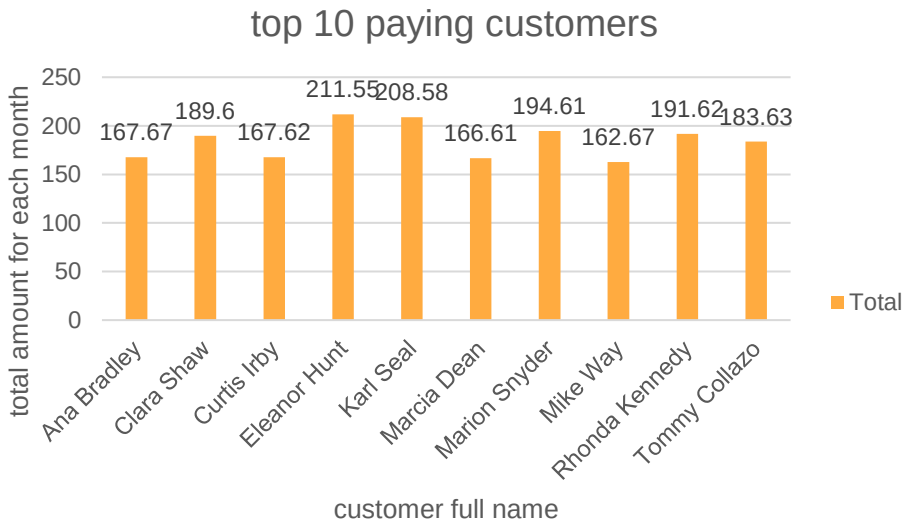
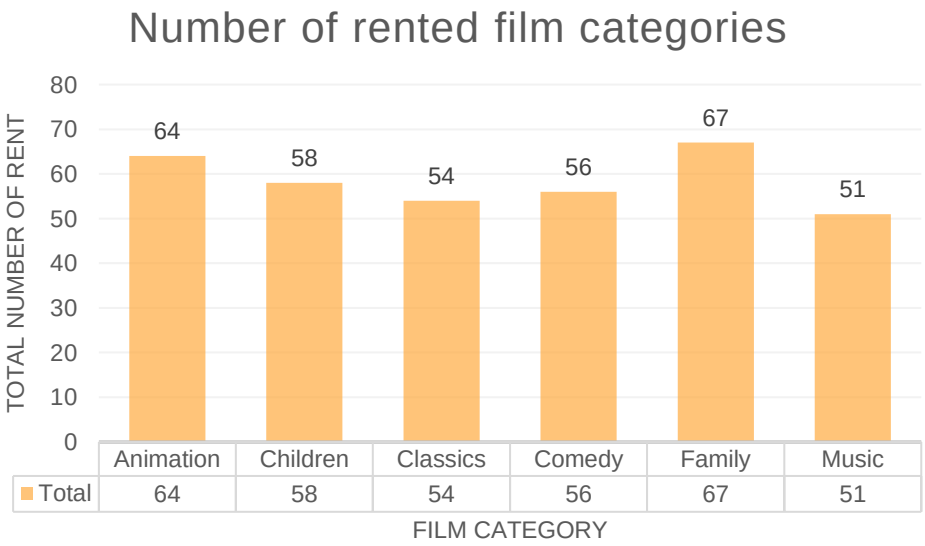
who were our top 10 paying customers, how many payments they made on a monthly basis during 2007, and what was the amount of the monthly payments?



We can see in the graph shown the top10 customers who most pay in 2007, and the results show that Eleanor Hunt is the highest total sum of the amount within 211.55 $.

In SQL query, I used subquery and concatenation to get the first name and last name together for the customer. using LIMIT to limit results with the top 10 customers.

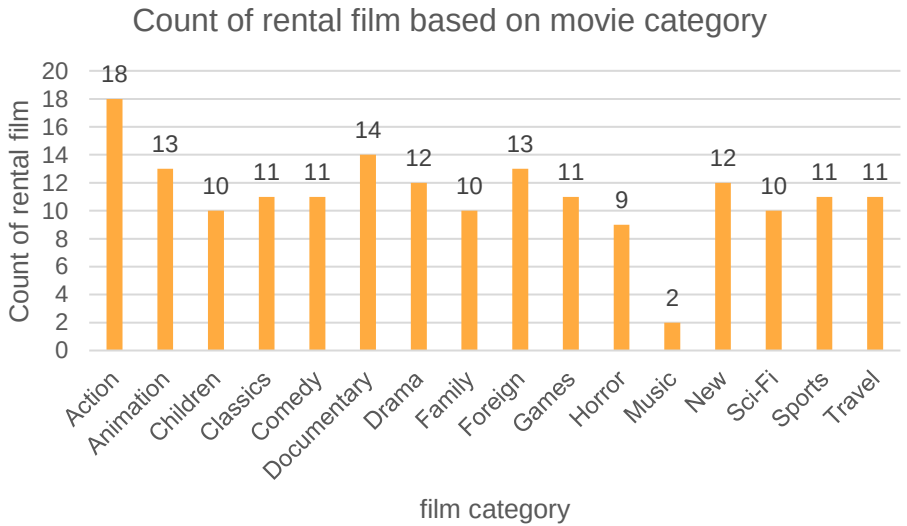
What is the highest number of rentals for a film category?



