Name:SNEHA K

PREDICTION SUMMARY:

**FEATURES USED:**

After preprocessing and dropping the Non-numeric fields, the model uses following features:

1. Year
2. Runtime(Minutes)
3. Rating
4. Votes
5. Revenue(Millions)
6. Sentiment(from the movie description)

**MODEL PERFORMANCE:**

On the test set -20% split

* **R^2 score**: Measures how well predictions approximate actual outcomes .
* Interpretation: Approximately **66%** of the variance in movie success is explained by the model.
* **Mean Absolute Error(MAE)**: Average magnitude of errors between predicted and actual success.
* Interpretation: On average, the model’s predictions are off by **0.20 units** success.

**INSIGHTS:**

* **Rating,revenue** and **votes** have a **strong positive effect** on movie”s success prediction.
* **Sentiment Score**  and  **runtime** have a  **slightly positive impact.**
* **Metascore** shows a **moderate positive effect.**
* **Year**  has a  **small but positive effect.**

This concludes that well rated , widely watched and highly-revenue films with positive descriptions tend to be more successful.