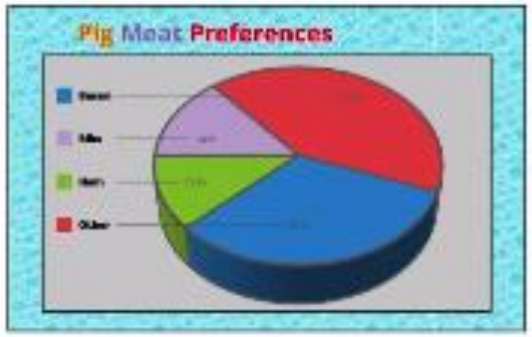
Visualizing Data with Python

Module 4

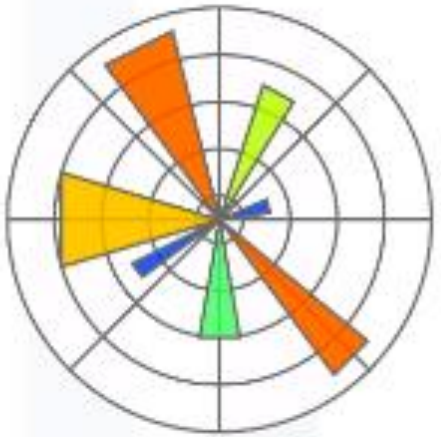
Part 1
Part 2
Part 3

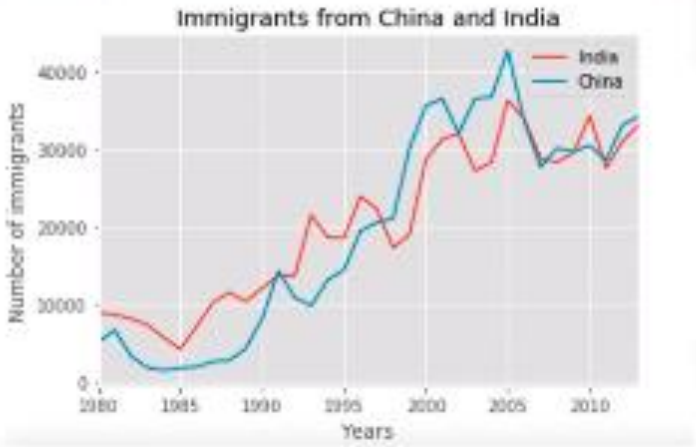
Part 1

Before

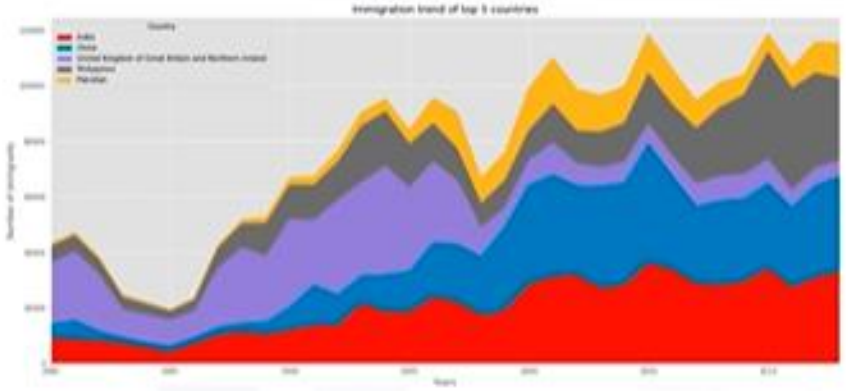


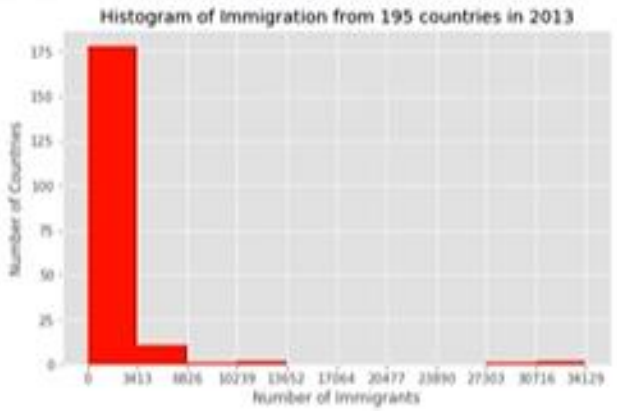
After

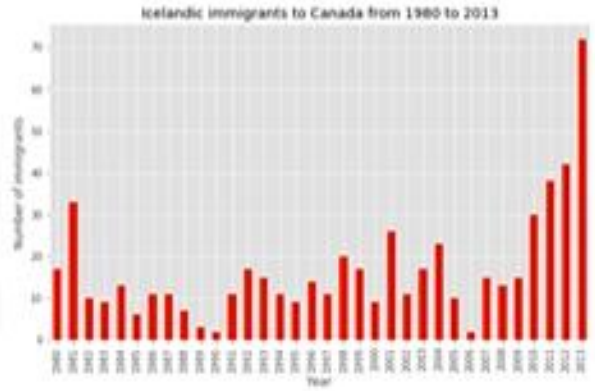




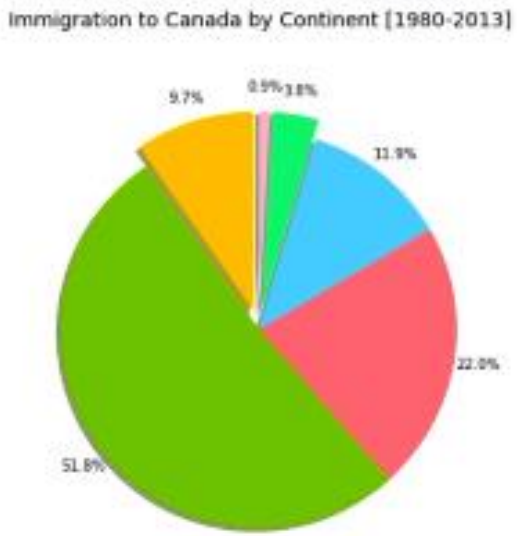
Part 2

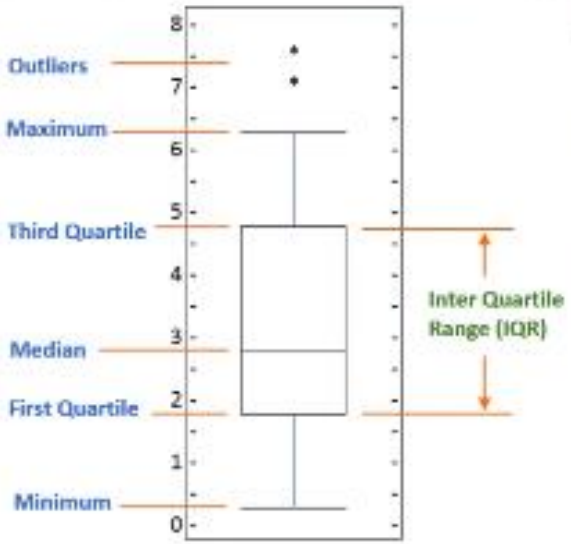


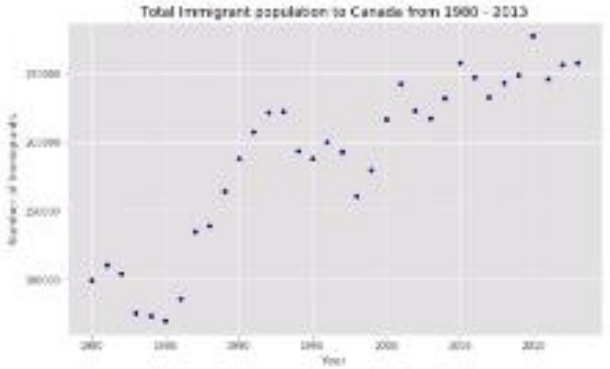

Histogram of Immigration from 195 countries in 2013
Number of Countries
Number of Immigrants


Icelandic immigrants to Canada from 1980 to 2013
Year

Part 3


Immigration to Canada by Continent [1980-2013]
9.7%
0.9%
3.8%
11.9%
22.0%
51.8%


Outliers
Maximum
Third Quartile
Median
First Quartile
Minimum
Inter Quartile Range (IQR)
8
7
6
5
4
3
2
1
0


Total Immigrant population to Canada from 1980 - 2013

Brazil
Argentina

Structure

- Part 1: Introduction to Visualization Tools – best practices, basic plotting with Matplotlib, line plots
- Part 2: Basic Visualization Tools – area plots, histograms, bar charts
- Part 3: Specialized Visualization Tools – pie charts, box plots, scatter plots, bubble plots

Learning Objectives

- Data visualization and some of the best practices when creating plots and visuals.
- The history and architecture of Matplotlib, and how to do basic plotting with Matplotlib.
- Generating different visualization tools using Matplotlib such as line plots, area plots, histograms, bar charts, box plots, and pie charts.