Generating a report summarizing the key findings for the movie data analysis

report = """
* Movie Data Analytics Report

Overview
This report analyzes a dataset of movies, focusing on key metrics such as **Budget**, **Revenue**, and **Popularity**. The dataset contains various attributes, including title, release date, budget, revenue, popularity, runtime, and user ratings (vote count and vote average). The objective is to uncover insights and trends in the film industry by analyzing correlations and identifying high-grossing movies.

***Key Findings**

*Top 5 Movies by Revenue
The top 5 movies in terms of revenue are:
1. **Avatar** (2009) - Revenue: $2.79 billion
2. **Star Wars: The Force Awakens** (2015) - Revenue: $2.06 billion
3. **The Avengers** (2012) - Revenue: $1.52 billion
4. **Jurassic World** (2015) - Revenue: $1.51 billion
5. **Furious 7** (2015) - Revenue: $1.50 billion

These movies stand out as massive financial successes, with significant budgets and high popularity scores.

***Correlation Analysis**
We analyzed the correlation between **Budget**, **Revenue**, and **Popularity**:
- **Budget vs. Revenue**: Strong positive correlation (0.77). Higher budgets generally lead to higher revenues.
- **Popularity vs. Revenue**: Moderate positive correlation (0.46). More popular movies tend to earn more at the box office.
- **Budget vs. Popularity**: Weak positive correlation (0.33). Higher budgets don't always guarantee higher popularity.

***Insights**:
- Big-budget movies tend to perform well financially, but other factors (such as marketing, cast, and timing) likely contribute to revenue generation.
- Popularity is an important metric for success, though it does not always perfectly align with revenue.

***Conclusion**
This analysis highlights that while budget is a significant factor in determining a movie's revenue, popularity also plays a key role. Filmmakers and studios aiming for financial success

should focus not only on production value but also on promoting and generating buzz around their films.

*__Next Steps__
Further analysis could explore other variables such as **vote average** and **runtime** to see how they affect both revenue and popularity. More advanced models could also be used to predict movie success based on a combination of factors.
"""

```
# Saving the report to a text file
report_file_path = "/mnt/data/Movie_Data_Analytics_Report.txt"
with open(report_file_path, "w") as report_file:
    report_file.write(report)

report_file_path
```