Week 3 Group Assignment

Data Visualisation and Communication

**Task 1:** Based on your analysis, groups should create a compelling data story using Tableau, [Data Wrapper](https://www.datawrapper.de/), or Python. These visualisations should be engaging and easy to understand for the identified stakeholders.

*Note:* Additionally, to choosing an appropriate graph, you should also consider how correct it is. For example, think whether you have an appropriate title, axes labels, legend. Think about whether the colours/shapes you are using are easily identifiable.

**Task 2:** Write a brief guide on how you decided which visualisations to use. Write an interpretation of each of the figures presented.

**Task 3:** You should finalise a small report with your conclusions and recommendations. Please add here all your work throughout the three weeks. This should start with problem formulation, data collection, data quality, analysis, and finally, recommendations.

*Note:* the report should have no more than 2-3 pages in total without figures.

--

Visualizations:  
**1. Life Expectancy Histogram**

* **Why chosen**: This gives a clear overview of how life expectancy is distributed across the dataset, identifying skewness or clustering.
* **Interpretation**: The histogram reveals that most countries have life expectancy values between 60 and 80 years, indicating significant global health improvements but also disparities at lower ends.

**2. Scatter Plot (Life Expectancy vs. Health Expenditure)**

* **Why chosen**: Scatter plots are ideal for demonstrating relationships between two continuous variables. This plot highlights how countries with higher health expenditure tend to have longer life expectancies.
* **Interpretation**: A clear positive correlation is observed, suggesting that investment in healthcare correlates with better life expectancy. However, diminishing returns are evident beyond a certain threshold.

**3. Stacked Bar Chart (Life Expectancy and Unemployment by Region)**

* **Why chosen**: This visualization provides a regional comparison, showing the sum of life expectancy and unemployment for different areas.
* **Interpretation**: The chart reveals stark differences between regions, such as Europe & Central Asia having the highest total life expectancy, while Sub-Saharan Africa exhibits high unemployment alongside lower life expectancy.