

MOVIE INDUSTRY EXPLORATION



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BUSINESS UNDERSTANDING

CLIENT: Microsoft

Objectives

- 1. To find out which movie genres rank highest in the box office**
- 2. To identify movie genres that rank highest in movie ratings**
- 3. To find out the most popular movie genres**

DATA UNDERSTANDING

Data source movie sites:

- Box Office
- IMDBLinks
- Rotten Tomatoes
- TheMovieDB
- The Numbers

Utilized data from tables:

- **bom.movie_gross.csv**
- **tmdb.movies.csv**
- **movie_basics**
- **movie_ratings**

DATA DESCRIPTION

- **Bom.movie_gross:** Data in the `box_office` column to show top genres with the highest returns.
- **Movie_basics:** Genres column is essential in finding out most popular genres
- **Movie_ratings:** `Movie_ratings` column is used to find out genres sequence in their rating.

Data analysis

Bom.movie_gross:

- Replacement of missing values by their median value.
- Generating new column 'box_office' (domestic_gross + foreign_gross)
- Replacement of genre_ids with their respective names
- Plotting genres against box_office

Data analysis

Movie_basics:

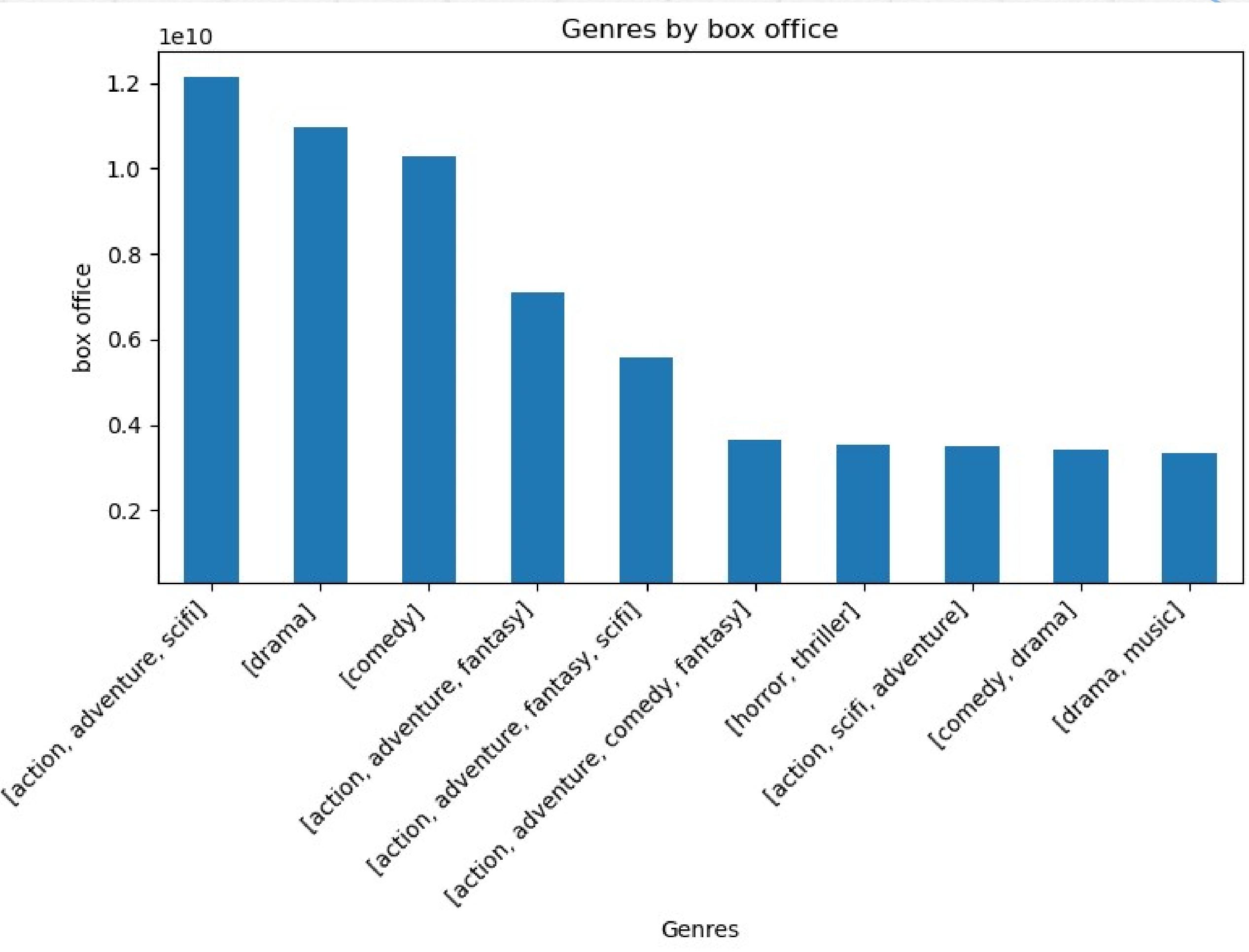
- Replacement of missing values in the genres column by the mode
- Listing top ten genres in descending order
- Plotting genres by frequency of occurrence

