Making Comparisons with DV4L

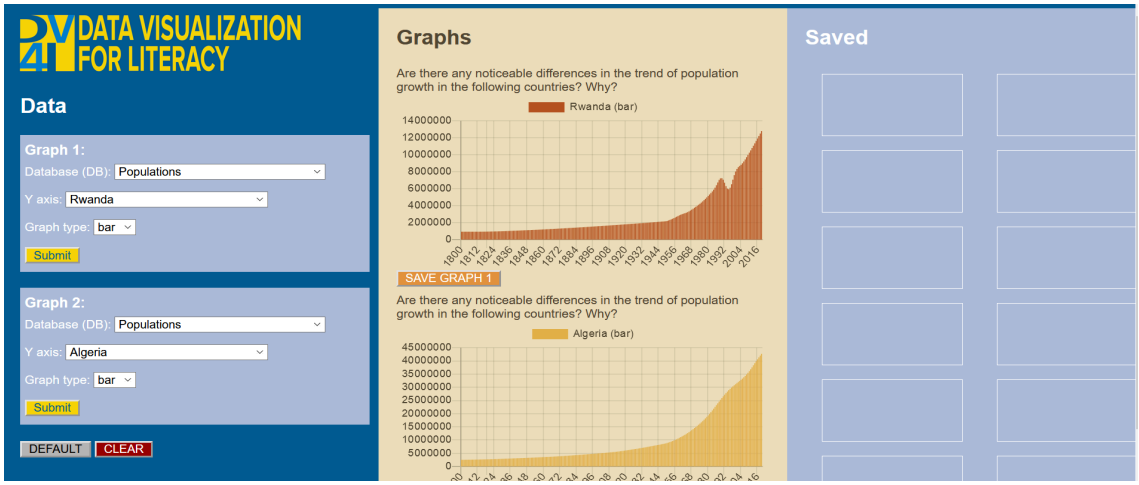
In this project, we will be using a data visualization tool for historical inquiry called DV4L (Data Visualization for Literacy). DV4L uses preloaded datasets to make comparisons between two graphs. It also has a feature that allows the user to save up to twelve graphs for later comparisons if desired.

1. First, look at this modified ***dataset*** (includes *continent* life-expectancy data) from the UN -- click here (https://bit.ly/35pVMsx).

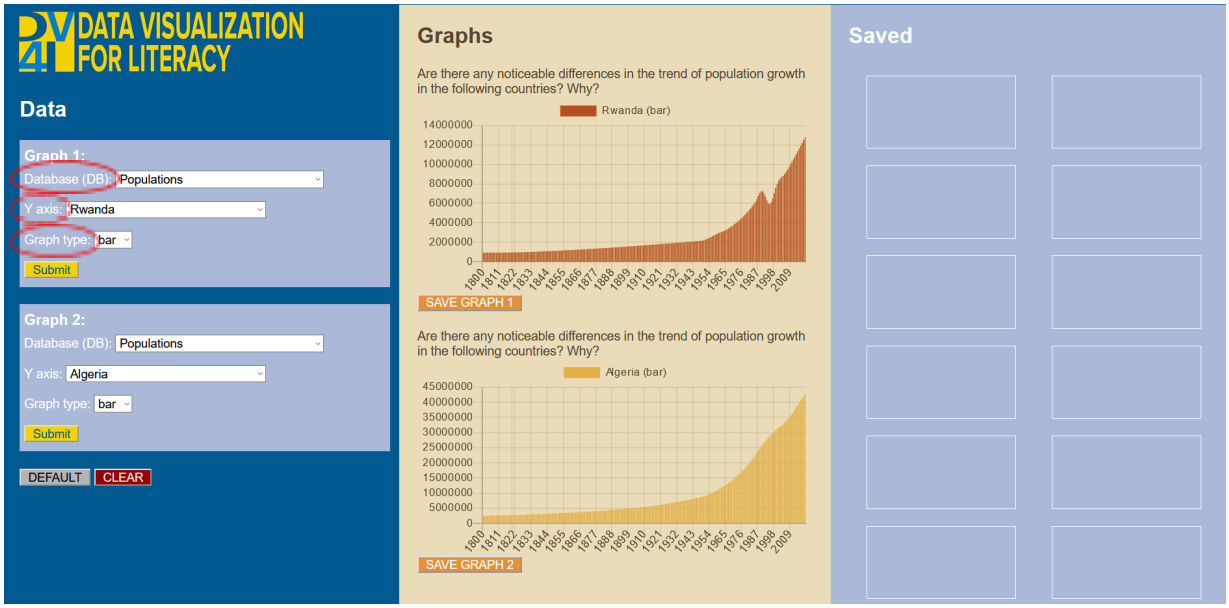
   Take a moment to think about the data:
   - ***How many rows of data are there?***
   - ***What's the minimum and maximum life-expectancy for each continent?***

   Then, discuss these and any other questions you have with your partner.

