



COMP 150: Plotting Review

Week 11, Lab 07



1. Create a report and a colab notebook.
2. In the colab notebook, import:
 - a. `plotly.express` as `px`
 - b. `pandas`
 - c. `seaborn`
3. Task 1: Timeseries plots and multi-line line graphs
 - a. Upload the given CSV “stockdata.csv” into colab and import it as a dataframe
 - b. Make one line plot where the x-axis is the date and the y-axis is the cost (there will be multiple lines). Put this figure into your report.
 - c. Report the date and value when the cost of each stock was at its minimum and maximum
 - i. Hint: you can use `dataframe.describe()` to get started on this task
 - d. Report the precise value of each stock on the date “2016-01-11” and “2015-06-15”
 - i. Hint: you will want to use a filter, such as `df[df[“column”] == value]`

4. Part 2: Categorical Data

- a. Upload the given CSV “WorldPopulationByCountry.csv” into colab and import it as a dataframe
- b. Describe this data. What is in it?
- c. Report on the top 10 countries with the highest current (2025) population
 - i. Hint: since the data is already sorted, you can use `.head(10)`
- d. Report on the top 10 countries with the highest growthRate
 - i. Hint: you can use `.nlargest(n = 10, columns = [“growthRate”])`
- e. Produce a scatter plot where the x-axis contains the population density and the y-axis contains the growthRate. Copy this figure into your report. Add the country’s name to the hover text for each point.
 - i. Hint: you can add `hover_data = “country”` to achieve this!