Q1. Find the total number of rows in each table of the schema?

| **TABLE\_NAME** | **TABLE\_ROWS** |
| --- | --- |
| names | 23,628 |
| role\_mapping | 15,155 |
| genre | 14,662 |
| ratings | 8,230 |
| movie | 7,088 |
| director\_mapping | 3,867 |

Q2. Which columns in the movie table have null values?

| **Metric** | **Count** |
| --- | --- |
| Total Rows | 7,997 |
| Title Nulls | 0 |
| Year Nulls | 0 |
| Date Published Nulls | 0 |
| Duration Nulls | 0 |
| Country Nulls | 20 |
| Worldwide Gross Income Nulls | 3,724 |
| Languages Nulls | 194 |
| Production Company Nulls | 528 |

-- Now as you can see four columns of the movie table has null values. Let's look at the at the movies released each year.

-- Q3. Find the total number of movies released each year? How does the trend look month wise? (Output expected)  
Here is the data in table format:

| **Year** | **Number of Movies** |
| --- | --- |
| 2017 | 3,052 |
| 2018 | 2,944 |
| 2019 | 2,001 |

| **Month** | **Count** |
| --- | --- |
| 1 | 804 |
| 2 | 640 |
| 3 | 824 |
| 4 | 680 |
| 5 | 625 |
| 6 | 580 |
| 7 | 493 |
| 8 | 678 |
| 9 | 809 |
| 10 | 801 |
| 11 | 625 |
| 12 | 438 |

\*The highest number of movies is produced in the month of March.

So, now that you have understood the month-wise trend of movies, let’s take a look at the other details in the movies table.

We know USA and India produces huge number of movies each year. Lets find the number of movies produced by USA or India for the last year.\*/

-- Q4. How many movies were produced in the USA or India in the year 2019??

| **Metric** | **Count** |
| --- | --- |
| Number of Movies | 887 |

USA and India produced more than a thousand movies(you know the exact number!) in the year 2019.

Exploring table Genre would be fun!!

Let’s find out the different genres in the dataset.\*/

-- Q5. Find the unique list of the genres present in the data set?

| **Unique Genre** |
| --- |
| Drama |
| Fantasy |
| Thriller |
| Comedy |
| Horror |
| Family |
| Romance |
| Adventure |
| Action |
| Sci-Fi |
| Crime |
| Mystery |
| Others |

Now, wouldn’t you want to know which genre had the highest number of movies produced in the last year?

Combining both the movie and genres table can give more interesting insights. \*/

-- Q6.Which genre had the highest number of movies produced overall?

| **Genre** | **Movies Produced** |
| --- | --- |
| Drama | 4,285 |

/\* So, based on the insight that you just drew, RSVP Movies should focus on the ‘Drama’ genre.

But wait, it is too early to decide. A movie can belong to two or more genres.

So, let’s find out the count of movies that belong to only one genre.\*/

-- Q7. How many movies belong to only one genre?

| **Movies of One Genre** |
| --- |
| 3,289 |

/\* There are more than three thousand movies which has only one genre associated with them.

So, this figure appears significant.

Now, let's find out the possible duration of RSVP Movies’ next project.\*/

-- Q8.What is the average duration of movies in each genre?

-- (Note: The same movie can belong to multiple genres.)

| **Genre** | **Avg Duration (min)** |
| --- | --- |
| Drama | 107 |
| Fantasy | 105 |
| Thriller | 102 |
| Comedy | 103 |
| Horror | 93 |
| Family | 101 |
| Romance | 110 |
| Adventure | 102 |
| Action | 113 |
| Sci-Fi | 98 |
| Crime | 107 |
| Mystery | 102 |
| Others | 100 |

/\* Now you know, movies of genre 'Drama' (produced highest in number in 2019) has the average duration of 106.77 mins.

Lets find where the movies of genre 'thriller' on the basis of number of movies.\*/

-- Q9.What is the rank of the ‘thriller’ genre of movies among all the genres in terms of number of movies produced?

| **Genre** | **Movies Produced** | **Rank** |
| --- | --- | --- |
| Drama | 4,285 | 1 |
| Comedy | 2,412 | 2 |
| Thriller | 1,484 | 3 |
| Action | 1,289 | 4 |
| Horror | 1,208 | 5 |
| Romance | 906 | 6 |
| Crime | 813 | 7 |
| Adventure | 591 | 8 |
| Mystery | 555 | 9 |
| Sci-Fi | 375 | 10 |
| Fantasy | 342 | 11 |
| Family | 302 | 12 |
| Others | 100 | 13 |

/\*Thriller movies is in top 3 among all genres in terms of number of movies

In the previous segment, you analysed the movies and genres tables.