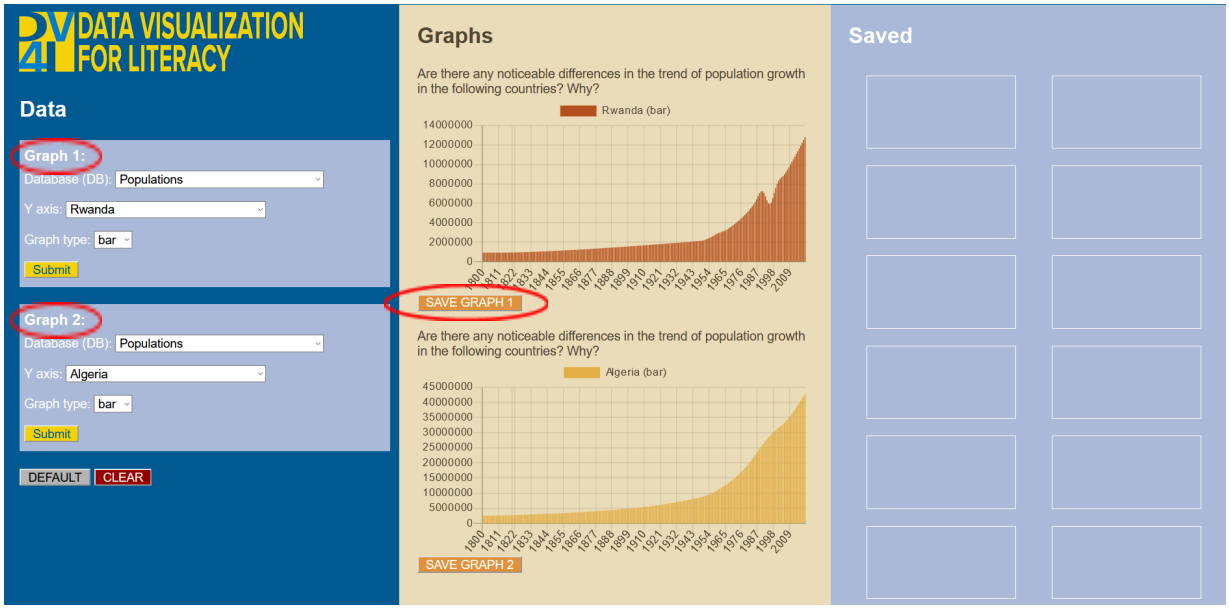
2. Now click on this link (http://historyindata.org/dv4l/). It will take you to the DV4L website. It should look like this:



3. Choose from the drop-down options on the top left under "Graph 1", starting with a **database** of interest, then a country of interest (**y-axis**). Next, choose the way you would like the data to be displayed (**Graph Type**). Note that the horizontal or x-axis of all graphs is always the year range. Finally, click 'Submit' to view Graph 1, which will plot in the middle top area of the screen. If you leave any of the drop-down options blank, you will not be able to click 'Submit' and plot your graph.



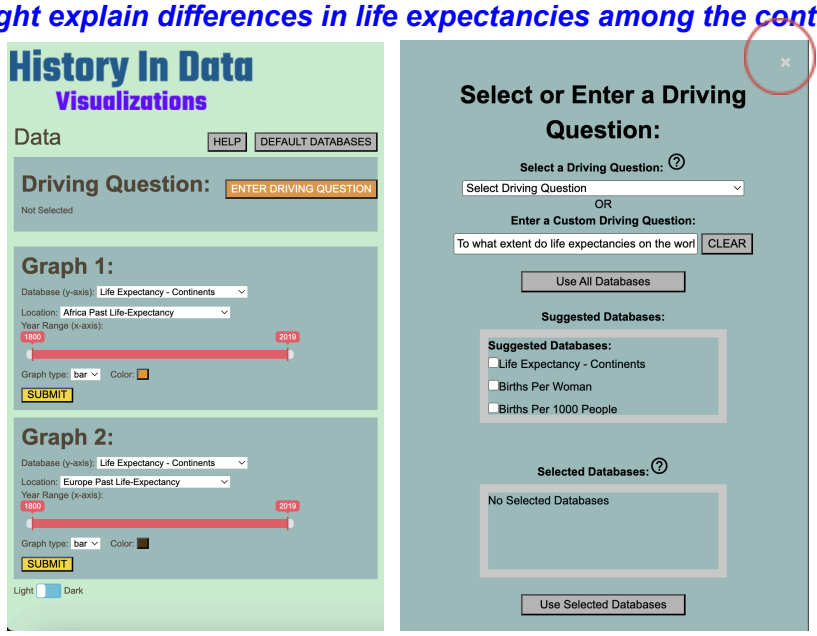
4. Repeat everything in Step 3 for Graph 2 which will plot underneath Graph 1 in the middle of the screen. Note that you can click on ‘SAVE GRAPH’ below each graph, which will save a copy on the right side of the screen.



