# PHASE 2 PROJECT

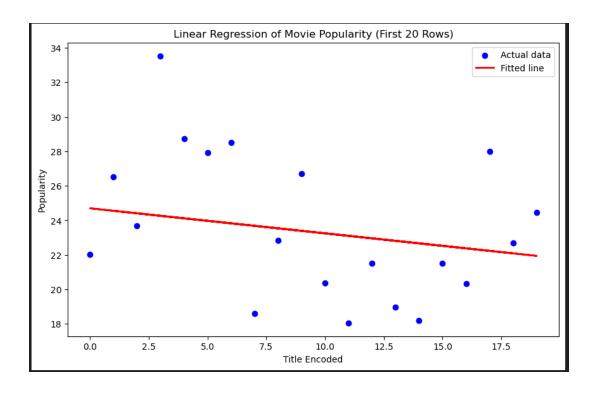
The project is presented by Simon Muema Analysis of movies Data Base

#### HYPOTHESIS TESTING

- Here we have our null and Alter native Hypothesis.
- Ho: There is no significant difference in Movie performance based on factors.
- H1: There is a significant difference in movie peformance based on different factors.

#### DATA FOR INVESTORS.

 BASED ON POPULARITY HARRY POTTER AND HOEW TO TRAIN YOUR DRAGON ARE THE HIGHEST WITH A SCORE OF 33.533 AND 27.734 RESPECTIVELY



### THE MOST WATCHED MOVIES

- FROM THIS INITIAL DATA WE FIND THAT THE TOP FIVE MOVIES THAT DID WELL ARE;
- HARRY POTTER
- HOW TO TRAIN YOUR DRAGON
- IRON MAN
- TOY STORY
- INCEPTION



#### RATINGS BASED ON NUMVOTES

• THIS ARE THE RATINGS FOR THE TOP MOVIES AND THEIR ID BASED ON NUMBER OF VOTES.

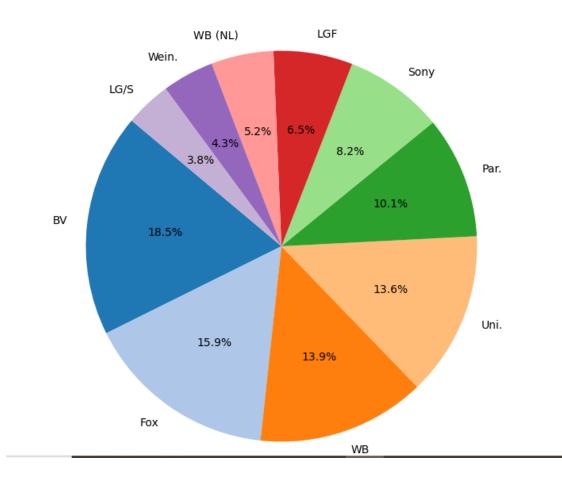
16]:		movie_id	averagerating	numvotes
	63498	tt1375666	8.8	1841066
	8738	tt1345836	8.4	1387769
	24920	tt0816692	8.6	1299334
	38058	tt1853728	8.4	1211405
	48221	tt0848228	8.1	1183655
	39356	tt0993846	8.2	1035358
	3140	tt1130884	8.1	1005960
	25777	tt2015381	8.1	948394
	60518	tt1431045	8.0	820847
	63506	tt1392170	7.2	795227

WE ARE CREATING A LINEAR REGRESSION BASED ON AVERAGE RATING AND I

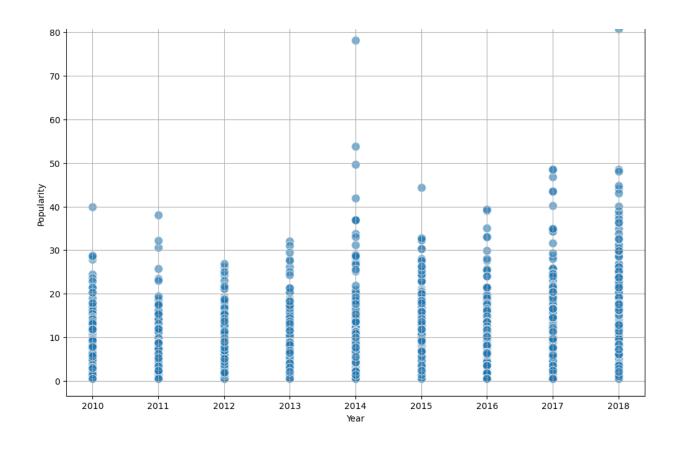
### BV STUDIOS IS RECOMMENDED.