In this segment, you will analyse the ratings table as well.

To start with lets get the min and max values of different columns in the table\*/

-- Segment 2:

-- Q10. Find the minimum and maximum values in each column of the ratings table except the movie\_id column?

| **Metric** | **Value** |
| --- | --- |
| Min Average Rating | 1.0 |
| Max Average Rating | 10.0 |
| Min Total Votes | 100 |
| Max Total Votes | 725,138 |
| Min Median Votes | 1 |
| Max Median Votes | 10 |

/\* So, the minimum and maximum values in each column of the ratings table are in the expected range.

This implies there are no outliers in the table.

Now, let’s find out the top 10 movies based on average rating.\*/

-- Q11. Which are the top 10 movies based on average rating?

| **Title** | **Avg Rating** | **Movie Rank** |
| --- | --- | --- |
| Kirket | 10.0 | 1 |
| Love in Kilnerry | 10.0 | 1 |
| Gini Helida Kathe | 9.8 | 2 |
| Runam | 9.7 | 3 |
| Fan | 9.6 | 4 |
| Android Kunjappan Version 5.25 | 9.6 | 4 |
| Yeh Suhaagraat Impossible | 9.5 | 5 |
| Safe | 9.5 | 5 |
| The Brighton Miracle | 9.5 | 5 |
| Shibu | 9.4 | 6 |
| Our Little Haven | 9.4 | 6 |
| Zana | 9.4 | 6 |
| Family of Thakurganj | 9.4 | 6 |
| Ananthu V/S Nusrath | 9.4 | 6 |
| Eghantham | 9.3 | 7 |
| Wheels | 9.3 | 7 |
| Turnover | 9.2 | 8 |
| Digbhayam | 9.2 | 8 |
| Tõde ja õigus | 9.2 | 8 |
| Ekvtime: Man of God | 9.2 | 8 |
| Leera the Soulmate | 9.2 | 8 |
| AA BB KK | 9.2 | 8 |
| Peranbu | 9.2 | 8 |
| Dokyala Shot | 9.2 | 8 |
| Ardaas Karaan | 9.2 | 8 |
| Kuasha jakhon | 9.1 | 9 |
| Oththa Seruppu Size 7 | 9.1 | 9 |
| Adutha Chodyam | 9.1 | 9 |
| The Colour of Darkness | 9.1 | 9 |
| Aloko Udapadi | 9.1 | 9 |
| C/o Kancharapalem | 9.1 | 9 |
| Nagarkirtan | 9.1 | 9 |
| Jelita Sejuba: Mencintai Kesatria Negara | 9.1 | 9 |
| Shindisi | 9.0 | 10 |
| Officer Arjun Singh IPS | 9.0 | 10 |
| Oskars Amerika | 9.0 | 10 |
| Delaware Shore | 9.0 | 10 |
| Abstruse | 9.0 | 10 |
| National Theatre Live: Angels in America Part Two - Perestroika | 9.0 | 10 |
| Innocent | 9.0 | 10 |

\* Do you find you favourite movie FAN in the top 10 movies with an average rating of 9.6? If not, please check your code again!!

So, now that you know the top 10 movies, do you think character actors and filler actors can be from these movies?

Summarising the ratings table based on the movie counts by median rating can give an excellent insight.\*/

-- Q12. Summarise the ratings table based on the movie counts by median ratings.

| **Median Rating** | **Movie Count** |
| --- | --- |
| 1 | 94 |
| 2 | 119 |
| 3 | 283 |
| 4 | 479 |
| 5 | 985 |
| 6 | 1,975 |
| 7 | 2,257 |
| 8 | 1,030 |
| 9 | 429 |
| 10 | 346 |

/\* Movies with a median rating of 7 is highest in number.

