

Matplotlib Visualization Tasks for Health Indicators

1. Histogram of Life Expectancy by Region

Task: Create histograms to visualize the distribution of life expectancy for each region.

Tools: Use `matplotlib.pyplot.hist()` to create the histograms and organize subplots for different regions.

2. Scatter Plot of Life Expectancy Correlation

Task: Plot a scatter plot showing the correlation between low and high life expectancy values.

Tools: Use `matplotlib.pyplot.scatter()` with appropriate labels and a trendline using `numpy.polyfit()` for visualizing correlation.

3. Bar Chart of Average Life Expectancy by Gender

Task: Visualize the average life expectancy for males and females across countries using a bar chart.

Tools: Use `matplotlib.pyplot.bar()` for the bar chart, with gender-specific data.

4. Boxplot for Outlier Detection

Task: Create boxplots to identify outliers in life expectancy for each gender or region.

Tools: Use `matplotlib.pyplot.boxplot()` with different categories (e.g., gender or region).

5. Line Plot for Trends Over Time

Task: Generate a line plot to show the trend of average life expectancy over time for a specific region or country.

Tools: Use `matplotlib.pyplot.plot()` to draw the trend lines, adding markers for significant points.