For my final project, I was interested in how certain factors of streaming applications affected the experience of viewers watching movies and shows. Factors such as device type, playback quality of videos, genre, and the countries of users were utilized to create insights. The main IDE used was Jupyter Notebook. I utilized four packages within my work: the Pandas library, the Matplotlib library, the Seaborn library, and the GeoPandas library.

The first question that I challenged myself with was, “How does the device type and playback quality affect the duration watched of a show?” From my exploration, I found that people who streamed their media in Standard Definition (SD) spent an average of 61.9 minutes streaming, which was the longest amount. Of the people watching in SD, smartphone streamers spent the most time, with 62.5 minutes streamed. Desktop streams had the second most minutes streamed at 62.1 minutes. High Definition (HD) streaming had an average stream time of 59.7 minutes. 4K had the lowest average stream time with 59.6 minutes, just behind SD playback. The least amount of time streaming was spent by people watching on a tablet in 4K quality, with an average of 58.1 minutes.

The second question asked was, “What is the most popular type of genre per country?” From the data, 150 countries were displayed to show their most watched genre. For the United States, the most watched genre was sci-fi media, while for Mexico, action media was the most watched genre.

If I were presenting my findings to a client, I would recommend keeping the three options for playback quality. Because the times are so close, giving viewers a choice for their preference would allow for a higher retention rate of customers. I also think that maintaining the current range of devices available for streaming would benefit the client and reduce customer churn. For the future, I would like to monitor how the genre preferences of countries change as new media is created and added to streaming services. Currently, only five genres were included in the dataset. If more genres were added, some countries might see a change in their top genres, which could then inform the addition of more media reflecting the new top genres.