Now, let's find out the production house with which RSVP Movies can partner for its next project.\*/

-- Q13. Which production house has produced the most number of hit movies (average rating > 8)??

| **Production Company** | **Movie Count** | **Prod Company Rank** |
| --- | --- | --- |
| Dream Warrior Pictures | 3 | 1 |
| National Theatre Live | 3 | 1 |
| Lietuvos Kinostudija | 2 | 2 |
| Swadharm Entertainment | 2 | 2 |
| Panorama Studios | 2 | 2 |
| Marvel Studios | 2 | 2 |
| Central Base Productions | 2 | 2 |
| Painted Creek Productions | 2 | 2 |
| National Theatre | 2 | 2 |
| Colour Yellow Productions | 2 | 2 |
| The Archers | 1 | 3 |
| Blaze Film Enterprises | 1 | 3 |
| Bradeway Pictures | 1 | 3 |
| Bert Marcus Productions | 1 | 3 |
| A Studios | 1 | 3 |
| Ronk Film | 1 | 3 |
| Benaras Mediaworks | 1 | 3 |
| Bioscope Film Framers | 1 | 3 |
| Bestwin Production | 1 | 3 |
| Studio Green | 1 | 3 |
| AKS Film Studio | 1 | 3 |
| Kaargo Cinemas | 1 | 3 |
| Animonsta Studios | 1 | 3 |
| O3 Turkey Medya | 1 | 3 |
| StarVision | 1 | 3 |
| Synergy Films | 1 | 3 |
| PVP Cinema | 1 | 3 |
| Plan J Studios | 1 | 3 |
| 20 Steps Productions | 1 | 3 |
| Prime Zero Productions | 1 | 3 |
| Shreya Films International | 1 | 3 |
| SLN Cinemas | 1 | 3 |
| Epiphany Entertainments | 1 | 3 |
| 3 Ng Film | 1 | 3 |
| Eastpool Films | 1 | 3 |
| A square productions | 1 | 3 |
| Oak Entertainments | 1 | 3 |
| Doha Film Institute | 1 | 3 |
| Fenrir Films | 1 | 3 |
| Fábrica de Cine | 1 | 3 |
| Chernin Entertainment | 1 | 3 |
| Cross Creek Pictures | 1 | 3 |
| Loaded Dice Films | 1 | 3 |
| WM Films | 1 | 3 |
| Walt Disney Pictures | 1 | 3 |
| Excel Entertainment | 1 | 3 |
| Ancine | 1 | 3 |
| Twentieth Century Fox | 1 | 3 |
| Ave Fenix Pictures | 1 | 3 |
| Runaway Productions | 1 | 3 |
| Aletheia Films | 1 | 3 |
| 70 MM Entertainments | 1 | 3 |
| Moho Film | 1 | 3 |
| BR Productions and Riding High Pictures | 1 | 3 |
| Cana Vista Films | 1 | 3 |
| Gurbani Media | 1 | 3 |
| Sony Pictures Entertainment (SPE) | 1 | 3 |
| InnoVate Productions | 1 | 3 |
| Saanvi Pictures | 1 | 3 |
| The SPA Studios | 1 | 3 |
| Rotten Productions | 1 | 3 |
| Film Village | 1 | 3 |
| Arka Mediaworks | 1 | 3 |
| Atresmedia Cine | 1 | 3 |
| Goopy Bagha Productions Limited | 1 | 3 |
| Maxmedia | 1 | 3 |
| 1234 Cine Creations | 1 | 3 |
| Silent Hills Studio | 1 | 3 |
| Blueprint Pictures | 1 | 3 |
| Archangel Studios | 1 | 3 |
| HI Film Productions | 1 | 3 |
| Tin Drum Beats | 1 | 3 |
| Frío Frío | 1 | 3 |
| Warnuts Entertainment | 1 | 3 |
| Potential Studios | 1 | 3 |
| Adrama | 1 | 3 |
| Dark Steel Entertainment | 1 | 3 |
| Allfilm | 1 | 3 |
| Nokkhottro Cholochitra | 1 | 3 |
| BOB Film Sweden AB | 1 | 3 |
| Smash Entertainment! | 1 | 3 |
| EFilm | 1 | 3 |
| Urvashi Theaters | 1 | 3 |
| Angel Capital Film Group | 1 | 3 |
| Grass Root Film Company | 1 | 3 |
| Art Movies | 1 | 3 |
| Lost Legends | 1 | 3 |
| Ra.Mo. | 1 | 3 |
| Avocado Media | 1 | 3 |
