**Building a Netflix Dashboard in Power BI**

1. **Introduction:**

This report describes the process of preparing and visualizing the Netflix Titles dataset in Power BI. The dataset contains metadata about movies and TV shows available on Netflix, including attributes such as type, title, director, cast, country, release year, rating, duration, and the date the title was added to the platform.

To build an effective dashboard, two major steps are required:

* Pre-processing the data in Power Query to clean, normalize, and create analytical fields.
* Developing Visualizations in Power BI to answer business questions such as content trends, most popular genres, and key contributors.

1. **Pre-processing in Power Query:**
   1. **Data Loading:**

* Load the dataset: Home → Get Data → Text/CSV → netflix\_titles.csv → Transform Data.
  1. **Data Type Standardization:**
* release\_year → Whole Number
* date\_added → Date (if parsing fails: *Change Type → Using Locale → Date / English US*)
* duration, rating, type, director, cast, country, listed\_in → Text
  1. **Text Cleaning:**
* Apply Trim and Clean on columns: director, cast, country, listed\_in.
* Remove empty rows or null titles: Home → Remove Rows → Remove Blank Rows.
  1. **Derived Columns:**
* Year Added: Extract year from date\_added.

= Table.AddColumn(#"Changed Type", "year\_added", each Date.Year([date\_added]), Int64.Type)

* Seasons (for TV Shows): Extract numeric season count from duration.

= Table.AddColumn(#"Previous", "Seasons", each try Number.FromText(Text.BeforeDelimiter([duration], " ")) otherwise null, Int64.Type)

* 1. **Normalization of Multi-Value Columns**
* Genres (listed\_in): Split by comma → Split into Rows → Trim.
* Country: Split by comma → Split into Rows → Trim.

**2.6 Creating Supporting Tables**

* Actors Table:
  + Duplicate query → Keep only show\_id, title, cast.
  + Split cast by comma → Split into Rows → Trim.
  + Remove nulls → Rename column to *Actor*.
  + Optionally: Group By → Actor → Count Rows → Appearances.

These steps create a clean star-like model where the main table relates to normalized lookup tables for genres, countries, and actors.

1. **Visualization Design:**

The following visuals were developed in Power BI using the processed data:

1. **Movies vs TV Shows Count** – Donut chart showing distribution of content type.
2. **Distribution of Ratings** – Bar chart of MPAA/TV ratings (PG, R, TV-MA, etc.).
3. **Trend of Content Added per Year** – Line chart of titles by year\_added.
4. **Top 10 Countries** – Horizontal bar chart from normalized country table.
5. **Movies vs TV Shows Over the Years** – Line and Stacked chart comparing counts by release\_year.
6. **Top 10 Genres** – Bar chart from normalized genre data.
7. **Oldest and Newest Release Year** – Two card visuals using MIN/MAX measures.
8. **Movies by Director** – Slicer (director) linked to table visual with movie details.
9. **Top 10 Actors** – Horizontal bar chart from the Actors table (by appearances).
10. **Distribution of TV Show Seasons** – Column chart showing season counts or buckets (1, 2, 3–6, 7+).
11. **Conclusion:**

By combining structured pre-processing in Power Query with a well-designed set of Power BI visuals, this Netflix dashboard enables users to:

* Compare movies and TV shows by type, year, and geography.
* Identify leading countries, directors, actors, and genres.
* Understand content trends such as additions over time and distribution of ratings.
* Drill down interactively with slicers and filters for specific insights.

This structured approach demonstrates best practices in data cleaning, modeling, and visualization — ensuring that the Netflix dataset becomes a powerful resource for exploring entertainment trends.