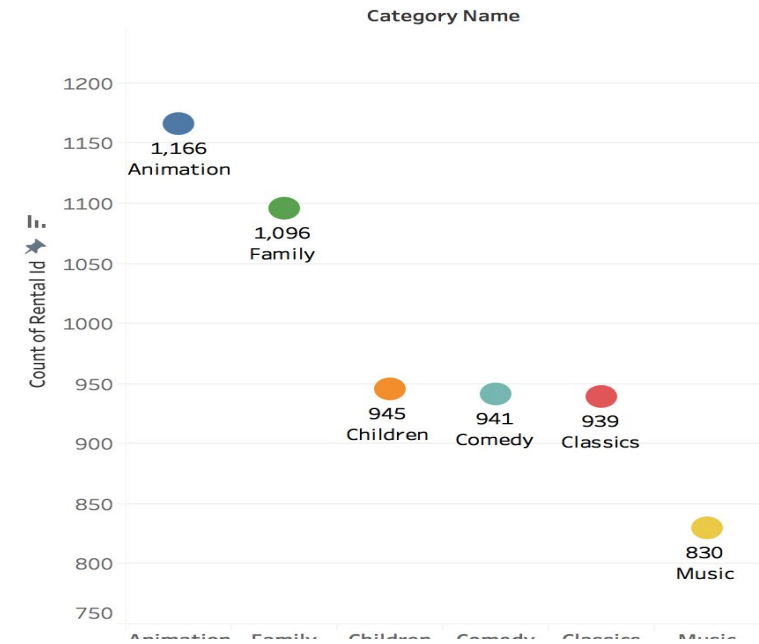# Question 1: What's the no. of times a film has been rented out based on the category of "Family" films?
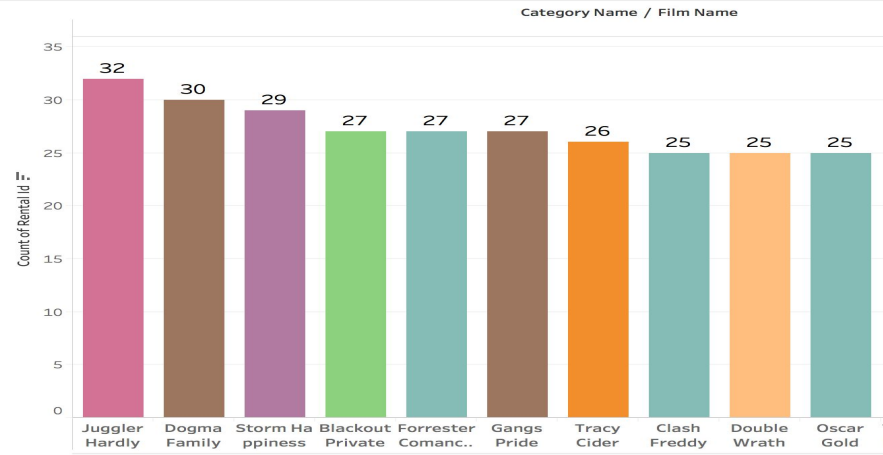
Rental Count by Film Category - Family films
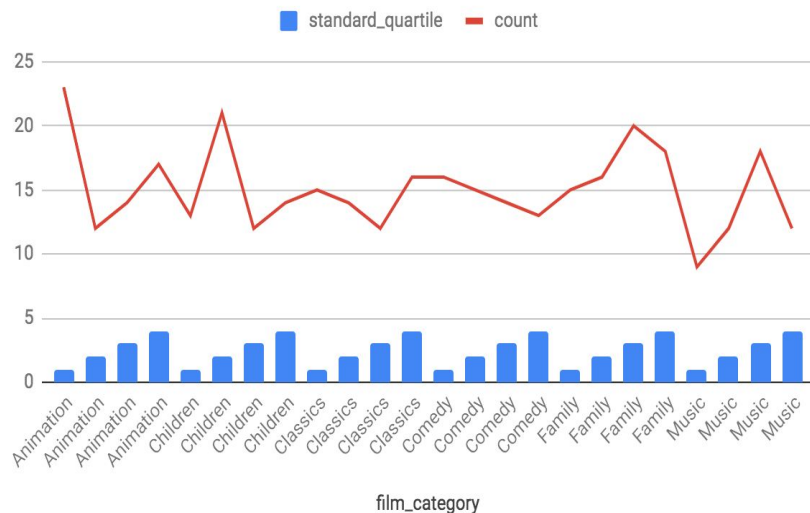
Category Name

