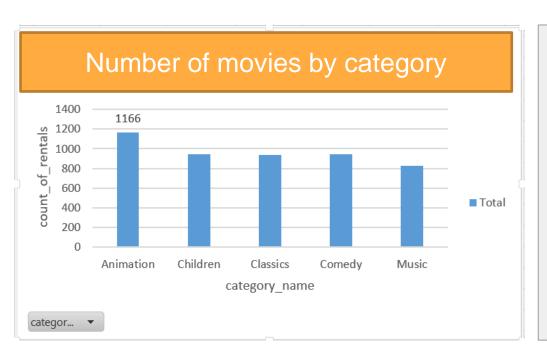
## Which category has been rented out the most?

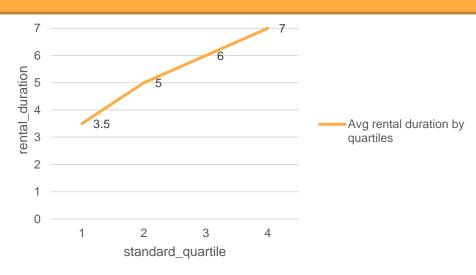


We can see that the Animation category has been rented out the most while music has been rented the least, while other categories are also seen.

The code of Question 1 is used for visualization.

### What is the average rental duration by quartile?

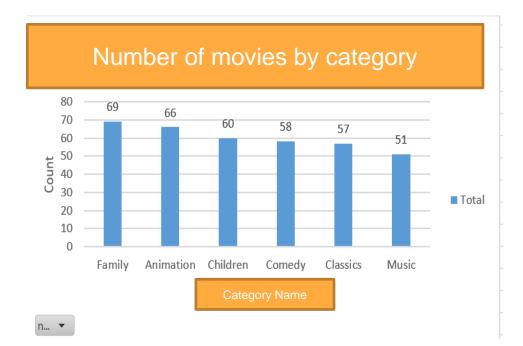
# Avg rental duration by quartiles



From the graph it is seen that the average of rental duration by quartile

The code of Question 2 is used for visualization.

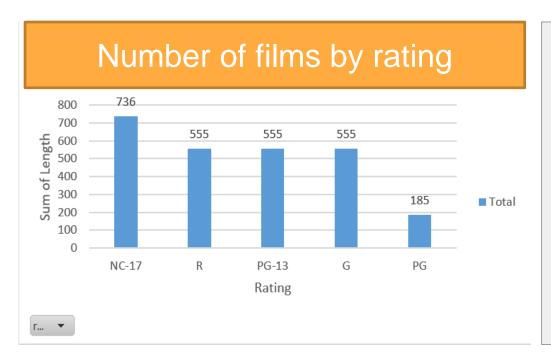
#### What is the count of movies within each combination of film category?



The sum of count by name is highest in Family and lowest in the Music, while other categories can also be seen.

The code of Question 3 is the used for visualization.

### Which rating has the highest length?



The length of NC-17 is highest ,while the lowest is PG. Other's can also be seen I in the visualization.

The code of Question 4 is used for visualization.