| Tigmanshu Dhulia Films | 1 | 3 |
| Think Music | 1 | 3 |
| Anwar Rasheed Entertainment | 1 | 3 |
| Dwarakish Chitra | 1 | 3 |
| Anto Joseph Film Company | 1 | 3 |
| Dijital Sanatlar Production | 1 | 3 |
| Missart produkcija | 1 | 3 |
| Jayanna Combines | 1 | 3 |
| Jar Pictures | 1 | 3 |
| British Muslim TV | 1 | 3 |
| Crossing Bridges Films | 1 | 3 |
| BrightKnight Entertainment | 1 | 3 |
| Mirror Images LTD. | 1 | 3 |
| Mango Pickle Entertainment | 1 | 3 |
| Detailfilm | 1 | 3 |
| Archway Pictures | 1 | 3 |
| Vehli Janta Films | 1 | 3 |
| Grooters Productions | 1 | 3 |
| Fulwell 73 | 1 | 3 |
| Participant | 1 | 3 |
| Madras Enterprises | 1 | 3 |
| Alchemy Vision Workz | 1 | 3 |
| Axess Film Factory | 1 | 3 |
| PRK Productions | 1 | 3 |
| Dashami Studioz | 1 | 3 |
| Fablemaze | 1 | 3 |
| StarFab Production | 1 | 3 |
| RGK Cinema | 1 | 3 |
| Shreyasree Movies | 1 | 3 |
| BRON Studios | 1 | 3 |
| Bhadrakali Pictures | 1 | 3 |
| The Icelandic Filmcompany | 1 | 3 |
| The Church of Almighty God Film Center | 1 | 3 |
| Maha Sithralu | 1 | 3 |
| Mythri Movie Makers | 1 | 3 |
| Orange Médias | 1 | 3 |
| Mumbai Film Company | 1 | 3 |
| Swapna Cinema | 1 | 3 |
| Vivid Films | 1 | 3 |
| HRX Films | 1 | 3 |
| Wonder Head | 1 | 3 |
| Sixteen by Sixty-Four Productions | 1 | 3 |
| Akshar Communications | 1 | 3 |
| Moviee Mill | 1 | 3 |
| Happy Hours Entertainments | 1 | 3 |
| M-Films | 1 | 3 |
| Cineddiction Films | 1 | 3 |
| Heyday Films | 1 | 3 |
| Diamond Works | 1 | 3 |
| Shree Raajalakshmi Films | 1 | 3 |
| Dream Tree Film Productions | 1 | 3 |
| Cine Sarasavi Productions | 1 | 3 |
| Acropolis Entertainment | 1 | 3 |
| RedhanThe Cinema People | 1 | 3 |
| Hombale Films | 1 | 3 |
| Swonderful Pictures | 1 | 3 |
| COMETE Films | 1 | 3 |
| Cinepro Lanka International | 1 | 3 |
| Williams 4 Productions | 1 | 3 |
| Touch Wood Multimedia Creations | 1 | 3 |
| Rocket Beans Entertainment | 1 | 3 |
| Hepifilms | 1 | 3 |
| SRaj Productions | 1 | 3 |
| Kharisma Starvision Plus PT | 1 | 3 |
| MD productions | 1 | 3 |
| Ataraxia Entertainment | 1 | 3 |
| NBW Films | 1 | 3 |
| Kannamthanam Films | 1 | 3 |
| Brainbox Studios | 1 | 3 |
| Matchbox Pictures | 1 | 3 |
| Reliance Entertainment | 1 | 3 |
| Neelam Productions | 1 | 3 |
| Jyot & Aagnya Anusaare Productions | 1 | 3 |
| Clown Town Productions | 1 | 3 |
| Special Treats Production Company | 1 | 3 |
| Mooz Films | 1 | 3 |
| Bulb Chamka | 1 | 3 |
| GreenTouch Entertainment | 1 | 3 |
| Crystal Paark Cinemas | 1 | 3 |
| Kangaroo Broadcasting | 1 | 3 |
| Swami Samartha Creations | 1 | 3 |
| DreamReality Movies | 1 | 3 |
| Fahadh Faasil and Friends | 1 | 3 |
| Narrator | 1 | 3 |
| Kineo Filmproduktion | 1 | 3 |
| Appu Pathu Pappu Production House | 1 | 3 |
| Rishab Shetty Films | 1 | 3 |
| Namah Pictures | 1 | 3 |
| Annai Tamil Cinemas | 1 | 3 |
| Viacom18 Motion Pictures | 1 | 3 |
| MNC Pictures | 1 | 3 |
| Clyde Vision Films | 1 | 3 |
| Adenium Productions | 1 | 3 |
|  |  |  |