It has 18.5% by vote count.

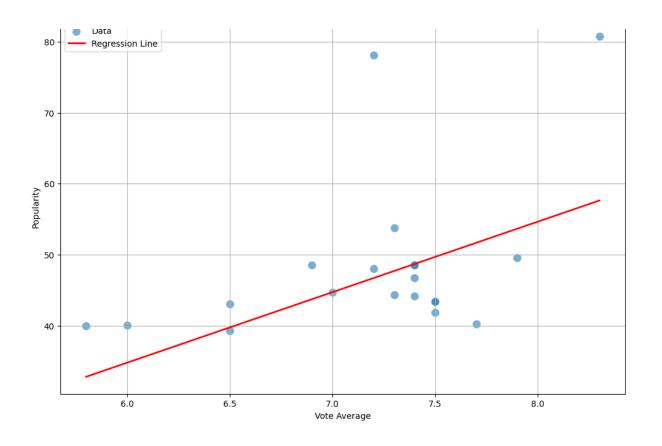
Top 10 Studios by Total Vote Count



#### 2018 HAD THE HIGHEST MOVIES WATCHED.



LINEAR
REGRESSION
BETWEEN
POPULARITY AND
VOTE AVERAGE.



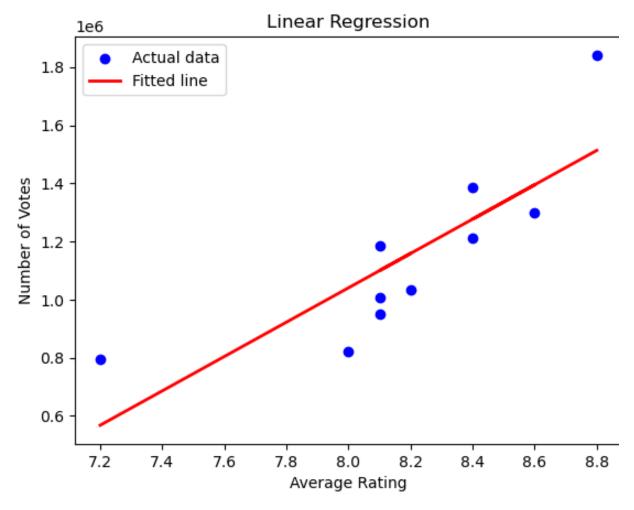
F-statistic: 37.76846132230437

P-value: 1.2438797969740367e-30

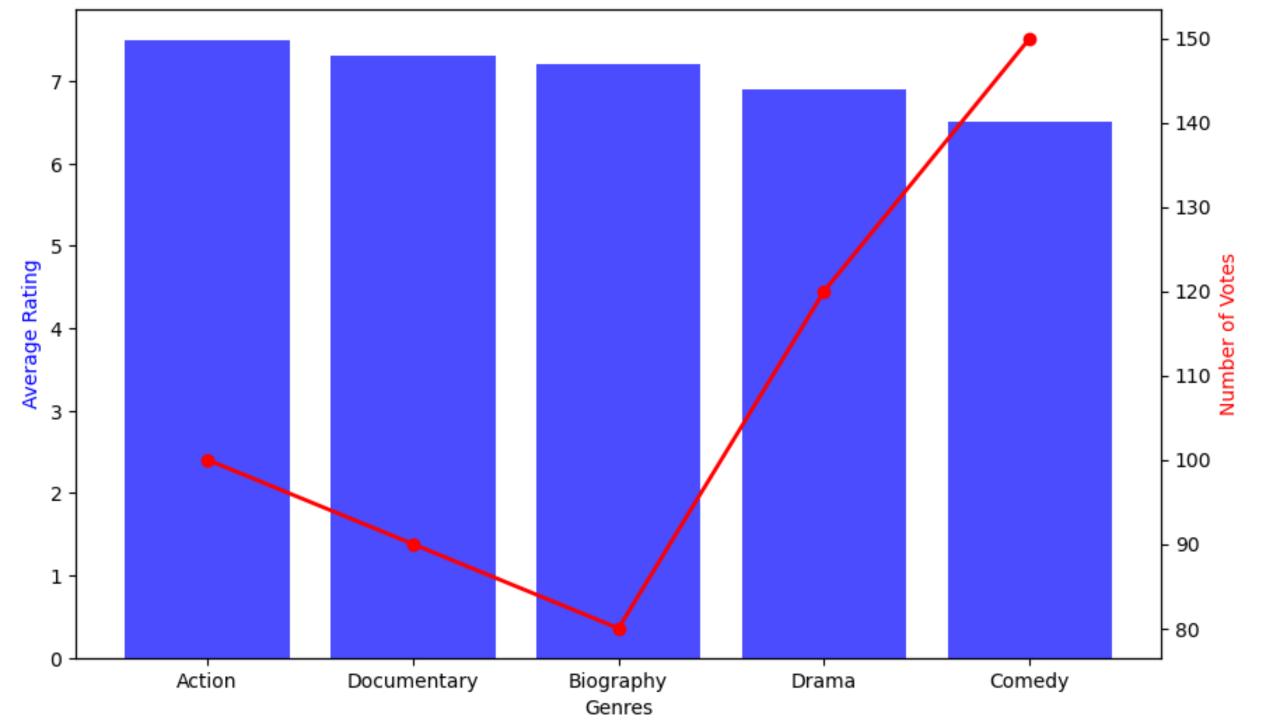
FROM THE ANOVA WE FIND AN AVERAGE POPULARITY OF 37.768.

