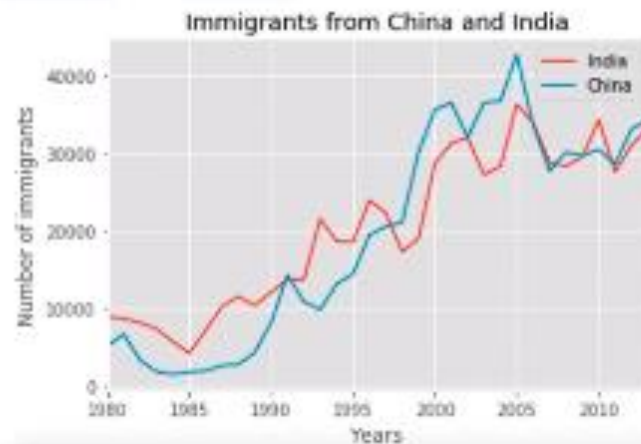
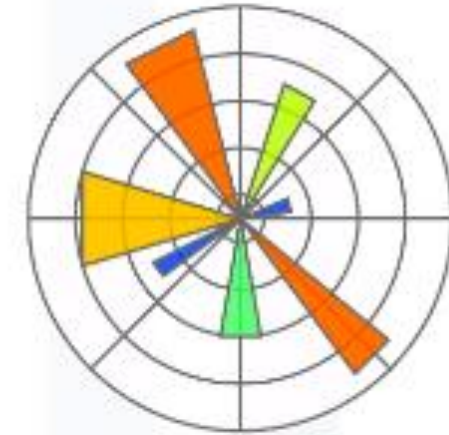


Visualizing Data with Python

Module 4



Part 1



United Nations
Population Division
Department of Economic and Social Affairs

International Migration: Trends and Challenges: The 2011 Revision

2011 Revision (2011) - Copyright 2011 United Nations. All rights reserved.

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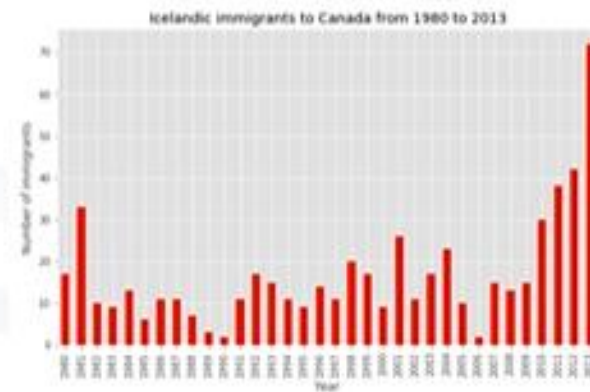
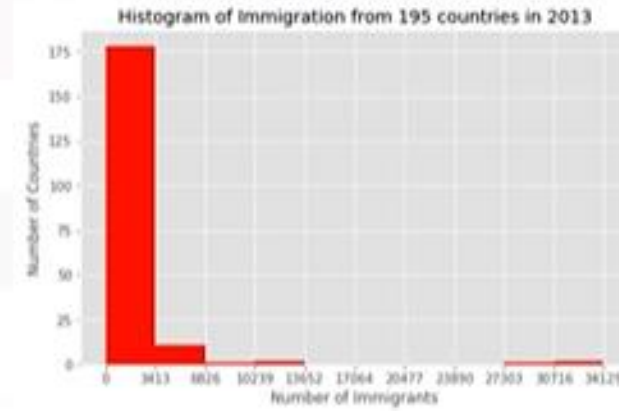
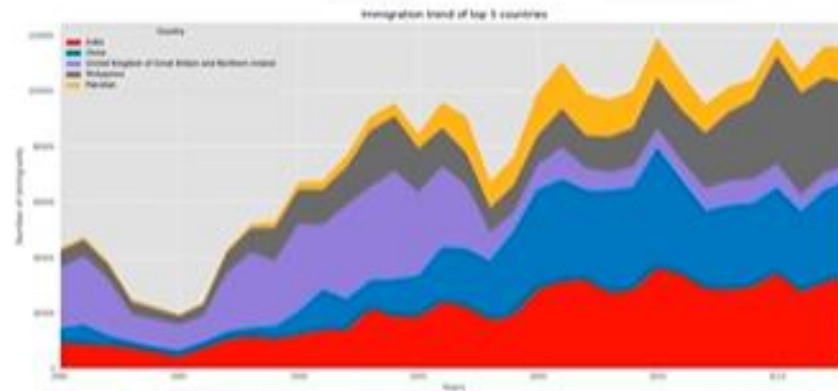
For more information, please contact the United Nations Population Division.

