1. **What Are the top 6 movies based on rating?**

|  |  |
| --- | --- |
| **Genres** | **Count ratings** |
| Comedy|Crime|Drama|Thriller | 56851 |
| Action|Crime|Drama|Thriller | 16725 |
| Action|Adventure|SciFi | 11939 |
| Drama | 6242 |
| Comedy | 5486 |
| Action|SciFi|Thriller | 5044 |

1. **What is the top one movie genres based on the rating per year? I want to see if the user clusters based on movie choices has changed.**

|  |  |
| --- | --- |
| **Year** |  |
| 1996, | Action|Adventure|Comedy|Fantasy|Romance |
| 1997, | Action|Comedy|Sci-Fi |
| 1998, | Action|Adventure|Comedy|Fantasy|Romance |
| 1999, | Action|Adventure|Comedy|Romance |
| 2000, | Action|Drama|Romance |
| 2001, | Action|Crime|Romance|Thriller |
| 2002, | Action|Adventure|Drama|War |
| 2003, | Action|Adventure|Animation|Drama|Fantasy |
| 2004, | Animation|Musical |
| 2005, | Adventure|Animation|Comedy |
| 2006, | Action|Drama|Western |
| 2007, | Adventure|Animation|Children|Comedy|Sci-Fi |
| 2008, | Adventure|Animation|Children|Comedy|Sci-Fi |
| 2009, | Action|Adventure|Mystery|Romance|Thriller |
| 2010, | Action|Adventure|Animation|Sci-Fi |
| 2011, | Action|Adventure|Animation|Children|Fantasy|Sci-Fi |
| 2012, | Action|Adventure|Animation|Sci-Fi |
| 2013, | Action|Romance|Sci-Fi|Thriller |
| 2014, | Action|Adventure|Animation|Crime|Fantasy |
| 2015, | Animation|Drama|War |
| 2016, | Action|Adventure|Drama|War |
| 2017, | Action|Adventure|Animation|Sci-Fi |
| 2018, | Action|Drama|Horror|Thriller |