#### REGRESSION LINE

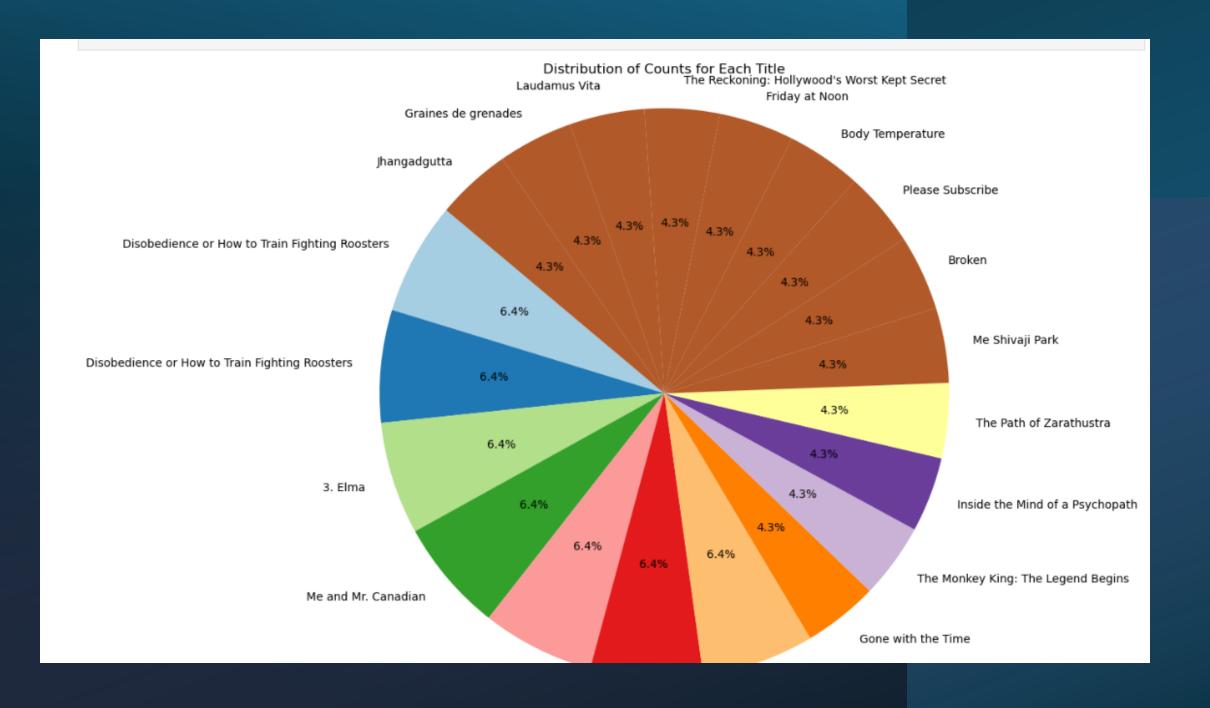
Intercept: -3687005.0077890987
Coefficient: 590953.1755542244



LET US MERGE ALL TABLES USING movie\_id AS OUR CONNECTOR.