Q14. How many movies released in each genre during March 2017 in the USA had more than 1,000 votes?

| **Genre** | **Movie Count** |
| --- | --- |
| Drama | 16 |
| Comedy | 8 |
| Crime | 5 |
| Horror | 5 |
| Action | 4 |
| Sci-Fi | 4 |
| Thriller | 4 |
| Romance | 3 |
| Fantasy | 2 |
| Mystery | 2 |
| Family | 1 |

Q15. Find movies of each genre that start with the word ‘The’ and which have an average rating > 8?

| **Title** | **Avg Rating** | **Genre** |
| --- | --- | --- |
| The Blue Elephant 2 | 8.8 | Drama |
| The Blue Elephant 2 | 8.8 | Horror |
| The Blue Elephant 2 | 8.8 | Mystery |
| The Brighton Miracle | 9.5 | Drama |
| The Irishman | 8.7 | Crime |
| The Irishman | 8.7 | Drama |
| The Colour of Darkness | 9.1 | Drama |
| Theeran Adhigaaram Ondru | 8.3 | Action |
| Theeran Adhigaaram Ondru | 8.3 | Crime |
| Theeran Adhigaaram Ondru | 8.3 | Thriller |
| The Mystery of Godliness: The Sequel | 8.5 | Drama |
| The Gambinos | 8.4 | Crime |
| The Gambinos | 8.4 | Drama |
| The King and I | 8.2 | Drama |
| The King and I | 8.2 | Romance |

-- You should also try your hand at median rating and check whether the ‘median rating’ column gives any significant insights.

-- Q16. Of the movies released between 1 April 2018 and 1 April 2019, how many were given a median rating of 8?

| **Movies Released** |
| --- |
| 361 |

Once again, try to solve the problem given below.

-- Q17. Do German movies get more votes than Italian movies?

-- Hint: Here you have to find the total number of votes for both German and Italian movies.

| **Language** | **Total Votes** |
| --- | --- |
| German | 3,865,608 |
| Italian | 2,003,623 |
| German & Italian | 555,917 |

-- Q18. Which columns in the names table have null values??

| **Field** | **Null Count** |
| --- | --- |
| name\_nulls | 0 |
| height\_nulls | 17,335 |
| date\_of\_birth\_nulls | 13,431 |
| known\_for\_movies\_nulls | 15,226 |

/\* There are no Null value in the column 'name'.

The director is the most important person in a movie crew.

Let’s find out the top three directors in the top three genres who can be hired by RSVP Movies.\*/

-- Q19. Who are the top three directors in the top three genres whose movies have an average rating > 8?

-- (Hint: The top three genres would have the most number of movies with an average rating > 8.)

| **Director Name** | **Movie Count** |
| --- | --- |
| James Mangold | 4 |
| Anthony Russo | 3 |
| Soubin Shahir | 3 |

-- Q20. Who are the top two actors whose movies have a median rating >= 8?

| **Actor Name** | **Movie Count** |
| --- | --- |
| Mammootty | 8 |
| Mohanlal | 5 |

Q21. Which are the top three production houses based on the number of votes received by their movies?

| **Production Company** | **Vote Count** | **Prod Comp Rank** |
| --- | --- | --- |
| Marvel Studios | 2,656,967 | 1 |
| Twentieth Century Fox | 2,411,163 | 2 |
| Warner Bros. | 2,396,057 | 3 |

/\*Yes Marvel Studios rules the movie world.

So, these are the top three production houses based on the number of votes received by the movies they have produced.

Since RSVP Movies is based out of Mumbai, India also wants to woo its local audience.

RSVP Movies also wants to hire a few Indian actors for its upcoming project to give a regional feel.

Let’s find who these actors could be.\*/

-- Q22. Rank actors with movies released in India based on their average ratings. Which actor is at the top of the list?

-- Note: The actor should have acted in at least five Indian movies.