Summary:
1. Based on the data, the animation category has the largest rental count. This is from family movies standpoint. (Film categories includes : Animation, Children, Classics, Comedy, Family and Music) The least is from the Music category. (Image 1: See picture on the left)
2. From the top 10 films (Animation category) with the most rental counts, Juggler Hardly has come first with 32. (Image 2: See picture below)

Top 10 Rental Count by Film Category - Family films

Category Name / Film Name

The Standard Quartile based on films and film category - rental

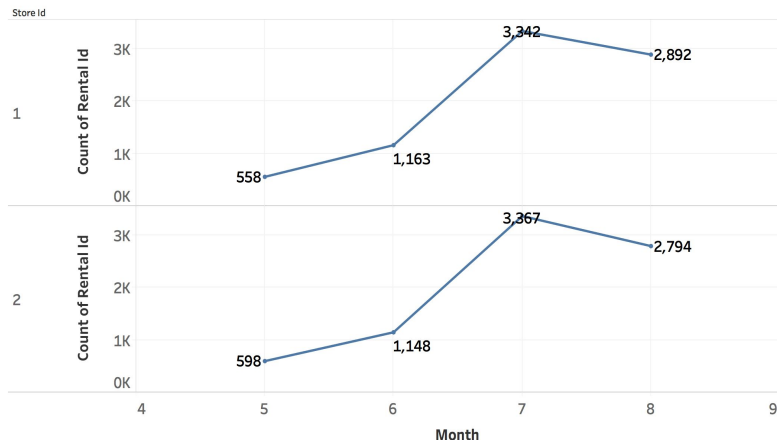## standard_quartile and count

film_category

Summary

1. See image on the left - Based on the data, the count of the length of these family rental duration for animation are the highest under the first quartile; 2nd quartile - children; 3rd quartile - family; 4th quartile - family

2. See image on the right : 4th quartile : The least has been music. It may appear that music is rented not for long as if one enjoys listening to the songs from the film, they can view it on spotify/youtube. Hence the length of rented out is not much or required for the Music category.
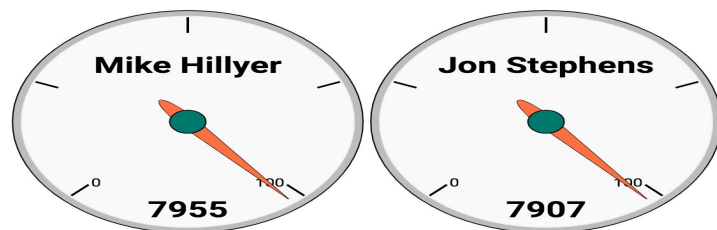
standard_quartile - 4th and count