 BASED ON THIS DATA WE CAN SEE THAT ACTION MOVIES RANK FIRST EVEN THOUGH THEY HAVE THE THIRD MOST NUMER OF VOTES WHEREAS COMEDY HAS THE MOST NUMER OF VOTES UT HAS A LOWER RATING THAN ACTION MOVIES.



#### RECOMMENDATIONS



THE MOVIE PRODUCTION THAT WE RECOMMEND IS ACTION
AND DOCUMENTARY MOVIES SINCE THEY AVERAGE HIGHER.



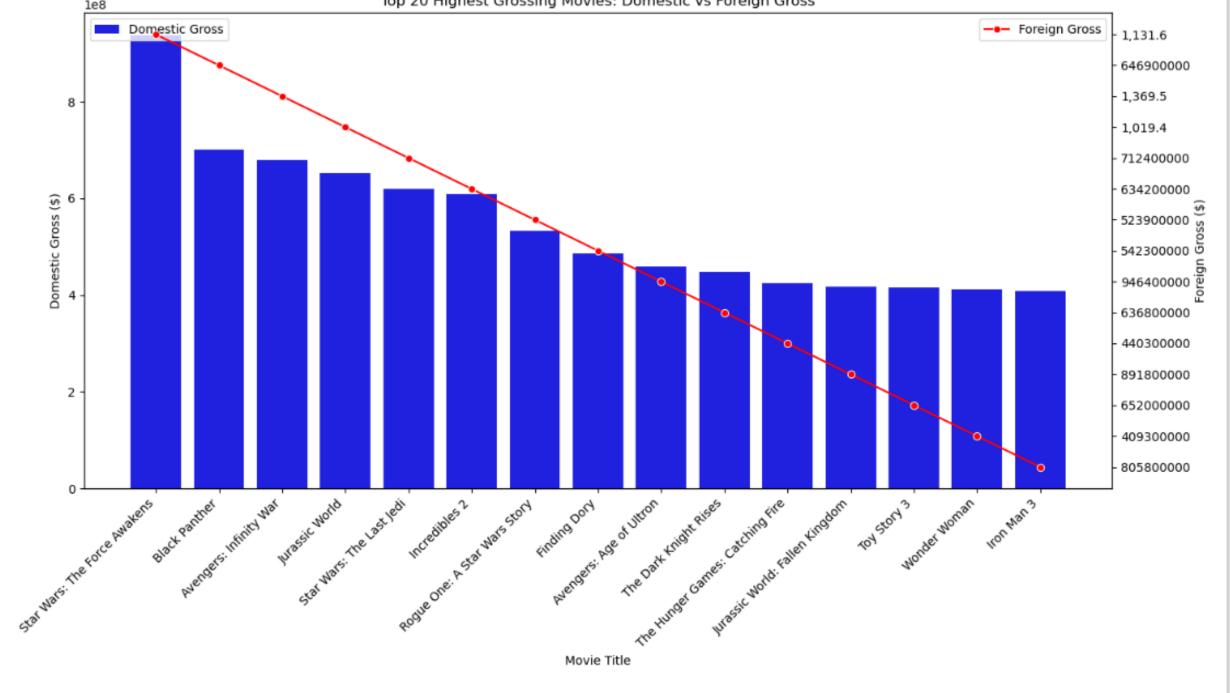
WE RECOMMEND WE SHOULD RECOMMEND TONY NEWTON TO DIRECT THE MOVIES IN THE STUDIO AS HE HAS THE MOST TITLES WITH 238 TITLES.



Brayan Mulato, Sergio Elias Ortiz, Ana Tumal and Esteban Unigarro are staff to be hired to ensure good production of the movie.

### TO THE INVESTORS.

- THE MOVIES TO INVEST IN ARE ACTION-SCIFI, DOCUMENTARY AND ANIMATION AS SEQUALS TO THE ACTION MOVIES.
- THIS IS EVIDENCED BY THE NEXT SLIDE.



#### CONCLUSION

 WE REJECT THE NULL HYPOTHESIS SINCE THERE IS A SIGNIFICNT DIFFERENCE IN MOVIE PEFORMANCE BASED ON DIFFERENT FACTORS.

## WE REJECT THE NULL HYPOTHESIS.

 As per the data manipulation we reject the null hypothesis as we can see a significant difference in movie performance based on different factors such as; Movie producers, Genr es, Title of movies, Type of movies, Rating and Number of votes.