We can see the highest number of rental depend on the film category, which is the family category within 67 rental.

In the SQL query, I connect all 5 tables and use "WHERE" to specify the film categories in the column.

how the length of rental duration of these family-friendly movies compares to the duration that all movies are rented for ?



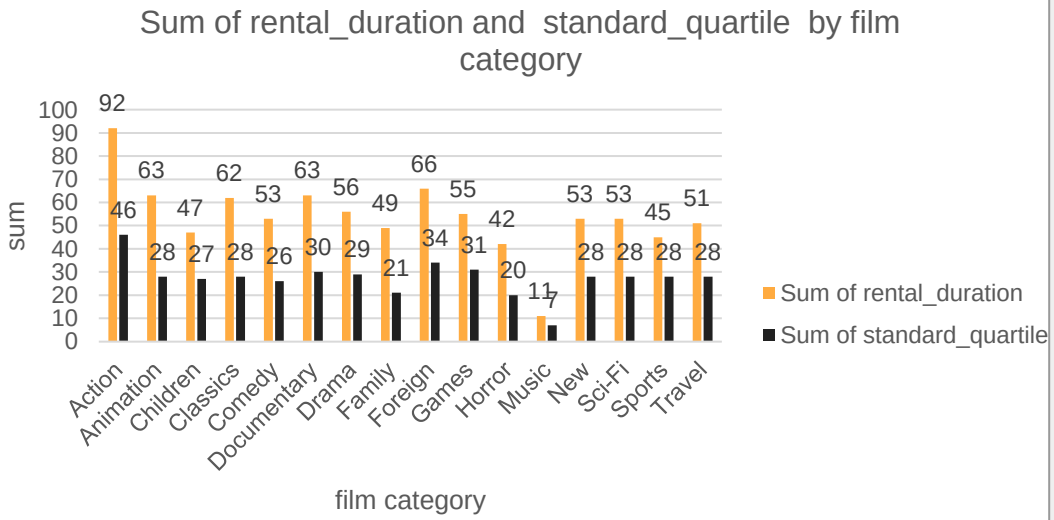
We can see that the most film category rental was Action category within 18 total rental duration

IN The SQL query, I connect 3 tables the category, film category, and film tables , I used percentiles ,window function 4 levels using NTILE(4) for rental duration.

AND WHERE to get rating film type= G = general audiences

EXTRA: we can specify extra film rating types like R, PG, or specific types using IN

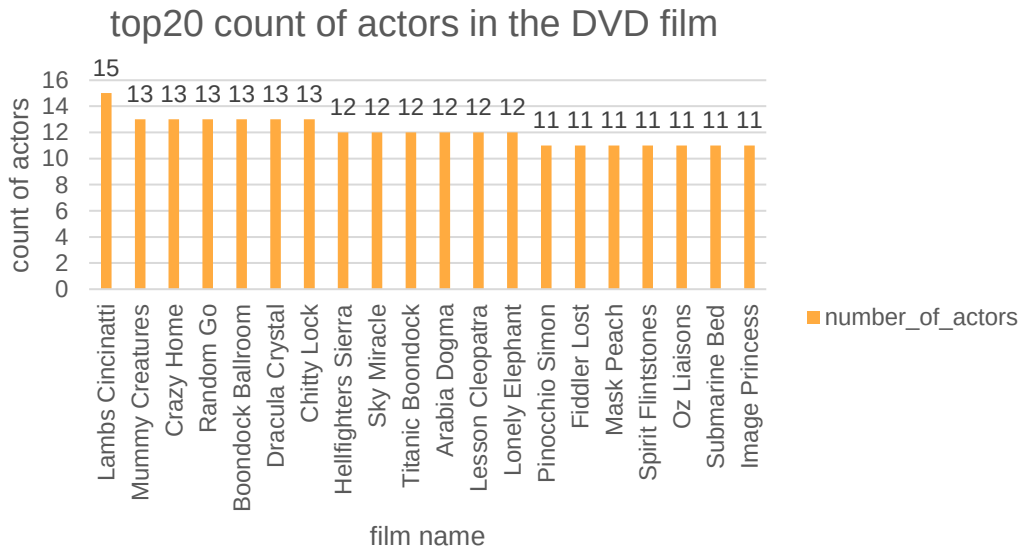
how the length of rental duration of these family-friendly movies compares to the duration that all movies are rented for ? (EXTRA GRAPH)



EXTRA GRAPH :

Comparing the sum rental duration within the standard quartile of all film category G, it has shown the highest difference between rental duration and standard quartile was in action movies within 46 quantity

top20 most count of actors in the DVD film in the store DB



We can see that the most film that have number of actors was Lambs Cincinatti movie within 15 count number of actors in the store DB.

In the SQL query , I connect 3 tables (film, film_actor, film) , and using aggregation function COUNT to count number of actors