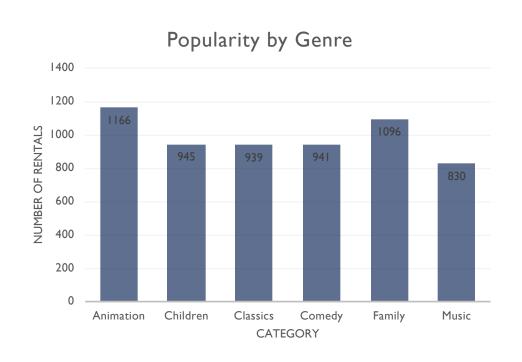
# PROGRAMMING FOR DATA SCIENCE

PROJECT ONE: SQL

SUBMITTED BY: KAITLYN KLUCZNIK

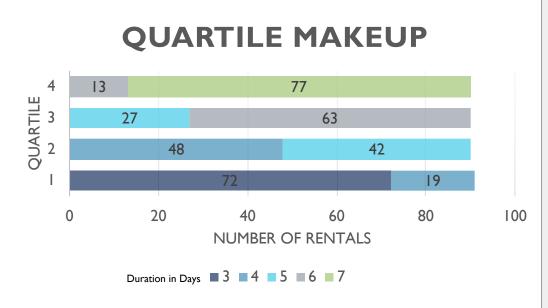
#### 1: WHICH FAMILY MOVIE CATEGORY IS THE MOST POPULAR?



When comparing the various categories of family films, it is easily noted that the Animation is the most popular category of all the family film categories.

Music is by far the least popular, with over 300 less rentals than the Animation category.

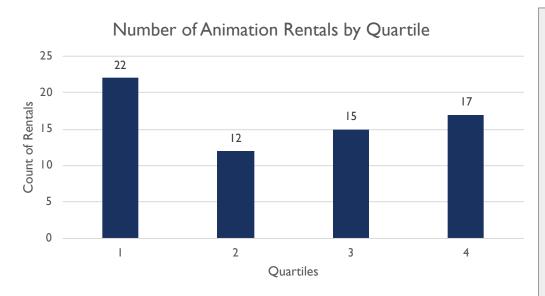
# 2: WHAT RENTAL DURATION COMBINATIONS MAKE UP THE QUARTILES?



While combing through the data I noticed that there were several rental durations that spanned multiple quartiles. Because of this I was interested to see how the durations comprised each quartile.

We can see that quartile 1 and quartile 4 have the most dramatic splits between the two time frames that make it up, likely because the rental durations of 3 and 7 days are not split between quartiles like 4, 5, and 6 days are.

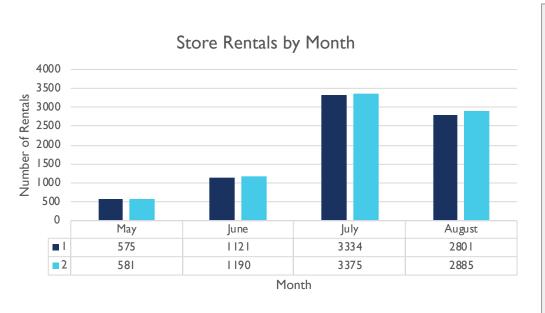
## 3: WHICH QUARTILE DOES ANIMATION FALL INTO THE MOST?



After analyzing the data in the first two questions. I was curious to see if the popularity of Animation films had an affect on it's rental duration.

Based on graph to the left we can see that Animation rental duration falls mostly into either the 1st or the 4th quartile, either the shortest or the longest duration for movie rentals.

### 4: WHICH STORE CONDUCTED MORE RENTALS BY MONTH IN 2005?



To answer the question of which store performed better based on the number of rentals conducted over the course of a 4 month period in 2005, we need only look to the graph on the left.

The two stores were in close competition each month, however, store number 2 outperformed store number 1 each month.