

Question 1: What are the most popular media/production (type, source, episodes, rating) attributes (popular based on score, members, favorites, and user review scores)?
(please refer to queries-demo)

Query TypeRankings shows TV anime are the most popular in all metrics, although when filtered in query FilteredTypeRankings, it can be seen that Movie anime usurped TV anime in both score and scores from the database's cleaned user review data. It makes sense that Movies are of higher quality, as there should be a greater barrier to entry, as blockbuster success is difficult to achieve, but TV is easier to enter and gain popularity (more content, etc). It is concluded that subtracting the bottom outliers, Movie anime tend to be of higher quality (in terms of scoring), and actually are the highest rated, while TV are more followed, but still highly rated.

Query SourceRankings shows Light Novel based anime are the most popular, topping all metrics but user review scores (still high). When filtered, in FilteredSourceRankings, Light Novel, and other text based sources, like Novels and Books, chart very highly, but Manga sources are somewhat closer after filtering, showing that obscure Manga anime lower their averages more than other sources. Query SourceCounts supports this, showing that the Manga anime count lowers greatly with obscure ones filtered, contrasting Light Novels. The source (material) can have varying popularity, average quality, etc. The results are interesting because in the west (Myanimelist is an English website), Manga boast greater popularity. Text sources' success may be due to their Japanese popularity, and smaller sample size, leading to higher average quality source material. It is concluded that text source anime, mainly Light Novels, are the most popular, followed by Manga based ones.

Query EpisodeRangeRankings shows anime with 13+ episodes are most popular, particularly 13-24 and 53+. Filtered results in FilteredEpisodeRangeRankings show 53+ episode anime performing the best in all metrics, but both queries show a tendency for longer running anime to perform better. This makes sense as a series having a longer running shows that there is merit in continuing the show, so there should be a higher base popularity with more episodes. These queries lead to the conclusion that anime with more episodes are more popular.

Both queries RatingRankings and FilteredRatingRankings show that R rated anime perform the best, except in user review scores, where it is quite the opposite, where the younger the audience rating, the better the scores in that category. Interestingly enough, filtering the results did not change the trends very much, possibly showing the obscure animes impact all ratings rather equally. Nevertheless, the results point to R anime, followed by PG-13 anime, being the most popular anime.

Question 2: For each scoring category, what are the best and worst genres?
Query bestWorstGenres

category	bestgenre	bestscore	worstgenre	worstscores
Animation	Josei	8.0199946470103245	Dementia	5.92243538687645995600
Character	Josei	7.7320362759052569	Dementia	4.76078682426628772667
Enjoyment	Josei	7.6742767994727681	Yuri	5.3416666666666666500
Sound	Josei	7.9065682482255830	Yuri	5.2583333333333333000
Story	Josei	7.3673353118201942	Yuri	4.1333333333333333000

(5 rows)

On average, the genre with the highest score in all scoring categories is the Josei genre (anime targeted towards teenage/older women). The worst genre for the *Animation* and *Character* categories is Dementia, and for the *Enjoyment*, *Sound*, and *Story* categories, it is the Yuri genre. Since the best genre for all the categories are the same, and that the Josei genre mainly targets female audiences, this suggests a possible correlation between gender and scores.

To investigate this further, a view (genderScores) to compare the average scores given to each scoring category by the three gender groups was produced. According to genderScores, female users do give higher scores for all the categories.

category	maleaveragescore	femaleaveragescore	nonbinaryaveragescore	gender	count
Enjoyment	7.3254232312359331	7.8175026680896478	7.0433070866141732	Female	32795
Story	6.7972404344847832	7.3651471260862936	6.3385826771653543	Non-Binary	1270
Animation	7.5472159702514923	7.8859582253392285	7.2401574803149606	Male	102190
Character	7.1015754966239358	7.5577069675255374	6.5314960629921260		
Sound	7.4309130051864175	7.7700869034913859	7.2125984251968504		

(5 rows)

(3 rows)

However, in our dataset, the sample sizes for each gender group vary significantly. Male users' data was 3 times more than female users, and almost 10 times more than non-binary users.

This implies potential bias in our results, as the data for female and non-binary users have far less variability than male users'.

Additionally, Dementia is the lowest rated in the animation and character categories. This could be due to the fact that Dementia anime aim to make the audience feel uncomfortable. On the other hand, there are only 20 Yuri anime in the dataset. This could lead to a prevalence in subpar anime sound and story quality, hence, the low enjoyment rates.

Question 3: What are users' most favorite animes by their attributes (gender, age)?

rank	malefavoriteanime	femalefavoriteanime	nonbinaryfavoriteanime
1	Steins;Gate	Fullmetal Alchemist: Brotherhood	Mahou Shoujo Madoka*Magica
2	Fullmetal Alchemist: Brotherhood	Death Note	Kill la Kill
3	Clannad: After Story	Ouran Koukou Host Club	Neon Genesis Evangelion: The End of Evangelion
4	Tengen Toppa Gurren Lagann	Steins;Gate	Fullmetal Alchemist: Brotherhood
5	Death Note	Hunter x Hunter (2011)	Hunter x Hunter (2011)

(5 rows)

Query GenderFavorites obviously demonstrates the top 5 favorited anime per gender (on MAL). Some shared top anime are Fullmetal Alchemist: Brotherhood (FMB), Death Note, Steins;Gate, and Hunter x Hunter. When querying for these top animes' demographic genres in MaleGenre, FemaleGenre, and NonBinaryGenre, it is shown that of those with specific demographic genres are almost all shounen (younger male audience), all of which were mentioned, minus Steins;Gate. This is interesting because it seems that shounen anime are universally enjoyed among genders, which is probably because shounen are the most mainstream anime. Ouran Koukou Host Club, a shoujo series, is highly favorited for female users, but also for male and non-binary, there are fewer shounen anime in the top 5 than for female users, and more

unlisted, or assumedly non explicitly targeted to demographics. While the queries also show a small sample size for viewing purposes and simplicity, they still lead to the conclusion that shounen anime are universally highly favorited among genders, as well as unspecified demographic anime.

rank	top1to18	top19to25	top26to30	top31to40	top40up
1	Clannad: After Story	Steins;Gate	Fullmetal Alchemist: Brotherhood	Death Note	Tengen Toppa Gurren Lagann
2	Fullmetal Alchemist: Brotherhood	Fullmetal Alchemist: Brotherhood	Steins;Gate	Cowboy Bebop	Cowboy Bebop
3	Hunter x Hunter (2011)	Hunter x Hunter (2011)	Clannad: After Story	Fullmetal Alchemist: Brotherhood	Mushishi
4	Mahou Shoujo Madoka*Magica	Clannad: After Story	Death Note	Tengen Toppa Gurren Lagann	Death Note
5	Neon Genesis Evangelion	Death Note	Code Geass: Hangyaku no Lelouch	One Piece	Toradora!

(5 rows)

Query ageTop5 obviously demonstrates the top 5 favorited anime per age group. Some shared top anime are similarly, FMB, Steins;Gate, Death Note, etc. When querying for these top animes' genres in FirstAgeGenre, SecondAgeGenre, ThirdAgeGenre, FourthAgeGenre, and FifthAgeGenre, the genres that show up are only shounen, and one seinen, befittingly for the oldest age group. This further supports the idea that shounen's mainstream popularity/success lead to users universally favoriting them, in conjunction to the previous observation of way fewer female users existing. In addition, the rest are all unlisted/unspecified, similar to the gender favorites. Again, while considering the small sample size for the queries, this still leads to the conclusion that shounen anime are universally highly favorited among all age groups, as well as non explicitly demographic targeted anime.