HW2.3 CONSOLIDATION

You consider a career as a Business Analyst and trying to make sense of the job market. What companies, industries, and geographies would make sense to pursue?

You got hold of the data on open Business Analytics positions in the US. There are already three files collected and you expect to receive more. You want to make a dashboard in a way so it automatically updates upon adding new files. This can be achieved by using a power query to consolidate the data.

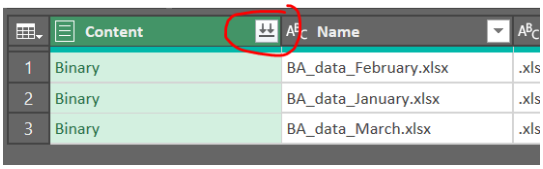
1. GET ACQUAINTED WITH THE RAW DATA

Let's first have a look inside any of the BA_data files. It is practically a collection of info about open positions from a database. There is information about the position, salary estimate, and some characteristics of the employer. Also, there is a file **states.xlsx** that matches cities to the states so you can conveniently analyze the data by geography.

2. CREATE A POWER QUERY TO

i. Consolidate all the data files with Business Analytics jobs.

➥ *instead of the lengthy procedure shown in the video, just try to hit this button and see what happens*



ii. Merge it with the 'states' file to associate the location of each job with a state. This will make possible analytics by state.

➥ *remember to save the same-formatted data files in one folder and the file with the states in another folder*

iii. Calculate the average salary so you can analyze it with the dashboard. It's important do perform this calculation in the power query, so it will be automatically updated with new data.

➥ *you may find the following functions of the power query useful:*

- **Add Column ⇒ Extract ⇒ Text between delimeters**
- **Transform ⇒ Data type**
- **Add Column ⇒ Custom column** *(there you can write an equation for average calculation)*

3. BUILD AN INTERACTIVE DASHBOARD

Include the following graphics into the dashboard:

i. Average salary by sector & amount per sector
ii. Average salary by state & amount
iii. Top 10 jobs

➥ *the first two graphs would be the most useful if done as combo-charts with two series displayed with different vertical axes*

➥ *you can sort bar / column charts by right-clicking on bars on the graphs and choosing **Sort***

Create slicers (at least two different) that would affect all the graphics of your dashboard. Play with slicers to get insight from the data (remember that you can select multiple items in the slicer).

- *you can play with the style of slicers (when a slicer is selected: **Options ⇒ Slicer styles ⇒ New Slicer Style…**)*

5. GET INSIGHT FROM THE DATA

Shortly answer the following questions and save your answers in a text box placed below the dashboard

i. In which state are salaries higher? Could it have something to do with Silicon Valley?
ii. What are the top three sectors that give higher salaries? Are there plenty of jobs there? Which sector breaks the record for the number of jobs? Are salaries high there?
iii. Any familiar company names among the top 10 job offers?
iv. How does the entire situation change (on all graphs) if only $10B+ companies are chosen?
v. Based on these insights and your personal preferences, what would be your job application strategy?

With that new knowledge, I would not be stressed anymore about that interview.

Grading and self-check	**Total points: 6**
Power query exists, it combines the files from the folder and mergers them with states.xlsx	1
Average salary calculation is done in the power query (steps of creating new columns are visible there)	1
Dashboard is attempted (some graphs and connected slicers are there, even if the content is wrong)	1
The combo graphs are done and make sense (check that salary levels and amount of jobs on the axes are reasonable, if not, maybe you used the wrong operator)	1
Questions are answered	1
The dashboard looks tidy and stylish	1