1. **Is there a relation between the month and the movie category?**

|  |  |  |
| --- | --- | --- |
| **Year** | **Month** | **Top Category** |
| 1996, | April, | Action|Crime|Drama|Thriller |
| 1996, | August, | Crime|Mystery|Thriller |
| 1996, | December, | Action|Adventure|Comedy|Fantasy|Romance |
| 1996, | July, | Action|Adventure|Comedy|Romance |
| 1996, | June, | Adventure|Animation|Comedy |
| 1996, | March, | Action|Adventure|Comedy|Romance|Thriller |
| 1996, | May, | Adventure|Animation|Comedy |
| 1996, | November, | Adventure|Children|Comedy|Musical |
| 1996, | October, | Comedy|Sci-Fi |
| 1996, | September, | Drama|War |
| 1997, | April, | Action|Drama|War |
| 1997, | December, | Action|Adventure|Sci-Fi |
| 1997, | February, | Action|Adventure |
| 1997, | January, | Action|Adventure |
| 1997, | July, | Action|Comedy|Sci-Fi |
| 1997, | June, | Action|Adventure |
| 1997, | March, | Adventure|Animation|Children|Drama|Musical|IMAX |
| 1997, | May, | Action|Adventure |
| 1997, | November, | Adventure|Drama|IMAX |
| 1997, | October, | Comedy |
| 1997, | September, | Action|Adventure |
| 1998, | August, | Action|Drama|War |
| 1998, | December, | Action|Comedy|Romance |
| 1998, | February, | Action|Thriller |
| 1998, | January, | Crime|Film-Noir|Mystery|Thriller |
| 1998, | July, | Action|Drama|War |
| 1998, | June, | Action|Adventure|Drama|Sci-Fi |
| 1998, | March, | Action|Adventure |
| 1998, | May, | Action|Thriller |
| 1998, | November, | Drama|Romance |
| 1999, | August, | Drama|Horror|Mystery |
| 1999, | December, | Action|Adventure|Drama|War |
| 1999, | February, | Comedy |
| 1999, | January, | Comedy|Romance |
| 1999, | July, | Comedy|Drama |
| 1999, | June, | Action|Adventure|Sci-Fi |
| 1999, | March, | Children|Drama|Fantasy |
| 1999, | May, | Adventure|Drama |
| 1999, | November, | Action|Adventure|Comedy|Romance |
| 1999, | October, | Action|Adventure|Mystery|Romance|Thriller |
| 1999, | September, | Drama|Romance |
| 2000, | April, | Action|Adventure |
| 2000, | August, | Action|Adventure|Mystery|Romance|Thriller |
| 2000, | December, | Action|Drama|Romance |
| 2000, | February, | Action|Drama|War |
| 2000, | January, | Action|Adventure |
| 2000, | July, | Action|Adventure|Comedy|Fantasy|Romance |
| 2000, | June, | Action|Adventure|Comedy|Fantasy|Romance |
| 2000, | March, | Action|Adventure|Drama |
| 2000, | May, | Action|Adventure |
| 2000, | November, | Action|Adventure|Drama|War |
| 2000, | October, | Action|Adventure|Comedy|Fantasy|Romance |
| 2000, | September, | Action|Adventure|Comedy|Fantasy|Romance |
| 2001, | April, | Action|Adventure |
| 2001, | August, | Action|Adventure |
| 2001, | December, | Action|Adventure|Comedy|Fantasy|Romance |
| 2001, | February, | Action|Adventure|Animation|Drama|Fantasy |
| 2001, | January, | Action|Adventure|Comedy|Fantasy|Romance |
| 2001, | July, | Action|Adventure|Mystery|Thriller |
| 2001, | June, | Action|Adventure|Comedy|Fantasy|Romance |
| 2001, | March, | Crime|Drama|Thriller |
| 2001, | May, | Action|Drama|Romance |
| 2001, | November, | Action|Comedy|Musical |
| 2001, | October, | Action|Adventure|Comedy|Crime |
| 2001, | September, | Action|Comedy|Sci-Fi |
| 2002, | April, | Action|Adventure|Drama|War |
| 2002, | August, | Action|Adventure|Animation|Sci-Fi |
| 2002, | December, | Action|Comedy|Musical |
| 2002, | February, | Action|Adventure|Comedy|Fantasy|Romance |
| 2002, | January, | Adventure|Fantasy |
| 2002, | July, | Action|Adventure|Horror|Sci-Fi |
| 2002, | June, | Action|Adventure|Thriller |
| 2002, | March, | Adventure|Animation|Children|Drama|Sci-Fi |
| 2002, | May, | Action|Adventure|Sci-Fi|Thriller |
| 2002, | November, | Comedy|Drama|Romance |
| 2002, | October, | Action|Adventure|Comedy|Fantasy|Romance |
| 2002, | September, | Action|Adventure|Comedy |
| 2003, | April, | Comedy|Crime|Drama|Musical |
| 2003, | August, | Action|Adventure|Drama|War |
| 2003, | December, | Action|Adventure|Thriller |
| 2003, | February, | Action|Adventure |
| 2003, | January, | Action|Adventure|Crime|Drama|Thriller |
| 2003, | July, | Action|Sci-Fi|Thriller |
| 2003, | June, | Action|Adventure|Animation|Drama|Fantasy |
| 2003, | March, | Action|Adventure|Comedy|Fantasy|Romance |
| 2003, | May, | Action|Adventure |
| 2003, | November, | Action|Adventure |
| 2003, | October, | Action|Crime|Mystery|Sci-Fi|Thriller |
| 2003, | September, | Action|Drama|Western |
| 2004, | April, | Action|Adventure|Horror|Sci-Fi |
| 2004, | August, | Action|Adventure|Drama|Fantasy |
| 2004, | December, | Drama|Mystery|Thriller |
| 2004, | February, | Action|Adventure|Drama |