film_category

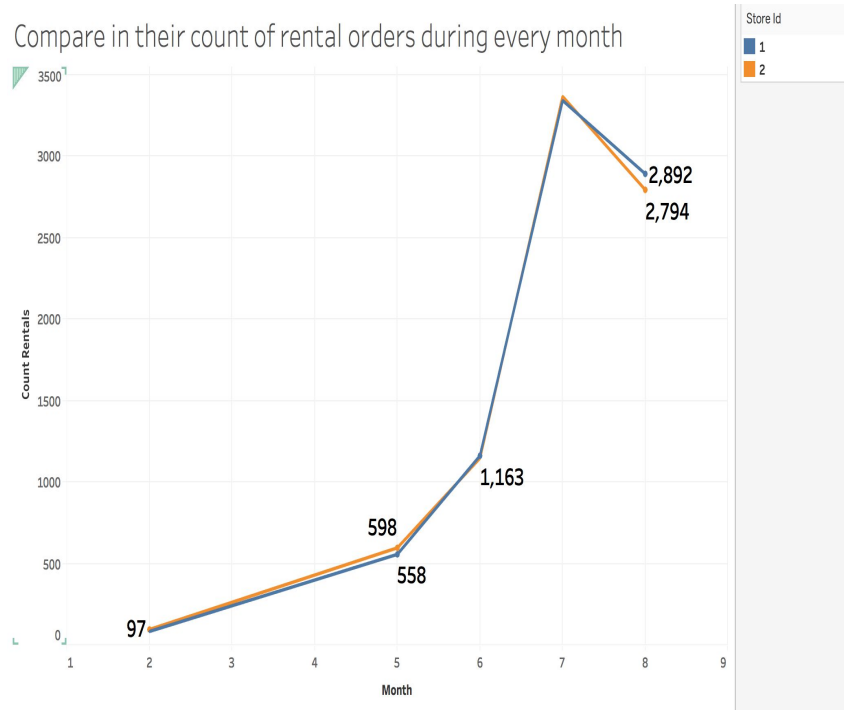# The rental orders fulfilled based on store id - timeline

Year 2005 : Rental count based on Store Id

Summary:

1. See image : It appears the largest rental orders made in 2005 is from July and also it seems store 2 fared slightly better than store 1.

2. We see also see there's nearly(or slightly greater) 2 times of increase in rental orders for both stores from May 2005 -> June 2005 -> July 2005. Unfortunately, it appears in August - the rental orders had decreased. It'd be interesting to understand what caused this shift. One of the many reasons that causes reduction of rental orders is due to customers may have taken a lot of films to watch in the month of July and may haven't gotten to watch it the same month and as a result; less orders in August. (Please note sql query was done on the whole data set and not just 2005)

Question 2: Compare the rental orders between Store 1 Vs Store 2

Compare in their count of rental orders during every month
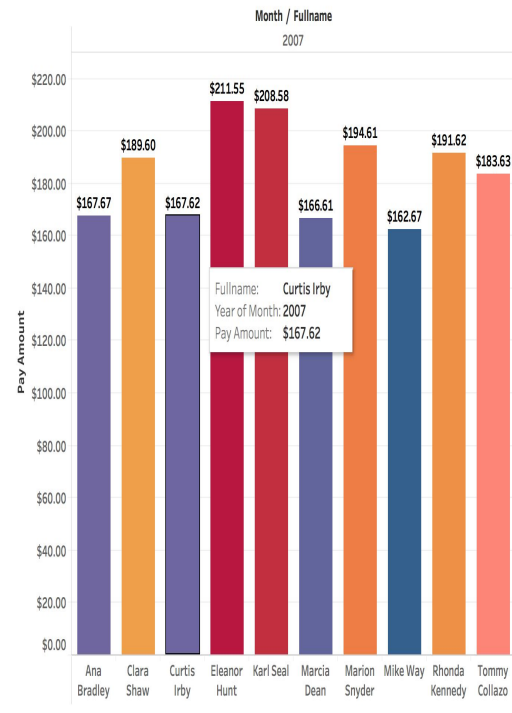
Store Id
1
2

Summary:

1. See image : We see that store 1 and store have been competitive in terms of rental orders done in each month. Store 1 has the highest count rental orders for August (all years of available data) and likewise Store 2 has performed better than Store 1 for the month of May (all years of available data)

