1. Data Cleaning & Preparation

Logic

To ensure Tableau reads the data correctly and all calculations (counts, averages, sorting) work without errors.

Steps

- Loaded the dataset from CSV.

- Renamed corrupted column headers to proper names:
  Series_ID, Title, Genre, Platform, Seasons, Episodes, IMDB_Rating, Year

- Converted numeric fields to the correct type (Seasons, Episodes, Rating, Year).

- Verified ranges and ensured no misaligned columns.

- Exported a **clean CSV** for use in Tableau.

Reasoning

Clean and properly typed data ensures charts display correctly, filters work, and calculations like averages and counts are accurate.

---

2. Visualization Approach in Tableau

Logic

Each problem statement requires a specific chart type that best answers the business question being asked.

Steps & Reasoning for Each Task

Task 1 — Trend of Web Series Released Per Year (Line Chart)

Steps

- Drag `Year` → Columns

- Drag `Series_ID` → Rows → change to **COUNT**

- Mark type: **Line**

Reasoning
A line chart clearly shows changes in number of series released over time.

Task 2 — IMDB Rating Distribution by Platform (Using Jitter Plot Instead of Box Plot)

(Because Tableau Trial restricts Box Plot)

Steps

- Drag `Platform` → Columns

- Drag `IMDB_Rating` → Rows

- Mark type → **Circle**

- Drag `Platform` → Detail (for spreading points)

Reasoning
This jitter plot still shows rating spread and variation across platforms, fulfilling the analytical goal of understanding distribution.

Task 3 — Top 5 Highest Rated Web Series (Horizontal Bar Chart)

Steps

- Drag `Title` → Rows

- Drag `IMDB_Rating` → Columns

- Sort descending

- Apply filter → **Top 5 by IMDB Rating**

Reasoning
Horizontal bars are best for ranking and comparison; makes top 5 instantly clear.

Task 4 — Genre Distribution (Bar Chart)

Steps

- Drag `Genre` → Columns

- Drag `Series_ID` → Rows → COUNT

- Mark type: Bar

- Sort highest to lowest

Reasoning
 Bar chart shows how many series exist in each genre; easiest way to compare categories.

Task 5 — Relationship Between Episodes and IMDB Rating (Scatter Plot)

Steps

- Drag `Episodes` → Columns

- Drag `IMDB_Rating` → Rows

- Mark type: Circle

Reasoning
 Scatter plot visualizes whether more episodes lead to higher/lower ratings.

Task 6 — Platform-Wise Average IMDB Rating by Genre (Heatmap)

Steps

- Drag `Genre` → Rows

- Drag `Platform` → Columns

- Drag `IMDB_Rating` → Color (Aggregation: **Average**)

- Mark type: **Square**

- Add Label → AVG(IMDB_Rating)

Reasoning
 A heatmap quickly highlights which platforms have stronger/waker genres based on color intensity.

Final Outcome

- Dataset cleaned, validated, and exported.

- All required visualizations created using Tableau-compatible methods.

- Alternative visualization used where Tableau Trial features were restricted.

- Final dashboard ready for analysis and presentation.