Assignment 1

Exercise 1

- Read the Getting Started section of the Altair documentation
- Install the Python packages `altair`, `vega_datasets`,and `pandas` - preferably into a dedicated virtual environment.
- Check whether you can run the examples in the demo Jupyter Notebook.

Exercise 2

Visually analyze the relationship between life expectancy and the GDP per capita (e.g. average income per person) using the data set `wdi.csv` for just the year 2020.

- How would you describe the visual pattern?
- Look critically at the visualization: list all aspects that you would like to improve on, e.g. to make the plot better readable, more insightful, or more beautiful. Then order these aspects according to how important you consider them.
- Try to address these aspects one by one. Take yourself time to look into various resources and online help to solve these aspects, e.g. today's demo script, chapter 1 and other resources.
- Note down for yourself your most important issues and observations: (1) problems, (2) strange or unexpected syntax or output, and (3) gained insights. We will discuss these in the next lecture.

Exercise 3

If time allows, conduct a visual exploration of other aspects of the WDI data set, according to your interests.