# HWA 1: Data cleaning, reshaping and visualization in Excel & Python

Excel Data Cleaning process

1. I first installed the Tableau for Excel Add-in.
2. Select the first data column “B2”
3. Select “Reshape Data” on the tableau menu
4. Have “$B$2” selected in the window and hit OK
5. Now the data is in long format.
6. Then In order to split Col2 into Year and Event I had to use…
7. Insert a new column after “B” column
8. Select the whole B column
9. Data tab in Excel
10. “Text-to-Columns”
11. Select: “Delimited” -> Hit next
12. Select only “Space” -> Hit next
13. Select Finish
14. Rename the column headers to “State”, “Year”, “Event”, “Rate”
15. Remove all metadata

**Visualization**

I created a few Visual Basic scripts within Excel to help me create the visualizations I desired.

I made two visualizations:

1. Average Rates of Marriage/Divorce
2. Average Divorce/Marriage by Year

I believe these two effectively visualized the data and allows you to see the trend.

**The Visual basic code is provided in the GITHUB link.**