

# MOVIES DATASET PROJECT

EXPLORATORY DATA ANALYSIS

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# MOVIES DATASET

The dataset provides a concise view of movie characteristics, with information on their identification, genre, release details, financial performance, popularity, user ratings, and runtime. These attributes can be used for analysis, comparison, and understanding trends in the movie industry.

## Identification:

Id: A unique identifier for each movie.

Title , original language

## Categorization:

Genres

## Release:

Release date

Release year : extracted from release date

## Financial:

Budget , revenue

Profit: calculated as revenue minus budget

## Metrics:

Popularity

Vote average , vote count

## Duration:

Runtime

Q1 .

What is the most frequent genre of movies?

Top 10 genres

genres	Num of movies
Drama	7466
Comedy	6076
Documentary	3121
Action	3081
Horror	2466
Thriller	1535
Animation	1517
Romance	1264
Crime	1161
Adventure	861

Q2 .

What is genre has the highest total popularity score?

Top 10 genres

genres	total popularity
Drama	56339.73
Comedy	43573.54
Action	39728.54
Horror	34622.66
Animation	24236.00
Thriller	14845.72
Documentary	13346.56
Romance	12040.09
Adventure	10450.94
Crime	10378.99

Q3 .

What is genre has  
the highest total  
vote count?

Top 10 genres

genres	total vote count
Drama	1308126
Action	1240029
Comedy	1098021
Adventure	564996
Horror	465478
Animation	357825
Crime	336705
Thriller	330134
Science Fiction	307331
Fantasy	274753

Q4 .

What is the total revenue generated by movies in each genre?

Top 10 genres

genres	total revenue
Action	58038546233
Comedy	37551646964
Drama	32159914974
Adventure	25891877046
Animation	18047307067
Fantasy	12966617312
Horror	10486890643
Science Fiction	10009852894
Crime	8411574600
Thriller	8350670046

**Q5.**

**What is the total profit each genre (revenue - budget)?**

**Top 10 genres**

genre	profit
Action	35382262957
Comedy	22398719637
Drama	17774665256
Adventure	16053172609
Animation	12478343903
Fantasy	9054162552
Horror	6903717428
Science Fiction	5708318935
Crime	4382649285
Thriller	4338495270

**Q6 .**

**How Many movies  
were released in  
each year ?**

**Top 10 years**

release year	Num of movies
2019	1614
2018	1517
2021	1504
2017	1451
2020	1406
2016	1366
2022	1213
2015	1161
2014	1085
2013	1022



Q7 .

What is the average budget for movies released in each year?

Top 10 years

Release year	average budget
2023	6.997594e+06
1997	6.723333e+06
1998	6.138050e+06
2001	5.976343e+06
2000	5.480705e+06
2002	5.368375e+06
1996	5.287380e+06
2004	5.240576e+06
2007	5.201597e+06
2005	5.187259e+06

**Q8 .**

**What is the total profit each year (revenue - budget)?**

<b>release year</b>	<b>Total profit</b>
<b>2017</b>	7607809389
<b>2018</b>	6907990896
<b>2015</b>	6547823980
<b>2011</b>	6421240957
<b>2016</b>	6416248580
<b>2019</b>	6118030801
<b>2022</b>	6021627345
<b>2013</b>	5991482874
<b>2014</b>	5953195217
<b>2010</b>	5619198887

Q9 .

What is the average runtime of movies grouped by genre?

Top 10 genres

genres	average runtime
History	113.68
War	108.42
Music	106.34
Action	104.87
Drama	102.75
Documentary	102.07
Crime	100.84
Romance	97.56
Adventure	97.19
Thriller	96.76

**Q10 .**

**What is the title of the movie with the longest runtime?**

**Logistics**

**Q11 .**

**What is the title of the movie with the smallest runtime?**

**The strange world of Gumball**

Q12 .

What is the top 10 highest-grossing movies (revenue - budget)?

Top 10 movies

title	profit
Jurassic World	1521537444
Furious 7	1325341399
Harry Potter and the Deathly Hallows: Part 2	1216511219
The Super Mario Bros. Movie	1178766975
The Lord of the Rings: The Return of the King	1024888979
Joker	1019458282
Aquaman	988528393
The Fate of the Furious	986005118
Captain Marvel	979416446
Zootopia	873784195

Q13 .

What is top 10  
movies with the  
highest budget?

Top 10 movies

title	budget
DeAD	500000000
Mission: Impossible - Dead Reckoning Part One	290000000
Spider-Man 3	258000000
The Hobbit: The Battle of the Five Armies	250000000
The Hobbit: The Desolation of Smaug	250000000
Harry Potter and the Deathly Hallows: Part 1	250000000
Harry Potter and the Half- Blood Prince	250000000
John Carter	250000000
The Fate of the Furious	250000000
Guardians of the Galaxy Vol. 3	250000000

Q14.

What is the movies revenue with a vote average greater than 8 and a budget over \$100 million?

title	revenue
Guardians of the Galaxy Vol. 3	821801000
Harry Potter and the Deathly Hallows: Part 2	1341511219
Interstellar	701729206
Terminator 2: Judgment Day	520000000
Gladiator	465361176

Q15 .

What is languages  
has the highest  
popularity score for  
movies?

Top 5 languages

original language	popularity
en	208354.806
ja	16438.958
es	14248.018
fr	11868.650
ko	7730.656



**Q16 .**

**What is the average budget for movies in each original language based on budget?**

**Top 5 languages**

Original language	Average budget
se	4.450000e+06
en	4.095738e+06
zh	2.727207e+06
kk	2.166667e+06
ca	2.106667e+06