5. In preparation for the next activity, enter the following questions driving questions. To do so, click “ENTER DRIVING QUESTION in the top left portion of the screen. Type of paste the driving questions in the field under “Enter a custom driving question.” Then click the X at top right to exit.

To what extent do life expectancies on the world’s continents differ?

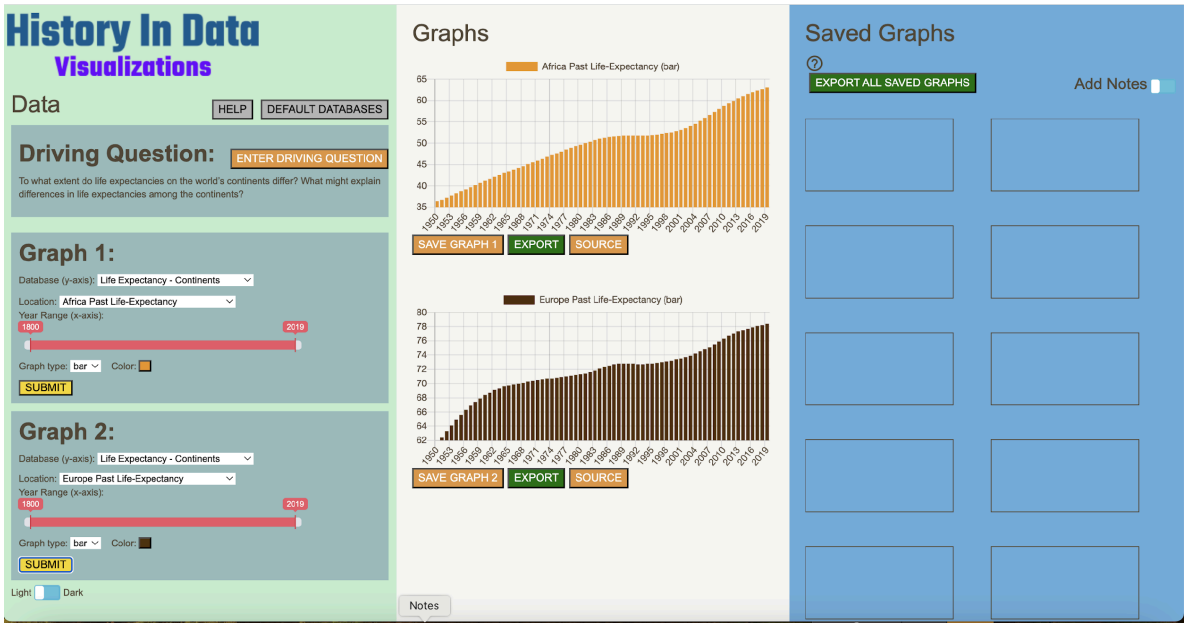
What might explain differences in life expectancies among the continents?



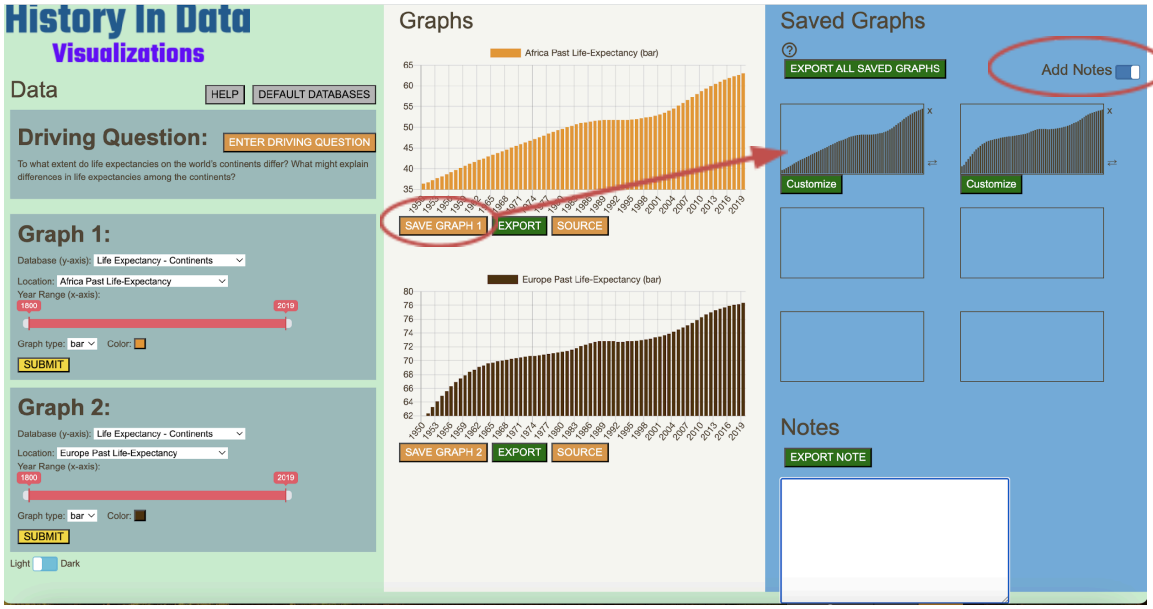
6. Now begin further exploring data associated with these questions. Choose “Life Expectancy-Continents” from the **Database** drop down menu options for both Graph 1 and Graph 2.

