**Case Study**: Analyzing the Impact of Income on Life Expectancy

**Introduction**:

Life expectancy is a critical indicator of the overall well-being and health of a population. It is influenced by various factors, including income levels. This case study aims to analyze the relationship between income and life expectancy, with a specific focus on comparing the United States and Europe, which have high life expectancies, with Africa, where life expectancy tends to be lower.

**Objective**:

The primary objective of this case study is to investigate the influence of income on life expectancy and to understand the disparities in life expectancy between the United States and Europe compared to Africa.

**Data Collection and Preparation**:

Data sources were collected, including income data and life expectancy data by country. The data underwent rigorous cleaning and preprocessing to ensure data quality and consistency. Initial EDA revealed insights into the dataset, including trends and correlations. Visualizations were created to showcase key metrics related to income and life expectancy. The study explored the key factors that could influence life expectancy, such as income levels, healthcare infrastructure, lifestyle factors, and access to quality healthcare.

**Analysis**:

The study explored external factors, such as healthcare policies, economic development, and cultural practices, and assessed their impact on life expectancy in the studied regions all tied to income levels which varied from high income, upper middle income, lower middle income, and low income.

**Conclusion**:

This case study highlights the significant impact of income on life expectancy, illustrating the disparities between regions with high life expectancies, such as the United States and Europe, and regions with lower life expectancies, such as Africa. It underscores the importance of addressing income inequality to enhance overall well-being and life expectancy.

**Resources:**

https://www.kaggle.com/datasets/mjshri23/life-expectancy-and-socio-economic-world-bank