Working Group: Global

Working Group: Global

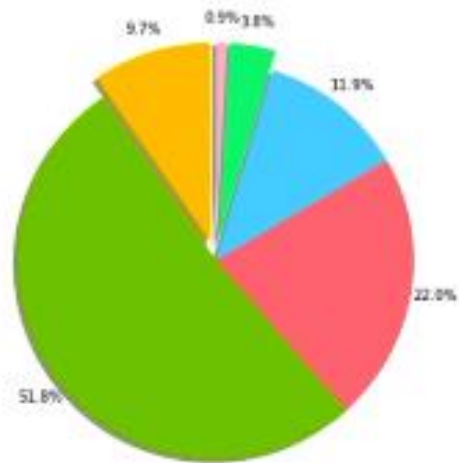
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India	Asia	1,100,000,000	1,100,000,000	0	0	0	0	0
United States	North America	300,000,000	0	300,000,000	0	0	0	0
Germany	Europe	80,000,000	0	80,000,000	0	0	0	0
Japan	Asia	125,000,000	125,000,000	0	0	0	0	0
United Kingdom	Europe	60,000,000	0	60,000,000	0	0	0	0
France	Europe	62,000,000	0	62,000,000	0	0	0	0
Italy	Europe	60,000,000	0	60,000,000	0	0	0	0
Spain	Europe	45,000,000	0	45,000,000	0	0	0	0
Canada	North America	32,000,000	0	0	32,000,000	0	0	0
United States	North America	300,000,000	0	300,000,000	0	0	0	0
China	Asia	1,392,000,000	1,392,000,000	0	0	0	0	0
India	Asia	1,100,000,000	1,100,000,000	0	0	0	0	0
United States	North America	300,000,000	0	300,000,000	0	0	0	0
Germany	Europe	80,000,000	0	80,000,000	0	0	0	0
Japan	Asia	125,000,000	125,000,000	0	0	0	0	0
United Kingdom	Europe	60,000,000	0	60,000,000	0	0	0	0
France	Europe	62,000,000	0	62,000,000	0	0	0	0
Italy	Europe	60,000,000	0	60,000,000	0	0	0	0
Spain	Europe	45,000,000	0	45,000,000	0	0	0	0
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Part 2

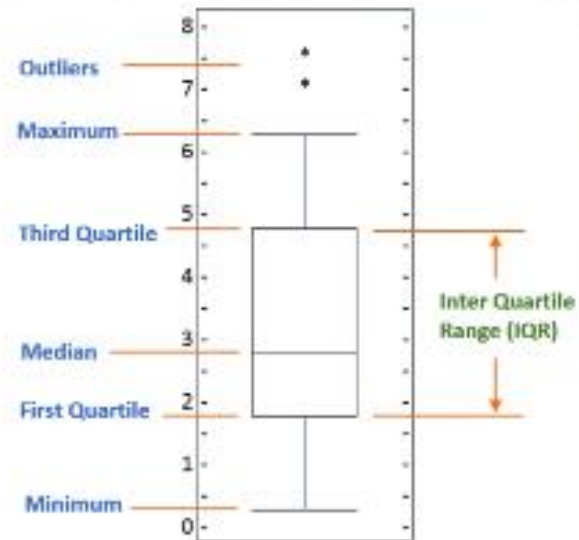
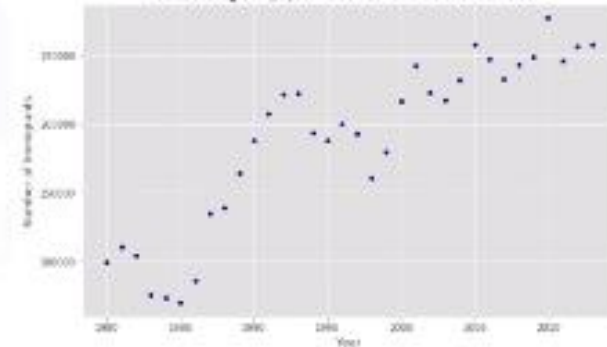


Part 3

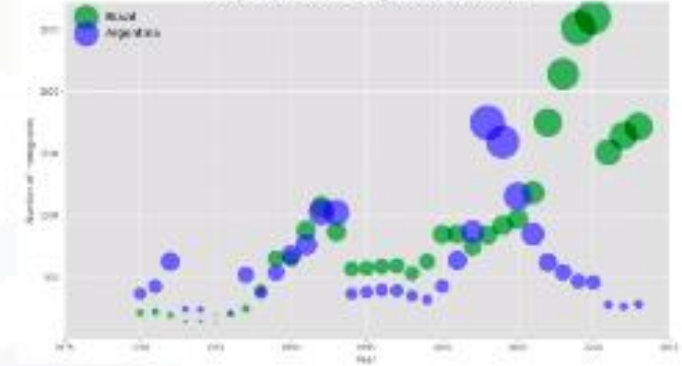
Immigration to Canada by Continent [1980-2013]



Total Immigrant population to Canada from 1980 - 2013



Immigration from Brazil and Argentina from 1980 - 2013



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.