edu/mgirvin/AllClasses/348/MSPTDA/Content/PowerQuery/003-MSPTDA-IntroToPowerQuery.pdf>)

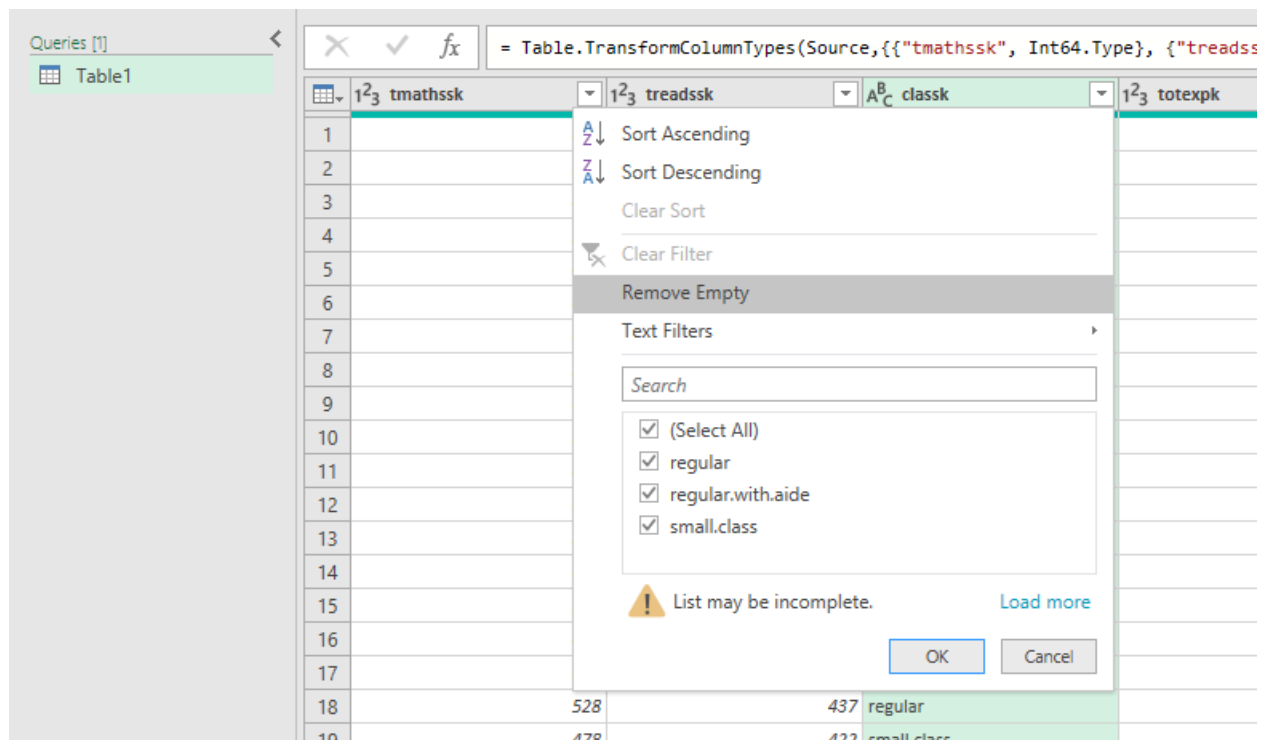


- A Home ribbon is at the top, just like in Excel. The first three tabs are going to have data cleaning functionality.
- The imported data is in the middle of the screen. We can click on rows and cells and see their values at the bottom of the screen.
- There is a small table icon in the “corner” of the dataset. Click on that and there are some shortcuts to working with this data.





- d. Click on any column drop-down and you'll see you can filter it just like in native Excel.



- e. You'll also see a symbol to the left of the column. This indicates the column's type. You can click on that to change the data type.

Queries [1] < X ✓ fx = Table.TransformColumnTypes(Source,{{"tmathssk", Int64.Type}, {"treadssk", Int64.Type}, {"class", type text}, {"sex", type text}, {"frequency", type text}})

	1 ² ₃ tmathssk	1 ² ₃ treadssk	A ^B _C classk
1	473	1.2	Decimal Number
2	536	\$	Currency
3	463	1 ² ₃	Whole Number
4	559	%	Percentage
5	489	📅	Date/Time
6	454	📅	Date
7	423	🕒	Time
8	500	🌐	Date/Time/Timezone
9	439	🕒	Duration
10	528	A ^B _C	Text
11	473	✓	True/False
12	468	☐	Binary
13	559		Using Locale...
14	494		
15	528		
16	484	439	regular

- f. You can also right-click on a column to operate on it. Hold down Ctrl and click multiple columns to operate on multiple columns.

X ✓ fx = Table.TransformColumnTypes(Source,{{"tmathssk", Int64.Type}, {"treadssk", Int64.Type}, {"class", type text}, {"sex", type text}, {"frequency", type text}})

	1 ² ₃ tmathssk	1 ² ₃ treadssk	A ^B _C class	A ^B _C sex	A ^B _C fre
1	473	447	small.class	girl	no
2	536	450	small.class	girl	no
3	463	439	regular.with.aid	boy	yes
4	559	448	regular	boy	no
5	489	447	small.class	boy	yes
6	454	431	regular	boy	yes
7	423	395	regular.with.aid	girl	yes
8	500	451	regular	girl	no
9	439	478	small.class	girl	no
10	528	455	small.class	girl	no
11	473	430	regular	boy	no
12	468	437	regular.with.aid	boy	no
13	559	474	small.class	boy	no
14	494	424	small.class	boy	no
15	528	490	regular.with.aid	boy	no
16	484	439	regular	boy	no
17	459	424	regular.with.aid	girl	yes
18	528	437	regular	girl	yes

