**YouTube Channels Data Analysis Report**

**Introduction**

This report presents an in-depth analysis of YouTube channels based on key metrics such as Views, Subscribers, and Uploads. The objective is to uncover insights into content performance, country-based trends, and correlations between different factors.

**Key Analysis Questions**

1. What is the relationship between Subscribers and Views?
2. Which are the top 10 channels with the highest Views?
3. Which are the top 10 channels with the highest Uploads?
4. What are the top 5 countries by Views, Subscribers, and Uploads?
5. What is the distribution of Uploads among channels?
6. What is the correlation between Views, Subscribers, and Uploads?

**Findings and Insights**

**1. Relationship Between Subscribers and Views**

* A scatter plot was used to visualize the correlation.
* The analysis showed a positive correlation, indicating that channels with more subscribers tend to have higher views.
* However, some channels with fewer subscribers still managed to accumulate a significant number of views, possibly due to viral content.

**2. Top 10 Channels with the Highest Views**

* A bar chart was created to highlight the top-performing channels in terms of total views.
* MrBeast, T-Series, and other major content creators dominated the list with billions of views.

**3. Top 10 Channels with the Highest Uploads**

* The analysis revealed that certain channels have significantly higher upload counts, indicating a content-heavy strategy.
* The trend suggests that while frequent uploads contribute to engagement, high views do not always correlate with high uploads.

**4. Top 5 Countries by Views, Subscribers, and Uploads**

* Countries like the USA, India, and Brazil ranked highest in terms of Views and Subscribers.
* These countries also had the most active content creators with massive audience reach.

**5. Distribution of Uploads Among Channels**

* A histogram was plotted to show how uploads are distributed.
* A majority of the channels have moderate upload counts, with only a few having extremely high numbers.

**6. Correlation Analysis**

* A heatmap visualization was used to explore the relationship between numerical variables.
* The correlation matrix indicated a strong positive relationship between Subscribers and Views, while Uploads had a weaker correlation with Views.

**Conclusion**

This analysis provides valuable insights into YouTube content trends, audience engagement, and the impact of different factors on a channel’s success. Understanding these metrics can help content creators optimize their strategies for growth and better audience reach.