

# Movies

## Introduction:

The Movie Dataset consists of five columns: `Id`, `Title`, `Director`, `Year`, and `Length\_minutes`. This dataset contains information about various Pixar movies, including their release year, director, and runtime. The dataset spans a range of movie releases, mostly covering animated films produced by Pixar.

The main attributes of the dataset include:

- Title: The name of the movie.
- Director: The person who directed the movie.
- Year: The year the movie was released.
- Length\_minutes: The duration of the movie in minutes.

## Project Objective:

The primary objectives of this dataset are:

1. To analyze the release trends of Pixar films over the years.
2. To identify patterns in movie lengths or directors' contributions over time.
3. To assess how frequently certain directors are involved in Pixar movie production.
4. To explore the performance of various movies based on factors such as release year and movie length.

## Project Benefit:

This analysis offers multiple benefits for different stakeholders:

1. **Movie Studios** can use the insights to plan future releases based on successful past trends.
2. **Filmmakers** can identify which directors have contributed the most to Pixar's success, influencing future collaborations.
3. **Film Critics** and **Researchers** can study the evolution of Pixar films and how their narratives and durations have changed over time.

4. **Investors** can identify potential opportunities by analyzing movie performance trends, especially for re-releases or sequels.

## Arising Questions:

1. *How would you identify recurring discrepancies or issues?*

The data was checked for issues such as missing rows, empty cells, and invalid values in the dataset. Upon inspection, no significant discrepancies were found—there were no duplicate entries, no missing values, and all data types were correct. This suggests that the data is clean and ready for analysis.

2. *As a data analyst, what questions would you ask stakeholders?*

Some questions I would ask include:

- Are there any specific directors or movies you would like to focus on for deeper analysis?
- Are we interested in identifying trends in terms of movie length or genres?
- Is there an interest in comparing this data with other movie datasets, such as box office revenue or audience ratings, for a more holistic analysis?

3. *Why would you join this data with other movie datasets?*

Merging this dataset with others, such as box office revenue, audience ratings, or awards won, would allow us to draw richer insights. Instead of analyzing the data in isolation, integrating additional information would provide a more comprehensive view of the factors contributing to Pixar's movie success.

4. *What additional columns or data would you add to this dataset?*

To enhance the dataset, it would be useful to add columns such as:

- **Genre**: To analyze trends based on movie themes.
- **Revenue**: To see which movies performed best financially.
- **Awards Won**: To understand the critical success of each movie.
- **Sequel Status**: To determine whether certain directors are more involved in original films or sequels.

## Insights:

1. Trend in Movie Releases:

Pixar has consistently released films almost every year. Directors such as **John Lasseter** have contributed significantly to the Pixar catalog, directing iconic films like **Toy Story** and **A Bug's Life**.

## 2. Movie Length:

Most Pixar movies have an average runtime of around 90 minutes, a trend that can be seen across various films. This is an important insight for filmmakers targeting family-friendly audiences, where a concise yet engaging narrative is often preferred.

## 3. Director Analysis:

Certain directors, such as **Pete Docter** and **Andrew Stanton**, have consistently directed or contributed to some of Pixar's biggest hits. Recognizing these directors' involvement could lead to strategic decisions in future productions.

## Interpretation:

- As a **Studio Executive**, it is beneficial to recognize the consistent performance of directors like John Lasseter, Pete Docter, and Andrew Stanton. Investing in these directors for future projects might guarantee success.
- As an **Investor**, examining the directors who worked on top-performing films would be valuable. Movies directed by these individuals tend to resonate well with audiences, thus securing strong returns.

## Query Breakdown:

1. **Finding the title of each film:** The query `SELECT Title FROM movies;` retrieves the titles of all movies in the dataset. This is achieved by selecting the Title column from the entire table, without any filters applied.
2. **Finding the director of each film:** The query `SELECT Director FROM movies;` is used to list the directors of all movies. It selects the Director column from the dataset, displaying each director associated with the films.
3. **Finding the title and director of each film:** To retrieve both the title and director for each film, the query `SELECT Title, Director FROM movies;` is used. This selects both the Title and Director columns from the dataset, returning the title alongside the director for each entry.
4. **Finding the title and year of each film:** The query `SELECT Title, Year FROM movies;` extracts the title and release year for each film. By selecting the Title and Year columns, we get a list of all movies along with their respective release years.

5. **Finding all the information about each film:** The query `SELECT * FROM movies;` is used to retrieve all available information for each movie. Here, the asterisk (\*) acts as a wildcard, selecting every column in the dataset, including Id, Title, Director, Year, and Length\_minutes.
6. **Finding the movie with a row id of 6:** The query `SELECT * FROM movies WHERE Id = 6;` fetches all the details of the movie that has a specific Id value of 6. The WHERE clause filters the rows, ensuring that only the movie with the desired Id is returned.
7. **Finding the movies released between 2000 and 2010:** The query `SELECT * FROM movies WHERE Year BETWEEN 2000 AND 2010;` is used to extract the movies released in the years 2000 to 2010. The BETWEEN operator checks if the Year falls within this range, and the query returns all movies that match this criterion.
8. **Finding the first 5 Pixar movies and their release year:** To get the first 5 movies based on their release order, the query `SELECT Title, Year FROM movies ORDER BY Id LIMIT 5;` is used. The ORDER BY Id arranges the movies by their Id, and LIMIT 5 ensures that only the first five records are displayed.
9. **Finding all Toy Story movies:** The query `SELECT * FROM movies WHERE Title LIKE '%Toy Story%';` identifies all movies that include the phrase "Toy Story" in their title. The LIKE operator with the % wildcard matches any title containing the specified phrase, whether at the beginning, middle, or end.
10. **Finding all the movies directed by John Lasseter:** The query `SELECT * FROM movies WHERE Director = 'John Lasseter';` retrieves all movies directed by John Lasseter. The WHERE clause ensures that only the rows where the Director is "John Lasseter" are selected, returning all relevant movie details.