

## **Power BI Project Requirements for Movie Data Analysis ( lesson 15)**

- 1. Load Movies.xls into Power BI desktop**
- 2. Remove or impute missing values in Budget and Box Office (e.g., replace with 0 or median)**
- 3. Ensure all columns are in a appropriate format.**
- 4. Create a separate DATE table by using Release Date column, use Addcolumns, Calendarauto, filter functions and make sure a relationship exist in the data model view between two tables**
- 5. Create the following DAX measures and calculated columns to practice filter contexts, aggregations, and time intelligence.**
  - Create a calculated column called profit by using Budget and Box office column**
  - Create a calculated column to categorize movies by run time for segmentation.**
    - ( - Run Time < 90, Short**
    - Run Time > 90 and Run Time < 120, Medium**
    - Run Time > 120 , Long )**
  - Create following measures**
    - ✓ Total Box Office**
    - ✓ Average Budget**
    - ✓ Average Margin**
    - ✓ Total movies with Oscars**
    - ✓ Top Genre by Box Office**
    - ✓ Year-over-Year Box Office Growth**
    - ✓ Average Nominations per Director**
- 6. Visualization Requirements**

**Create an interactive dashboard with the following visuals to practice Power BI's visualization features**

## **- Page 1: Overview Dashboard**

### **Recommended Visuals:**

- Card: Total Box Office, Profit Margin, Movies with Oscars.
- Bar Chart: Total Box Office by Genre (stacked by Certificate).
- Line Chart: Box Office trend by Release Year.
- Slicer: Filter by Country and Release Date (range).
- KPI: YoY Box Office Growth (target: >0%).

## **- Page 2: Director Analysis**

### **Recommended Visuals:**

- Treemap: Budget by Director (size by Budget, color by Oscar Wins).
- Table: List Directors, Total Nominations, Total Oscars, Avg Nominations per Director.
- Slicer: Filter by Genre.
- Donut Chart: Run Time Category distribution for selected Director.

## **- Page 3: Genre and Country Insights**

### **Recommended Visuals:**

- Matrix: Genre vs. Country with Total Box Office as values.
- Pie Chart: Share of Box Office by Certificate.
- Custom Visual: Word Cloud for Genre (requires marketplace visual).
- Slicer: Filter by Run Time Category.
- Use conditional formatting in the matrix (e.g., color scale for Box Office).