| 2004, | January, | Drama|Romance|War |
| 2004, | July, | Action|Adventure|Comedy|Fantasy|Romance |
| 2004, | June, | Animation|Musical |
| 2004, | March, | Action|Drama|War |
| 2004, | May, | Comedy|Drama|Romance|War |
| 2004, | November, | Action|Comedy|Romance |
| 2004, | October, | Action|Adventure|Western |
| 2004, | September, | Adventure|Drama|Sci-Fi |
| 2005, | April, | Action|Adventure|Animation|Sci-Fi |
| 2005, | August, | Action|Adventure|Animation|Sci-Fi |
| 2005, | December, | Comedy|Drama|Romance |
| 2005, | February, | Action|Adventure|Comedy|Romance |
| 2005, | January, | Action|Drama|Sci-Fi |
| 2005, | July, | Action|Adventure|Comedy|Fantasy |
| 2005, | June, | Action|Adventure|Drama|Fantasy |
| 2005, | March, | Action|Adventure|Crime|Drama|Thriller |
| 2005, | May, | Action|Crime|Film-Noir|Mystery|Thriller |
| 2005, | November, | Comedy|Crime|Drama|Thriller |
| 2005, | October, | Adventure|Animation|Children|Comedy |
| 2005, | September, | Action|Adventure|Drama |
| 2006, | April, | Action|Western |
| 2006, | August, | Action|Animation|Sci-Fi|Thriller |
| 2006, | December, | Action|Adventure|Comedy|Fantasy|Romance |
| 2006, | February, | Adventure|Animation|Children|Comedy |
| 2006, | January, | Adventure|Animation|Children|Comedy|Fantasy|Romance |
| 2006, | July, | Action|Comedy|Sci-Fi |
| 2006, | June, | Comedy|Crime|Mystery|Thriller |
| 2006, | March, | Drama|War |
| 2006, | May, | Adventure|Animation|Children|Comedy|Fantasy|Romance |
| 2006, | November, | Animation|Comedy|Musical |
| 2006, | October, | Action|Adventure|Western |
| 2006, | September, | Action|Romance|War|Western |
| 2007, | April, | Action|Adventure|Animation|Drama|Fantasy |
| 2007, | August, | Adventure|Animation|Children|Comedy|Sci-Fi |
| 2007, | December, | Action|Crime|Drama|Western |
| 2007, | February, | Comedy|Drama|Musical|Romance |
| 2007, | January, | Action|Crime|Film-Noir|Mystery|Thriller |
| 2007, | July, | Action|Adventure|Drama|Thriller |
| 2007, | June, | Adventure|Drama|Fantasy|Mystery|Sci-Fi |
| 2007, | March, | Action|Adventure|Drama |
| 2007, | May, | Action|Romance|War|Western |
| 2007, | November, | Action|Adventure|Animation|Drama|Fantasy |
| 2007, | October, | Drama|War |
| 2007, | September, | Action|Adventure|Animation|Drama|Fantasy |
| 2008, | April, | Action|Adventure|Crime|Drama|Thriller |
| 2008, | August, | Comedy|Musical|Romance |
| 2008, | December, | Action|Adventure|Horror|Sci-Fi |
| 2008, | February, | Action|Adventure|Crime|Drama|Thriller |
| 2008, | January, | Action|Adventure|Animation|Sci-Fi |
| 2008, | July, | Adventure|Fantasy|IMAX |
| 2008, | June, | Action|Crime|Thriller |
| 2008, | March, | Action|Adventure|Drama|Fantasy |
| 2008, | May, | Drama|Mystery|Sci-Fi|Thriller |
| 2008, | November, | Adventure|Animation|Children|Comedy|Sci-Fi |
| 2008, | October, | Action|Drama|War |
| 2008, | September, | Action|Adventure|Drama|Fantasy |
| 2009, | April, | Comedy|Fantasy|Romance |
| 2009, | August, | Action|Adventure|Animation|Children|Fantasy|Sci-Fi |
| 2009, | December, | Action|Sci-Fi |
| 2009, | February, | Animation|Comedy|Fantasy|Sci-Fi |
| 2009, | January, | Action|Adventure|Comedy|Crime|Fantasy |
| 2009, | July, | Action|Adventure|Drama|Fantasy |
| 2009, | June, | Animation|Drama|Sci-Fi|IMAX |
| 2009, | March, | Action|Adventure|Comedy|Fantasy|Romance |
| 2009, | May, | Adventure|Comedy|Musical |
| 2009, | November, | Action|Adventure|Mystery|Romance|Thriller |
| 2009, | October, | Action|Adventure|Comedy|Fantasy |
| 2009, | September, | Action|Crime|Drama|IMAX |
| 2010, | April, | Action|Adventure|Animation|Drama|Fantasy |
| 2010, | August, | Action|Crime|Drama|Mystery|Sci-Fi|Thriller|IMAX |
| 2010, | December, | Action|Comedy |
| 2010, | February, | Comedy|Crime|Drama|Thriller |
| 2010, | January, | Film-Noir|Mystery |
| 2010, | July, | Comedy|Drama|Romance |
| 2010, | June, | Action|Adventure|Comedy|Fantasy |
| 2010, | March, | Action|Drama|Thriller |
| 2010, | May, | Action|Comedy|Horror |
| 2010, | November, | Action|Comedy|Musical |
| 2010, | October, | Action|Comedy|Fantasy|Musical|Romance |
| 2010, | September, | Action|Crime|Drama|Mystery|Sci-Fi|Thriller|IMAX |
| 2011, | April, | Crime|Drama|Mystery |
| 2011, | August, | Action|Adventure|Crime|Drama|Thriller |
| 2011, | December, | Documentary |
| 2011, | February, | Action|Adventure|Sci-Fi|IMAX |
| 2011, | January, | Action|Crime|Film-Noir|Mystery|Thriller |
| 2011, | July, | Action|Adventure|Animation|Drama|Fantasy |
| 2011, | June, | Action|Adventure|Comedy|Fantasy|Romance |
| 2011, | March, | Adventure|Drama|Thriller |