Data analysis

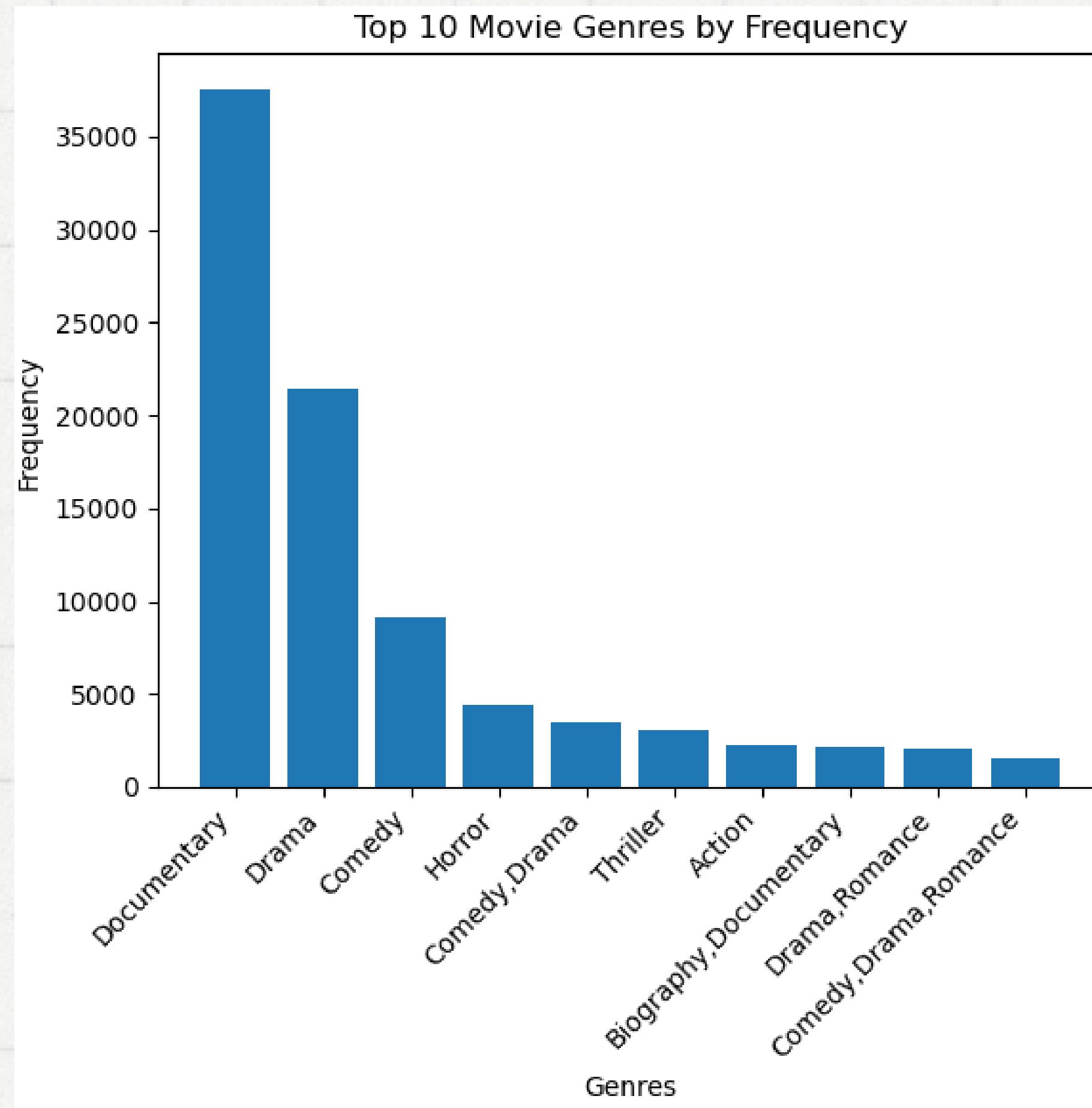
Movie_ratings:

- **Weighted_average_rating** as
$$(\text{SUM}(\text{averagerating} * \text{movie_count}) / \text{SUM}(\text{movie_count}))$$
- Joining **movie_basics** and **movie_rating** on
common column **movie_id**
- Plotting genres against
weighted_average_rating