2. In terms of months for all years, we've only rental orders for February, May, June, July and August.
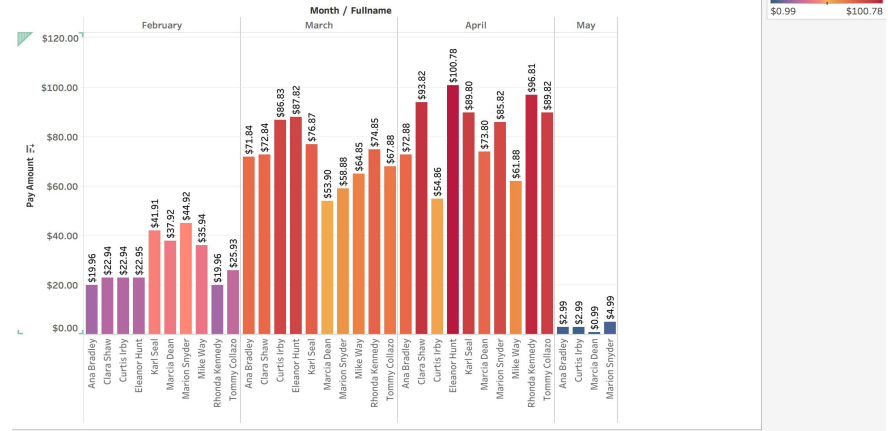
Top 10 : Customers and Payments - 2017

Customer and Payments

SUM(Pay Amount)
$162.67 — $211.55

Summary: Top 10 2017 (Customers and Payments)

1. See image on the left : We see that Eleonar hunt has topped the list with the highest payment amount for 2017 so far with $211.55 and Mike Way falls at the 10th spot of a payment amount of $162.67.

2. See image on the right : We observe that the highest contribution of payments fall in the month of April and the least amount collected is from May(possibly due to incomplete or pending data for that month)
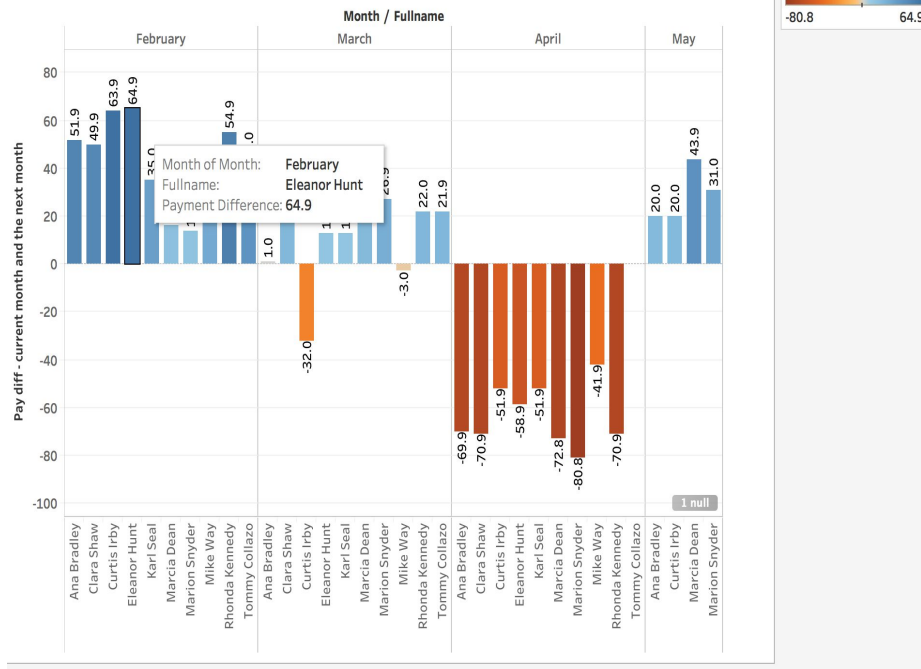
Top 10 : Customers and Payments - 2017 (Lead difference question)

Summary: Top 10 2017 (Customers and Payments)

1. See image : We clearly see the difference of the current amount payment to the next month for the top 10 customers. Highlighted is Eleanor Hunt with the the top difference of $64.9

2. One value appears to be NULL. I didn't hide the NULL value for presentation reasons. The NULL value occurs because the customer didn't have a lead payment amount.

3. There's a negative lead difference for April due to low payment amounts available for May. This is for all customers.