| 2011, | May, | Action|Adventure|Mystery|Romance|Thriller |
| 2011, | November, | Action|Adventure|Animation|Children|Fantasy|Sci-Fi |
| 2011, | October, | Action|Crime|Drama|Mystery|Sci-Fi|Thriller|IMAX |
| 2011, | September, | Adventure|Animation|Children|Comedy|Musical|Romance |
| 2012, | April, | Adventure|Drama |
| 2012, | August, | Crime|Drama|Thriller |
| 2012, | December, | Adventure|Animation|Children|Drama|Musical|IMAX |
| 2012, | February, | Adventure|Animation|Children|Comedy|Musical|Romance |
| 2012, | January, | Action|Adventure|Comedy|Fantasy|Romance |
| 2012, | July, | Action|Crime|Drama|Thriller |
| 2012, | June, | Action|Adventure|Animation|Sci-Fi |
| 2012, | March, | Action|Adventure|Animation|Drama|Fantasy |
| 2012, | May, | Action|Comedy|Romance |
| 2012, | November, | Action|Comedy|Crime |
| 2012, | October, | Animation|Comedy|Musical |
| 2012, | September, | Action|Adventure|Western |
| 2013, | April, | Action|Adventure|Mystery|Thriller |
| 2013, | August, | Action|Adventure|Comedy|Romance|Thriller |
| 2013, | December, | Action|Drama|Western |
| 2013, | February, | Action|Adventure|Drama |
| 2013, | January, | Action|Adventure|Drama |
| 2013, | July, | Action|Adventure|Fantasy|Sci-Fi|IMAX |
| 2013, | June, | Action|Adventure|Crime|IMAX |
| 2013, | March, | Action|Drama|Thriller |
| 2013, | May, | Action|Adventure|Comedy|Fantasy|Romance |
| 2013, | November, | Action|Sci-Fi|IMAX |
| 2013, | October, | Action|Adventure|Mystery|Romance|Thriller |
| 2013, | September, | Action|Adventure|Animation|Children|Comedy |
| 2014, | August, | Action|Adventure|Animation|Crime|Fantasy |
| 2014, | December, | Crime|Drama|Film-Noir|Thriller |
| 2014, | February, | Action|Comedy|Musical |
| 2014, | January, | Action|Adventure|Drama |
| 2014, | July, | Action|Crime|Drama |
| 2014, | June, | Action|Adventure|Mystery|Thriller |
| 2014, | March, | Comedy |
| 2014, | May, | Action|Adventure|Animation|Children|Comedy|Fantasy |
| 2014, | November, | Action|Adventure|Drama|War |
| 2014, | October, | Adventure|Comedy|Crime |
| 2014, | September, | Mystery|Sci-Fi|Thriller |
| 2015, | April, | Adventure|Animation|Children|Drama |
| 2015, | August, | Adventure|Comedy|Fantasy |
| 2015, | December, | Action|Adventure|Animation|Children|Comedy |
| 2015, | February, | Action|Adventure|Comedy|Crime |
| 2015, | January, | Action|Adventure|Comedy|Romance|Thriller |
| 2015, | July, | Action|Adventure|Mystery|Romance|Thriller |
| 2015, | June, | Action|Adventure|Comedy|Fantasy |
| 2015, | March, | Action|Adventure|Crime|Drama|Thriller |
| 2015, | May, | Action|Adventure|Crime|Drama|Thriller |
| 2015, | November, | Animation|Drama|War |
| 2015, | October, | Action|Romance|Sci-Fi|Thriller |
| 2015, | September, | Action|Adventure|Animation|Children|Comedy|Fantasy |
| 2016, | April, | Action|Adventure|Comedy|Fantasy|Romance |
| 2016, | August, | Action|Adventure|Comedy|Fantasy|Romance |
| 2016, | December, | Action|Comedy |
| 2016, | February, | Action|Adventure|Comedy|Fantasy|Romance |
| 2016, | January, | Action|Adventure|Mystery|Thriller |
| 2016, | July, | Action|Adventure|Comedy|Fantasy|Romance |
| 2016, | June, | Drama|War |
| 2016, | March, | Action|Crime|Drama|Mystery|Thriller |
| 2016, | May, | Action|Adventure|Crime|IMAX |
| 2016, | November, | Action|Adventure |
| 2016, | October, | Action|Adventure|Comedy|Crime |
| 2016, | September, | Action|Crime|Drama|Thriller |
| 2017, | April, | Action|Adventure|Animation|Children|Fantasy|Sci-Fi |
| 2017, | August, | Action|Adventure|Animation|Crime|Fantasy |
| 2017, | December, | Action|Adventure|Drama |
| 2017, | February, | Action|Adventure|Animation|Children|Comedy|Fantasy |
| 2017, | January, | Action|Adventure|Animation|Children|Comedy|Fantasy |
| 2017, | July, | Action|Adventure|Crime|IMAX |
| 2017, | June, | Action|Adventure|Animation|Sci-Fi |
| 2017, | March, | Action|Comedy |
| 2017, | May, | Action|Adventure|Animation|Children|Comedy |
| 2017, | November, | Action|Adventure|Animation|Sci-Fi |
| 2017, | October, | Action|Adventure|Sci-Fi |
| 2017, | September, | Action|Adventure|Crime|Drama|Thriller |
| 2018, | April, | Action|Crime|Drama|Mystery|Sci-Fi|Thriller|IMAX |
| 2018, | August, | Action|Adventure|Animation|Drama|Fantasy |
| 2018, | February, | Action|Adventure|Crime|IMAX |
| 2018, | January, | Action|Adventure |
| 2018, | July, | Action|Adventure|Comedy|Fantasy|Romance |
| 2018, | June, | Action|Adventure|Drama |
| 2018, | March, | Action|Adventure|Animation|Children|Comedy|Fantasy |
| 2018, | May, | Animation|Comedy |
| 2018, | September, | Action|Adventure|Animation|Children|Comedy|Fantasy |

