Executive Summary

The efficacy of the Covid-19 vaccine is a controversial topic. The United States population is divided into those who are pro-vaccine and those who are anti-vaccine. Within the pro-vaccine population, there are sub-groups labeled by vaccine brands. Individuals often believe one brand is more effective and less of a risk than the others. Sometimes they simply go with what is available at the time. Nevertheless, the comparison between the vaccine brands is a frequent and relevant topic. Since the beginning of the 2020 pandemic, there have been multiple brands of vaccines developed with hope of defeating the virus. Only three of those brands have been approved by the F.D.A. in the U.S. for emergency use. These brands are Pfizer, Moderna, and Johnson & Johnson. For this project, a python script was developed to assist in sorting through the total number of vaccines administered for each brand.

The overall goal of the Python script was to gain a better understanding of how the vaccine brands compare to one another. While there are various ways of viewing and analyzing the data on vaccines administered, this script narrowed in on a specific date of administration. The original data included the total number of vaccines administered for each brand by county and date, the combined total number of vaccines administered by county and date, and the cumulative total of all three brands since the first day vaccines were administered. The desired outcome would be to map the number of vaccines administered by brand on a given day. The data could be normalized by dividing each brand total by the combined total to see percentages. The convenience of the script allows the user to filter the data based on any chosen date and to produce multiple maps accordingly. Being able to focus on a more defined search could provide a clarified comparison of vaccine brands and rates of usage.