Copy
Remove Columns
Remove Other Columns
Add Column From Examples...
Remove Duplicates
Remove Errors
Replace Values...
Fill
Change Type
Merge Columns
Group By...
Unpivot Columns
Unpivot Other Columns
Unpivot Only Selected Columns
Move



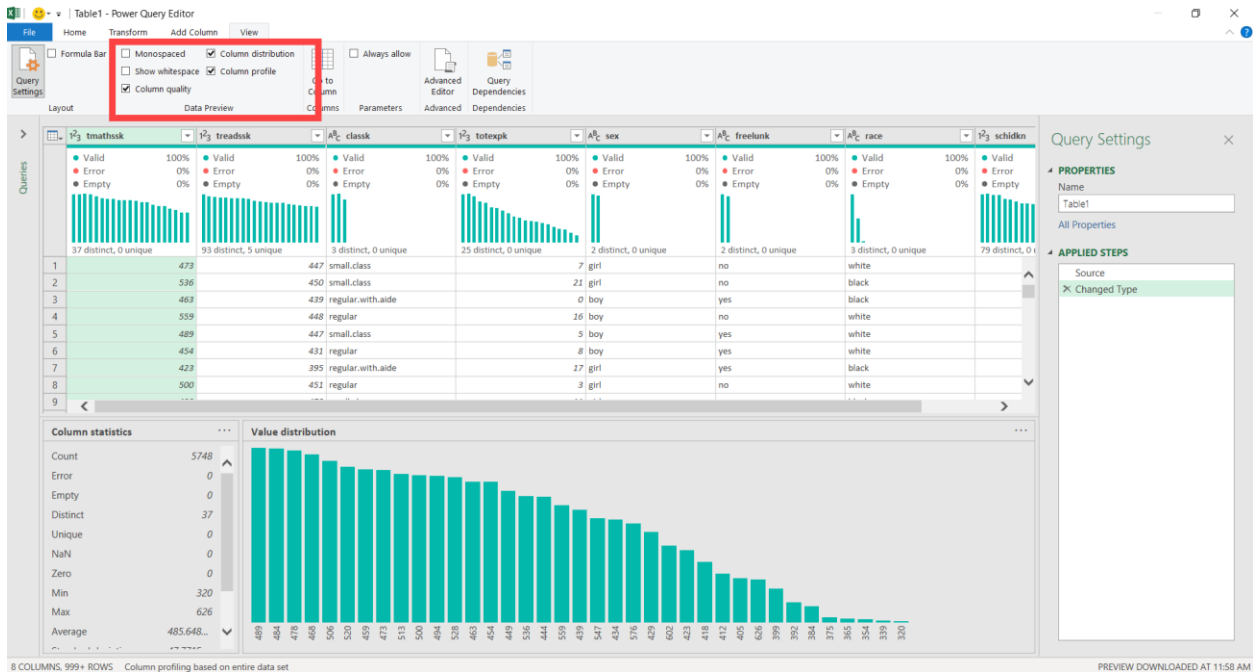
- g. Now, go to the View tab on the home ribbon.
- Initially, what you are seeing in the Power Query editor is based on the first 1,000 rows.
 - To include all data in the Data Preview, click the message at the bottom which says Column profiling based on top 1000 rows. Change to Column profiling based on entire data set.

The screenshot shows the Power Query Editor window with the 'View' tab selected. The ribbon includes options for 'Data Preview' and 'Columns'. The data preview table displays columns: tmathosk, treadsk, class, totoxpk, sex, freelunk, race, and schidkn. The status bar at the bottom indicates '8 COLUMNS, 999+ ROWS' and 'Column profiling based on top 1000 rows'. A red arrow points to this status bar message.

	tmathosk	treadsk	class	totoxpk	sex	freelunk	race	schidkn
1	473	447	small.class	7	girl	no	white	
2	536	450	small.class	21	girl	no	black	
3	463	439	regular.with.aide	0	boy	yes	black	
4	559	448	regular	16	boy	no	white	
5	489	447	small.class	5	boy	yes	white	
6	454	431	regular	8	boy	yes	white	
7	423	395	regular.with.aide	17	girl	yes	black	
8	500	451	regular	3	girl	no	white	
9	439	478	small.class	11	girl	no	black	
10	528	455	small.class	10	girl	no	white	
11	473	430	regular	13	boy	no	white	
12	468	437	regular.with.aide	6	boy	no	white	
13	559	474	small.class	0	boy	no	white	
14	494	424	small.class	6	boy	no	white	
15	528	490	regular.with.aide	18	boy	no	white	
16	484	439	regular	13	boy	no	white	
17	459	424	regular.with.aide	12	girl	yes	white	
18	528	437	regular	1	girl	yes	black	
19	478	422	small.class	8	girl	no	white	
20	559	424	regular	13	boy	yes	white	
21	454	431	regular	13	boy	no	white	
22	473	451	regular.with.aide	3	boy	no	white	
23	602	456	small.class	14	boy	yes	white	
24	459	421	regular.with.aide	11	girl	yes	black	
25	576	463	regular.with.aide	10	boy	yes	black	
26	520	425	regular.with.aide	8	girl	no	black	
27	559	522	regular	8	girl	no	white	
28	459	413	regular.with.aide	5	girl	no	white	
29	532	416	regular	13	boy	no	white	

- h. You can now change column appearance and add some statistics about each column using the Data Preview group of the View tab.





- i. To exit the Power Query editor, hit the X on the upper-right. You can discard your changes for now.
- i. This will return you to “classic” Excel.

