**Global Happiness and Economic Growth: Analyzing the Key Factors Driving National Well-Being**

#### **Purpose**

This project aims to analyze the key factors influencing national happiness and assess how happiness impacts economic growth. The study examines how economic production, social support, life expectancy, freedom, corruption levels, and generosity contribute to a country's overall happiness by examining World Happiness Data Set data. Additionally, it investigates the relationship between happiness and a nation's economic performance, providing insights that can inform policymaking and development strategies.

#### **Dataset**

The dataset originates from the **Gallup World Poll** and includes happiness scores and rankings for various countries. It quantifies the influence of six major factors:

* **Economic Production (GDP per capita)**
* **Social Support**
* **Life Expectancy**
* **Freedom to Make Life Choices**
* **Absence of Corruption**
* **Generosity**

Each factor represents a country's deviation from a hypothetical "Dystopia," a baseline with the lowest recorded values for these variables. While these factors do not directly contribute to the final happiness score, they help explain why certain countries rank higher than others in happiness evaluations.

#### **Expected Outcomes**

* **Identification of Key Happiness Drivers**: Understanding which factors have the greatest impact on national happiness.
* **Correlation Between Happiness and Economic Growth**: Exploring whether happier nations tend to have stronger economies and better development indicators.
* **Policy Recommendations**: Providing insights for governments and organizations on improving well-being through targeted policies.
* **Trends and Patterns**: Recognizing regional disparities, long-term happiness trends, and any significant patterns in the data.

This analysis will help uncover meaningful insights into the science of happiness and its role in shaping sustainable economic and social policies.

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### **Problem Statement**

Happiness is a crucial indicator of a nation’s well-being, yet many countries struggle to achieve high happiness levels despite economic growth. While GDP per capita is often considered a measure of national success, research suggests that economic prosperity alone does not guarantee a happier society. Other factors—such as social support, life expectancy, personal freedom, corruption levels, and generosity—may play a significant role in shaping national happiness.

This analysis seeks to answer the following key questions:

* **What primary factors drive national happiness, and how do they vary across countries?**
* **To what extent does happiness correlate with economic growth?**
* **Are there specific patterns or trends that can help policymakers improve national well-being?**

By exploring these questions, this study aims to provide insights that can guide policymakers, economists, and social scientists in designing strategies to enhance happiness and quality of life beyond just economic development. Understanding these relationships can help governments create more balanced, sustainable policies that prioritize well-being alongside financial progress.

### **Data Description**

The dataset consists of **146 rows and 12 columns**, capturing various factors that influence national happiness and its relationship with economic growth. Each row represents a country, ranked based on its happiness score. Below is a detailed description of each column:

| Column name | Data Type | Description |
| --- | --- | --- |
| Rank | Integer | The overall ranking of a country based on its happiness score. |
| Country | String | The name of the country |
| Happiness Score | Float | The overall happiness score of a country, based on survey responses. |
| Whisker High | Float | The upper confidence interval for the happiness score. |
| Whisker Low | Float | The lower confidence interval for the happiness score. |
| Dystopia Residual | Float | A baseline measure used for comparison, representing a hypothetical country with the world’s lowest values in all factors. |
| GDP per Capita | Float | The economic production per person, adjusted for purchasing power parity (PPP). |
| Social Support | Float | The perceived level of social support available to individuals in the country. |
| Healthy Life Expectancy | Float | The average number of healthy years an individual is expected to live. |
| Freedom to Make Life Choices | Float | The extent to which people feel free to make their own life decisions. |
| Generosity | Float | The willingness of people to donate and help others. |
| Corruption | Float | A measure of perceived corruption in government and businesses. |