Executive Summary: Netflix Data Analysis Project

This project leverages data visualization and exploratory data analysis using Python libraries—**Pandas** and **Matplotlib**—to understand content trends on Netflix. The analysis spans content type distribution, audience ratings, duration patterns, country-wise content contribution, and temporal trends in content production.

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1. Content Type Distribution

- The dataset includes **two main content types**: **Movies** and **TV Shows**.

- Out of the total content:

    - **Movies account for approximately 69.7%**

    - **TV Shows make up the remaining 30.3%**

Insight: Netflix's catalog is movie-dominant, indicating a strategic focus on shorter, one-time watch content rather than long-format series.

Chart Used: *Bar Chart — Count of Content Types on Netflix*

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2. Content Ratings Breakdown

- The ratings give insight into the target audience age groups.

- Top 5 ratings (with % distribution):

    - **TV-MA** (Mature Audience): ~41%

    - **TV-14**: ~20%

    - **TV-PG**: ~9%

    - **R** (Restricted): ~8%

    - **PG-13**: ~5%

- Other ratings like G, NC-17, etc., form the remaining ~17%.

Insight: Over **61%** of the content is intended for **mature or teen audiences**, highlighting Netflix's emphasis on edgier and more diverse storytelling.

 Chart Used: *Pie Chart — % of Content Ratings*

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3. Movie Duration Analysis

- Duration (for movies only) ranges from short 30-minute films to over 200-minute long features.

- **Most movies (~62%) fall in the 80–100 minutes range**.

- Very few (<2%) exceed 150 minutes.

Insight: Netflix favors feature-length content suitable for casual viewing sessions, avoiding overly long runtimes.

Chart Used: *Histogram — Distribution of Movie Duration*

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4. Release Trends Over the Years

- Content release has **skyrocketed post-2015**, peaking around 2018–2020.

- Before 2010, the platform had relatively minimal content additions.

Insight: There's a **clear content explosion after 2015**, reflecting Netflix's shift from a distributor to a **major content producer**.

Chart Used: *Scatter Plot — Release Year vs Number of Shows*

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5. Top 10 Countries by Content Contribution

Here's the percentage breakdown among the **top 10 content-producing countries**:

Country	% of Total Content
United States	~31.6%
India	~8.2%
United Kingdom	~6.7%

Canada	~4.5%
France	~3.3%
Japan	~2.9%
South Korea	~2.5%
Spain	~2.3%
Mexico	~2.0%
Australia	~1.9%

Insight: The **U.S. dominates** Netflix's content library, but countries like **India and the U.K.** are also major contributors—underscoring Netflix's global content strategy.

Chart Used: *Horizontal Bar Chart — Top 10 Countries by Number of Shows*

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6. Yearly Trend: Movies vs TV Shows

The dual-line chart shows:

- **Movies consistently lead** in yearly release count.

- **TV Shows have grown sharply post-2015**, now making up a significant portion.

Insight: Netflix is increasingly **investing in original series**, likely due to the binge-watch culture and higher engagement rates with episodic content.

Chart Used: *Line Plot Subplots — Movies vs TV Shows Over the Years*