| **Actor Name** | **Movie Count** | **Weighted Avg Rating** | **Total Votes** | **Actor Rank** |
| --- | --- | --- | --- | --- |
| Vijay Sethupathi | 5 | 8.41673 | 23,114 | 1 |
| Fahadh Faasil | 5 | 7.98604 | 13,557 | 2 |
| Yogi Babu | 11 | 7.83018 | 8,500 | 3 |
| Joju George | 5 | 7.57967 | 3,926 | 4 |
| Ammy Virk | 6 | 7.55383 | 2,504 | 5 |
| Dileesh Pothan | 5 | 7.52133 | 6,235 | 6 |
| Kunchacko Boban | 6 | 7.48351 | 5,628 | 7 |
| Pankaj Tripathi | 5 | 7.43706 | 40,728 | 8 |
| Rajkummar Rao | 6 | 7.36701 | 42,560 | 9 |
| Dulquer Salmaan | 5 | 7.30087 | 17,666 | 10 |
| Amit Sadh | 5 | 7.21306 | 13,355 | 11 |
| Tovino Thomas | 8 | 7.14540 | 11,596 | 12 |
| Mammootty | 8 | 7.04208 | 12,613 | 13 |
| Nassar | 5 | 7.03312 | 4,016 | 14 |
| Karamjit Anmol | 6 | 6.90863 | 1,970 | 15 |
| Hareesh Kanaran | 5 | 6.57747 | 3,196 | 16 |
| Naseeruddin Shah | 5 | 6.53622 | 12,604 | 17 |
| Anandraj | 6 | 6.53571 | 2,750 | 18 |
| Mohanlal | 6 | 6.50840 | 17,244 | 19 |
| Aju Varghese | 5 | 6.43375 | 2,237 | 20 |
| Siddique | 7 | 6.42565 | 5,953 | 21 |
| Prakash Raj | 6 | 6.37126 | 8,548 | 22 |
| Jimmy Sheirgill | 6 | 6.28772 | 3,826 | 23 |
| Mahesh Achanta | 6 | 6.21141 | 2,716 | 24 |
| Biju Menon | 5 | 6.21091 | 1,916 | 25 |
| Suraj Venjaramoodu | 6 | 6.18625 | 4,284 | 26 |
| Abir Chatterjee | 5 | 5.80078 | 1,413 | 27 |
| Sunny Deol | 5 | 5.70509 | 4,594 | 28 |
| Radha Ravi | 5 | 5.70223 | 1,483 | 29 |
| Prabhu Deva | 5 | 5.68014 | 2,044 | 30 |

Q23.Find out the top five actresses in Hindi movies released in India based on their average ratings?

-- Note: The actresses should have acted in at least three Indian movies.

-- (Hint: You should use the weighted average based on votes. If the ratings clash, then the total number of votes should act as the tie breaker.)

| **Actress Name** | **Movie Count** | **Weighted Avg Rating** | **Total Votes** | **Actress Rank** |
| --- | --- | --- | --- | --- |
| Taapsee Pannu | 3 | 7.73692 | 18,061 | 1 |
| Divya Dutta | 3 | 6.88440 | 8,579 | 2 |
| Kriti Kharbanda | 3 | 4.80314 | 2,549 | 3 |
| Sonakshi Sinha | 4 | 4.18124 | 4,025 | 4 |

Q24. Consider thriller movies having at least 25,000 votes. Classify them according to their average ratings in

the following categories:

Rating > 8: Superhit

Rating between 7 and 8: Hit

Rating between 5 and 7: One-time-watch

Rating < 5: Flop

Note: Sort the output by average ratings (desc).

