coursera

☰ **Item Navigation**

Wide to long with tidyr

When organizing or tidying your data using R, you might need to convert wide data to long data or long to wide. Recall that this is what data in a wide format looks like in a spreadsheet:

	A	B	C	D	E	F	G	H	
1	Country Name	2010 [YR2010]	2011 [YR2011]	2012 [YR2012]	2013 [YR2013]	2014 [YR2014]	2015 [YR2015]	2016 [YR2016]	20
2	Antigua and Barb	88028	89253	90409	91516	92562	93566	94527	
3	Argentina	40788453	41261490	41733271	42202935	42669500	43131966	43590368	
4	Aruba	101669	102046	102560	103159	103774	104341	104872	
5	Bahamas, The	354942	359577	363584	367168	370633	374206	377931	
6	Barbados	282131	282987	283700	284296	284825	285324	285796	
7	Belize	322464	330237	338000	345715	353366	360933	368400	

Wide data has observations across several columns. Each column contains data from a different condition of the variable. In this example, different years.

Now check out the same data in a long format:

	A	B	C
1	Country Name	Year	Population
2	Antigua and Barb	2010	88028
3	Antigua and Barb	2011	89253
4	Antigua and Barb	2012	90409
5	Antigua and Barb	2013	91516
6	Antigua and Barb	2014	92562
7	Antigua and Barb	2015	93566
8	Antigua and Barb	2016	94527
9	Antigua and Barb	2017	95426
10	Antigua and Barb	2018	96286
11	Antigua and Barb	2019	97118
12	Argentina	2010	40788453

And, to review what you already learned about the difference, **long data** has all the observations in a single column, and variables in separate columns.

The pivot_longer and pivot_wider functions