   For the **y-axis**, choose ‘Africa Past Life-Expectancy’ in Graph 1, and ‘Europe Past Life-Expectancy’ in Graph 2.

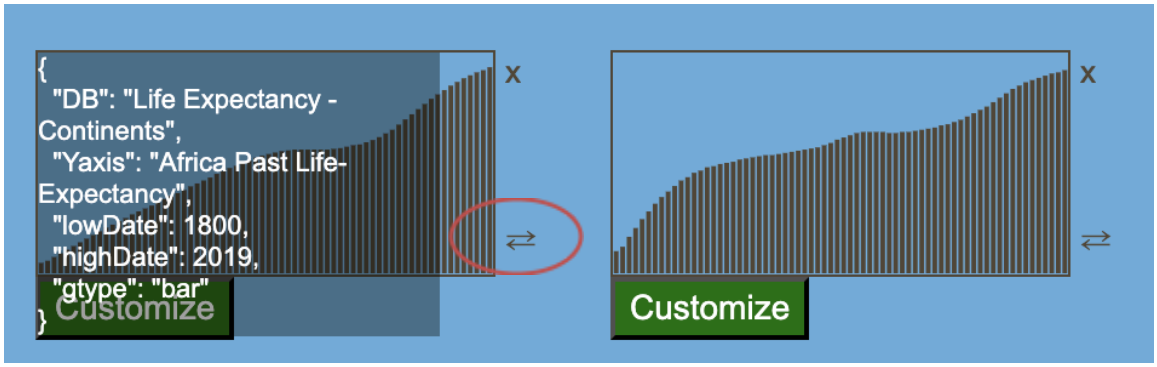
   For the **Graph type**, choose either option you prefer for both Graph 1 and 2 and click ‘Submit’. You should have something like this:



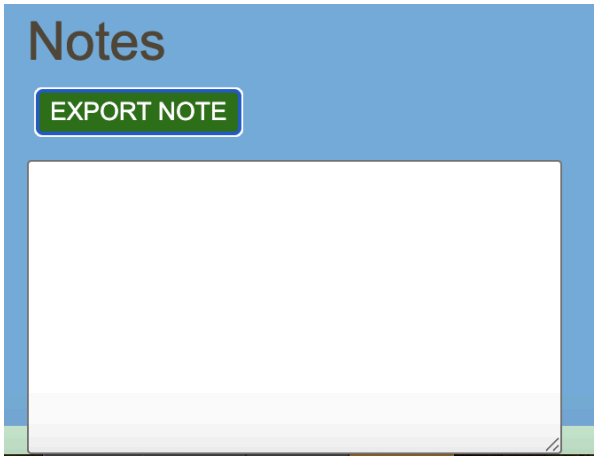
7. Study the graphs carefully. Make sure you pay attention to the numbers on the x- and y-axis. You'll notice, for example, that the age range on the y-axis is not the same for each graph. This is important for your analysis. Save each of the graphs by clicking "SAVE GRAPH 1" and "SAVE GRAPH 2" and dragging it to an empty box on the right. Toggle on "ADD NOTES" in the top right of your screen and answer the **first driving question** based on your reading of the graphs on Africa and Europe.



8. Now look at the Past Life-Expectancy of other continents. With each new graph, drag it to your saved graphs and take notes on your observations, addressing the first driving question. Remember that you should always pay attention to the x- and y-axis!
NOTE: If you ever want to remember which graph you're looking at in the saved graphs, you can click on it and information about the graph will appear. If you want to move the graphs around you click on the arrows next to the graph and drag it to another box.



9. When you've finished, answer your driving question on a separate sheet of paper. You can also export and print your notes for your teacher.


Notes
EXPORT NOTE