1. **What is the highest rating movie category month of December for each year?**

|  |  |
| --- | --- |
| **Year** |  |
| 1996, | Action|Adventure|Comedy|Fantasy|Romance |
| 1997, | Action|Adventure|Sci-Fi |
| 1998, | Action|Comedy|Romance |
| 1999, | Action|Adventure|Drama|War |
| 2000, | Action|Drama|Romance |
| 2001, | Action|Adventure|Comedy|Fantasy|Romance |
| 2002, | Action|Comedy|Musical |
| 2003, | Action|Adventure|Thriller |
| 2004, | Drama|Mystery|Thriller |
| 2005, | Comedy|Drama|Romance |
| 2006, | Action|Adventure|Comedy|Fantasy|Romance |
| 2007, | Action|Crime|Drama|Western |
| 2008, | Action|Adventure|Horror|Sci-Fi |
| 2009, | Action|Sci-Fi |
| 2010, | Action|Comedy |
| 2011, | Documentary |
| 2012, | Adventure|Animation|Children|Drama|Musical|IMAX |
| 2013, | Action|Drama|Western |
| 2014, | Crime|Drama|Film-Noir|Thriller |
| 2015, | Action|Adventure|Animation|Children|Comedy |
| 2016, | Action|Comedy |
| 2017, | Action|Adventure|Drama |