| **Title** | **Movie Category** |
| --- | --- |
| Ah-ga-ssi | Superhit |
| Joker | Superhit |
| Andhadhun | Superhit |
| The Foreigner | Hit |
| Brimstone | Hit |
| Elle | Hit |
| John Wick: Chapter 2 | Hit |
| Miss Sloane | Hit |
| Shot Caller | Hit |
| Good Time | Hit |
| Mission: Impossible - Fallout | Hit |
| Split | Hit |
| Get Out | Hit |
| Forushande | Hit |
| Hotel Mumbai | Hit |
| The Killing of a Sacred Deer | Hit |
| First Reformed | Hit |
| John Wick: Chapter 3 - Parabellum | Hit |
| Den skyldige | Hit |
| Searching | Hit |
| The Mule | Hit |
| Pet Sematary | One-time-watch |
| The Belko Experiment | One-time-watch |
| Venom | One-time-watch |
| xXx: Return of Xander Cage | One-time-watch |
| Kidnap | One-time-watch |
| Mute | One-time-watch |
| Halloween | One-time-watch |
| The Commuter | One-time-watch |
| Hunter Killer | One-time-watch |
| American Assassin | One-time-watch |
| Geostorm | One-time-watch |
| Would You Rather | One-time-watch |
| Sleepless | One-time-watch |
| Alien: Covenant | One-time-watch |
| Atomic Blonde | One-time-watch |
| Red Sparrow | One-time-watch |
| The Autopsy of Jane Doe | One-time-watch |
| Jigsaw | One-time-watch |
| Scary Stories to Tell in the Dark | One-time-watch |
| Jungle | One-time-watch |
| The Equalizer 2 | One-time-watch |
| Widows | One-time-watch |
| The Circle | One-time-watch |
| Fractured | One-time-watch |
| Maze Runner: The Death Cure | One-time-watch |
| Robin Hood | One-time-watch |
| Mile 22 | One-time-watch |
| The Fate of the Furious | One-time-watch |
| In the Tall Grass | One-time-watch |
| Rough Night | One-time-watch |
| The Curse of La Llorona | One-time-watch |
| Annabelle: Creation | One-time-watch |
| Happy Death Day | One-time-watch |
| Life | One-time-watch |
| The Beguiled | One-time-watch |
| The Ritual | One-time-watch |
| Thoroughbreds | One-time-watch |
| Insidious: The Last Key | One-time-watch |
| Skyscraper | One-time-watch |
| The Nun | One-time-watch |
| Captive State | One-time-watch |
| Roman J. Israel, Esq. | One-time-watch |
| Serenity | One-time-watch |
| Revenge | One-time-watch |
| Truth or Dare | One-time-watch |
| Glass | One-time-watch |
| Peppermint | One-time-watch |
| Us | One-time-watch |
| Velvet Buzzsaw | One-time-watch |
| Anna | One-time-watch |
| The Perfection | One-time-watch |
| Annabelle Comes Home | One-time-watch |
| Fifty Shades Freed | Flop |
| Race 3 | Flop |
| The Open House | Flop |

-- Q25. What is the genre-wise running total and moving average of the average movie duration?

-- (Note: You need to show the output table in the question.)

| **Genre** | **Avg Duration** | **Running Total Duration** | **Moving Avg Duration** |
| --- | --- | --- | --- |
| Action | 112.88 | 1341.03 | 103.16 |
| Romance | 109.53 | 1228.15 | 102.35 |
| Crime | 107.05 | 1118.62 | 101.69 |
| Drama | 106.77 | 1011.57 | 101.16 |
| Fantasy | 105.14 | 904.80 | 100.53 |
| Comedy | 102.62 | 799.66 | 99.96 |
| Adventure | 101.87 | 697.04 | 99.58 |
| Mystery | 101.80 | 595.17 | 99.20 |
| Thriller | 101.58 | 493.37 | 98.67 |
| Family | 100.97 | 391.79 | 97.95 |
| Others | 100.16 | 290.82 | 96.94 |
| Sci-Fi | 97.94 | 190.66 | 95.33 |
| Horror | 92.72 | 92.72 | 92.72 |

-- Q26. Which are the five highest-grossing movies of each year that belong to the top three genres?

-- (Note: The top 3 genres would have the most number of movies.)

| **Genre** | **Year** | **Title** | **Worldwide Gross Income** |
| --- | --- | --- | --- |
| Comedy | 2017 | The Healer | $9,979,800 |
| Comedy | 2017 | Tim Timmerman, Hope of America | $97,727 |
| Comedy | 2017 | Il a déjà tes yeux | $9,755,458 |
| Comedy | 2017 | Jumanji: Welcome to the Jungle | $962,102,237 |
| Comedy | 2017 | All Nighter | $96,162 |
| Comedy | 2018 | La fuitina sbagliata | $992,070 |
| Comedy | 2018 | Gung-hab | $9,899,017 |
| Comedy | 2018 | Simmba | $9,865,268 |
| Comedy | 2018 | Aleksi | $9,791 |
| Comedy | 2018 | Os Farofeiros | $9,786,399 |
| Comedy | 2019 | Eaten by Lions | $99,276 |
| Comedy | 2019 | Friend Zone | $9,894,885 |
| Comedy | 2019 | Organize Isler: Sazan Sarmali | $9,831,515 |
| Comedy | 2019 | Benjamin | $97,521 |
| Comedy | 2019 | Brochevarevarura | $9,737 |
| Drama | 2017 | Shatamanam Bhavati | INR 530,500,000 |
| Drama | 2017 | Winner | INR 250,000,000 |
| Drama | 2017 | Thank You for Your Service | $9,995,692 |
| Drama | 2017 | The Healer | $9,979,800 |
| Drama | 2017 | Shan guang shao nu | $9,949,926 |
| Drama | 2018 | Antony & Cleopatra | $998,079 |
| Drama | 2018 | Zaba | $991 |
| Drama | 2018 | Canary | $98,665 |
| Drama | 2018 | Simmba | $9,865,268 |
| Drama | 2018 | Une saison en France | $98,390 |
| Drama | 2019 | Joker | $995,064,593 |
| Drama | 2019 | Nur eine Frau | $9,884 |
| Drama | 2019 | Running with the Devil | $98,682 |
| Drama | 2019 | Charlie Says | $98,240 |
| Drama | 2019 | Transit | $982,372 |
| Thriller | 2017 | Gi-eok-ui bam | $9,968,972 |
| Thriller | 2017 | V.I.P. | $9,710,283 |
| Thriller | 2017 | Fixeur | $9,669 |
| Thriller | 2017 | Overdrive | $9,650,552 |
| Thriller | 2017 | Den 12. mann | $9,567,121 |
| Thriller | 2018 | The Villain | INR 1,300,000,000 |
| Thriller | 2018 | Shéhérazade | $966,225 |
| Thriller | 2018 | Truth or Dare | $95,330,493 |
| Thriller | 2018 | La nuit a dévoré le monde | $95,208 |
| Thriller | 2018 | Replicas | $9,206,925 |
| Thriller | 2019 | Prescience | $9,956 |
| Thriller | 2019 | Joker | $995,064,593 |
| Thriller | 2019 | Running with the Devil | $98,682 |
| Thriller | 2019 | The Boat | $98,559 |
| Thriller | 2019 | Division 19 | $981 |

