**Load Movies.xls into Power BI Desktop**

1. Open **Power BI Desktop**
2. Click **Home > Get Data > Excel**
3. Browse and select the Movies.xls file
4. In the **Navigator**, select the sheet or table (e.g., Movies)
5. Click **Transform Data** (not "Load" yet) to clean the data in Power Query

**Remove or Impute Missing Values in Budget and Box Office**

In Power Query Editor:

1. Select the Budget column
   * To **replace nulls with 0**:
     + Right-click → **Replace Values** → Replace null with 0
   * Or use **Transform > Statistics > Median** to get the median and manually input
2. Repeat for Box Office

**Ensure All Columns Are in the Appropriate Format**

* Budget, Box Office: **Decimal Number**
* Release Date: **Date**
* Run Time: **Whole Number**
* Genre, Director, Country, Certificate: **Text**
* Nominations, Oscar Wins: **Whole Number**

Use the **Data Type** dropdown on the toolbar in Power Query to set them.

**Create a Separate Date Table Using Release Date**

Go back to Power BI (after clicking **Close & Apply**).

Create a **New Table** using DAX:

DateTable =

ADDCOLUMNS(

CALENDARAUTO(),

"Year", YEAR([Date]),

"Month", FORMAT([Date], "MMMM"),

"MonthNum", MONTH([Date]),

"Quarter", "Q" & FORMAT([Date], "Q")

)

### ****Create a Calculated Column:**** Profit

Profit = Movies[Box Office] - Movies[Budget]

## **Calculated Column: Run Time Category**

RunTimeCategory =

SWITCH(

TRUE(),

Movies[Run Time] < 90, "Short",

Movies[Run Time] >= 90 && Movies[Run Time] < 120, "Medium",

Movies[Run Time] >= 120, "Long",

"Unknown"

)

### ****Total Box Office****

Total Box Office = SUM(Movies[Box Office])

### ****Average Budget****

Average Budget = AVERAGE(Movies[Budget])

### ****Average Margin (Box Office – Budget)****

Average Margin =

AVERAGEX(

Movies,

Movies[Box Office] - Movies[Budget]

)

### ****Total Movies with Oscars****

Movies with Oscars =

CALCULATE(

COUNTROWS(Movies),

Movies[Oscar Wins] > 0

)

### ****Top Genre by Box Office****

Top Genre by Box Office =

CALCULATE(

SELECTEDVALUE(Movies[Genre]),

TOPN(

1,

SUMMARIZE(

Movies,

Movies[Genre],

"TotalBox", SUM(Movies[Box Office])

),

[TotalBox],

DESC

)

)

### ****Year-over-Year Box Office Growth****

YoY Box Office Growth =

VAR CurrentYear =

CALCULATE([Total Box Office], DATESYTD(DateTable[Date]))

VAR PrevYear =

CALCULATE([Total Box Office], DATESYTD(SAMEPERIODLASTYEAR(DateTable[Date])))

RETURN

DIVIDE(CurrentYear - PrevYear, PrevYear)

Format this measure as **percentage** and use in a **KPI visual** with a target of > 0%.

### ****Average Nominations per Director****

Avg Nominations per Director =

AVERAGEX(

VALUES(Movies[Director]),

CALCULATE(SUM(Movies[Nominations]))

)