Visualization: Genres by box_office

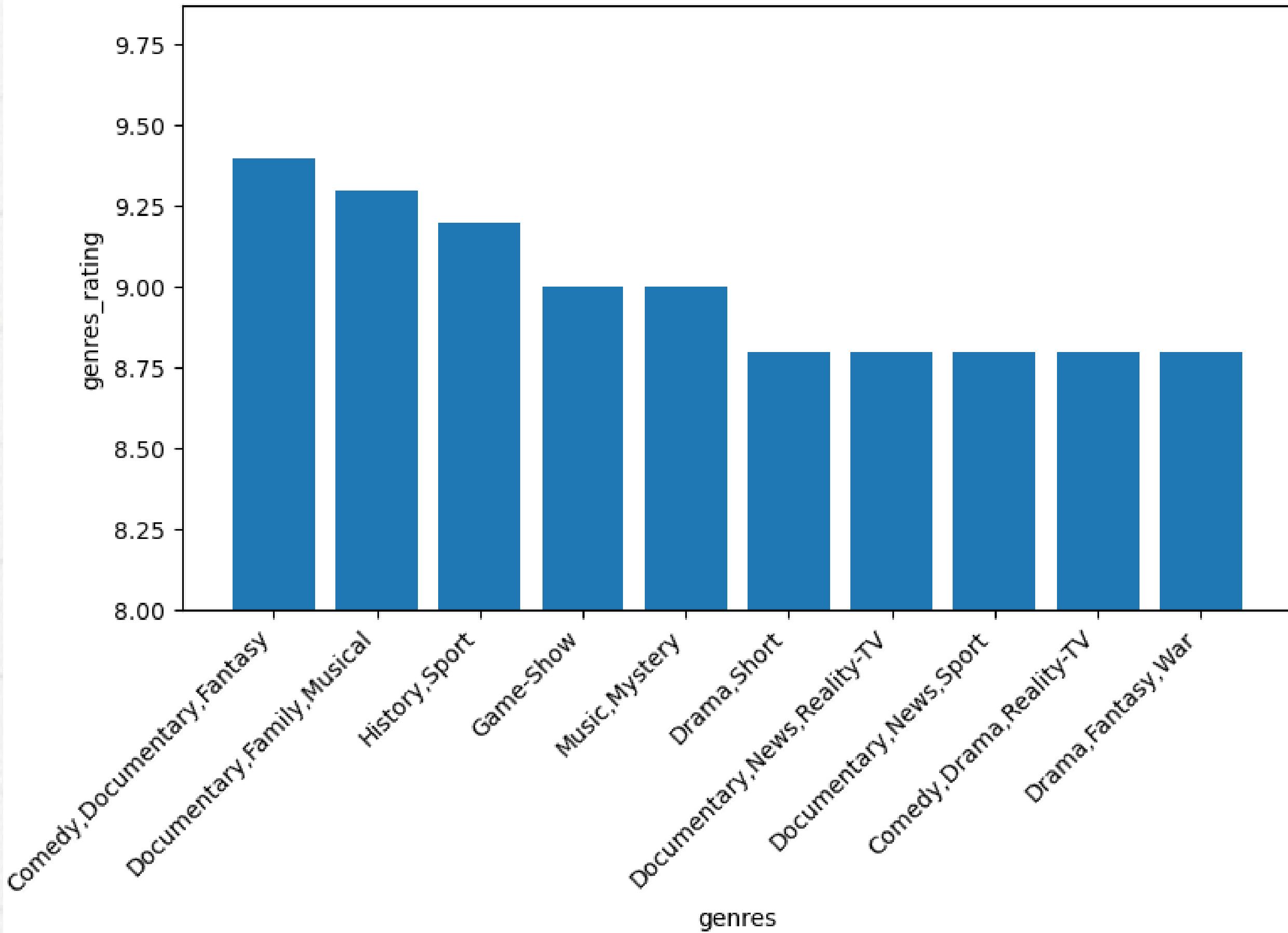


Visualization: Genres by frequency



Visualization: Genres by average rating

movie genres by rating



Conclusions

Top 3 genres by box office:

- Action, adventure, sci-fi
- comedy
- drama

Top 3 genres by frequency

- documentary
- drama
- comedy

Top 3 genres by rating

- Comedy, documentary, fantasy
- documentary, family, musical
- history, sport

Recommendations

Venture into:

- Comedy and drama: being the safest genres to venture into
- Action, adventure, sci-fi: being the genres with the highest returns
- documentary: being the most frequent genre and also has high ratings

**Thank you
very much!**

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