**Text analyzing:**

1. **List of movie category with the number of negative words**

|  |  |
| --- | --- |
| Movie Category | Count negative words |
| Action|Adventure|Comedy|Crime|Fantasy, | 1 |
| Action|Adventure|Fantasy|Sci-Fi, | 1 |
| Action|Adventure|Sci-Fi, | 5 |
| Action|Adventure|Sci-Fi|IMAX, | 2 |
| Action|Adventure|Sci-Fi|Thriller, | 3 |
| Action|Animation|Drama|Sci-Fi, | 1 |
| Action|Comedy|Horror, | 1 |
| Action|Crime, | 1 |
| Action|Crime|Drama|IMAX, | 1 |
| Action|Crime|Drama|Thriller, | 4 |
| Action|Crime|Sci-Fi, | 3 |
| Action|Crime|Thriller, | 2 |
| Action|Sci-Fi, | 1 |
| Action|Sci-Fi|Thriller, | 1 |
| Action|Thriller, | 1 |
| Action|Western, | 1 |
| Adventure|Animation|Drama|Horror, | 1 |
| Adventure|Children|Comedy|Fantasy, | 1 |
| Adventure|Romance|Sci-Fi|IMAX, | 1 |
| Animation|Comedy|Drama, | 2 |
| Animation|Fantasy|Thriller, | 2 |
| Children|Comedy|Fantasy, | 1 |
| Comedy, | 3 |
| Comedy|Crime, | 3 |
| Comedy|Crime|Drama, | 3 |
| Comedy|Crime|Drama|Thriller, | 11 |
| Comedy|Drama, | 1 |
| Comedy|Drama|Romance, | 1 |
| Comedy|Drama|Thriller, | 2 |
| Comedy|Romance, | 1 |
| Comedy|Sci-Fi, | 2 |
| Comedy|War, | 3 |
| Comedy|Western, | 1 |
| Crime|Drama, | 1 |
| Crime|Drama|Fantasy|Mystery|Thriller, | 1 |
| Crime|Drama|Mystery|Thriller, | 1 |
| Crime|Drama|Thriller, | 1 |
| Drama, | 1 |
| Drama|Fantasy|Mystery, | 2 |
| Drama|Horror, | 1 |
| Drama|Horror|Thriller, | 1 |
| Drama|Romance, | 1 |
| Drama|Thriller, | 3 |
| Mystery|Thriller, | 1 |
| Sci-Fi, | 1 |
| Sci-Fi|IMAX, | 1 |
| Thriller, | 1 |