-- Finally, let’s find out the names of the top two production houses that have produced the highest number of hits among multilingual movies.

-- Q27. Which are the top two production houses that have produced the highest number of hits (median rating >= 8) among multilingual movies?

| **Production Company** | **Movie Count** | **Production Company Rank** |
| --- | --- | --- |
| Star Cinema | 7 | 1 |
| Twentieth Century Fox | 4 | 2 |

Multilingual is the important piece in the above question. It was created using POSITION(',' IN languages)>0 logic

-- If there is a comma, that means the movie is of more than one language

-- Q28. Who are the top 3 actresses based on the number of Super Hit movies (Superhit movie: average rating of movie > 8) in 'drama' genre?

-- Note: Consider only superhit movies to calculate the actress average ratings.

-- (Hint: You should use the weighted average based on votes. If the ratings clash, then the total number of votes

-- should act as the tie breaker. If number of votes are same, sort alphabetically by actress name.)

| **Actress Name** | **Total Votes** | **Movie Count** | **Actress Average Rating** | **Actress Rank** |
| --- | --- | --- | --- | --- |
| Amanda Lawrence | 656 | 2 | 8.95000 | 1 |
| Denise Gough | 656 | 2 | 8.95000 | 2 |
| Susan Brown | 656 | 2 | 8.95000 | 3 |

/\* Q29. Get the following details for top 9 directors (based on number of movies)

Director id

Name

Number of movies

Average inter movie duration in days

Average movie ratings

Total votes

Min rating

Max rating

total movie durations

| **Director ID** | **Director Name** | **Number of Movies** | **Avg Inter Movie Days** | **Avg Rating** | **Total Votes** | **Min Rating** | **Max Rating** | **Total Duration** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| nm1777967 | A.L. Vijay | 5 | 177 | 5.42 | 1754 | 3.7 | 6.9 | 613 |
| nm2096009 | Andrew Jones | 5 | 191 | 3.02 | 1989 | 2.7 | 3.2 | 432 |
| nm0001752 | Steven Soderbergh | 4 | 254 | 6.48 | 171684 | 6.2 | 7.0 | 401 |
| nm0425364 | Jesse V. Johnson | 4 | 299 | 5.45 | 14778 | 4.2 | 6.5 | 383 |
| nm0515005 | Sam Liu | 4 | 260 | 6.23 | 28557 | 5.8 | 6.7 | 312 |
| nm0814469 | Sion Sono | 4 | 331 | 6.03 | 2972 | 5.4 | 6.4 | 502 |
| nm0831321 | Chris Stokes | 4 | 198 | 4.33 | 3664 | 4.0 | 4.6 | 352 |
| nm2691863 | Justin Price | 4 | 315 | 4.50 | 5343 | 3.0 | 5.8 | 346 |
| nm6356309 | Özgür Bakar | 4 | 112 | 3.75 | 1092 | 3.1 | 4.9 | 374 |