1. **List of movie category with the number of positive words.**

|  |  |
| --- | --- |
| **Movie Category** | **Count Positive Tags** |
| Action|Adventure|Animation|Children|Comedy|Fantasy, | 2 |
| Action|Adventure|Children | 1 |
| Action|Adventure|Crime|IMAX, | 1 |
| Action|Adventure|Drama|Fantasy | 1 |
| Action|Adventure|Sci-Fi, | 7 |
| Action|Adventure|Sci-Fi|IMAX | 1 |
| Action|Animation|Comedy, | 3 |
| Action|Comedy, | 1 |
| Action|Comedy|Crime|Horror, | 1 |
| Action|Comedy|Fantasy|Sci-Fi, | 1 |
| Action|Comedy|Horror, | 1 |
| Action|Crime|Drama|Mystery|Sci-Fi|Thriller|IMAX, | 1 |
| Action|Crime|Drama|Thriller, | 4 |
| Action|Crime|Sci-Fi, | 1 |
| Action|Drama|Western, | 3 |
| Action|Horror|Thriller, | 1 |
| Adventure|Animation|Children|Comedy|Fantasy, | 1 |
| Adventure|Animation|Comedy, | 1 |
| Adventure|Children|Comedy|Fantasy, | 1 |
| Adventure|Comedy|Crime|Romance, | 2 |
| Adventure|Comedy|Fantasy, | 1 |
| Adventure|Comedy|Musical|Sci-Fi, | 1 |
| Animation|Comedy|Drama, | 1 |
| Children|Comedy, | 1 |
| Children|Comedy|Fantasy, | 1 |
| Children|Drama, | 1 |
| Comedy, | 7 |
| Comedy|Crime, | 6 |
| Comedy|Crime|Drama|Thriller, | 11 |
| Comedy|Crime|Mystery|Thriller, | 1 |
| Comedy|Drama|Mystery, | 1 |
| Comedy|Drama|Romance, | 4 |
| Comedy|Romance, | 3 |
| Comedy|War, | 1 |
| Crime|Drama|Mystery, | 1 |
| Drama, | 8 |
| Drama|Film-Noir|Thriller, | 1 |
| Drama|Mystery|Sci-Fi|Thriller, | 1 |
| Drama|Mystery|Thriller, | 1 |
| Drama|Romance, | 1 |
| Drama|Romance|Sci-Fi, | 3 |
| Horror|Mystery|Thriller, | 1 |
| Sci-Fi, | 1 |

**Other analyzes:**

1. **Popularity analysis: Identify the most popular movies based on the number of tags, ratings, or a combination of both.**

Top 10 Popular Movies:

|  |  |  |
| --- | --- | --- |
| **Movie ID** | **Title** | **Popularity** |
| 296 | Pulp Fiction (1994) | 759.6693811074919 |
| 2959 | Fight Club (1999) | 230.73853211009174 |
| 924 | A Space Odyssey (1968), | 159.6743119266055 |
| 7361 | Eternal Sunshine of the Spotless Mind (2004), | 141.45038167938932 |
| 293 | Léon: The Professional (a.k.a. The Professional) (Léon) (1994), | 140.6578947368421 |
| 140 | Big Lebowski, The (1998), | 125.58490566037736 |
| 1732 | Title: Donnie Darko (2001), | 115.46788990825688 |
| 4878 | Donnie Darko (2001), | 115.46788990825688 |
| 260 | Star Wars: Episode IV - A New Hope (1977), | 110.00796812749003 |
| 79132 | Inception (2010), | 105.72727272727273 |
| 4144 | In the Mood For Love (Fa yeung nin wa) (2000), | 75.85714285714286 |

1. **Genre preferences: Determine the most popular genres among users by analyzing tags and ratings.**

|  |  |
| --- | --- |
| **Genre** | **Popularity** |
| Drama | 1320.6051502145922 |
| Comedy|Crime|Drama|Thriller | 830.2406749555951 |
| Comedy | 521.2556976097833 |

1. **Correlations: Find correlations between movie genres, tags, and ratings to identify relationships and associations between different aspects of movies.**