## **Analysis and Comments for Part 2**

- 1. We use the cdc website data to plot stacked bargraph of the data for different types of Influenza Positive tests reported by public laboratories and it is observed that the positive tests increase significantly from last year 2018 to current year 2019.
- 2. We use the cdc website data to plot stacked bargraph of the data for different types of Influenza Positive tests reported by clinical laboratories and it is observed that the positive tests increase significantly from last year 2018 to current year 2019 for virus types A and B.
- 3. We plot the same plot as a pie chart and a detailed analysis on differet strains of virus is made.
- 4. We plot a heatmap for the United States of America basd on the number of tests and reported infections in the whle country. Highest numbers indicated by red color and green indicates less number of infections for the year 2018 till the 4<sup>th</sup> week of 2019.
- 5. We plot the graph using clinical data for 52 weeks for all the states and observe that the infections decreased but increased again from 2018 and 2019. We also plot the stacked barplot for different strains of the virus and study the distribution over the course of 52 weeks.
- 6. We plot the graph using clinical data for 52 weeks for the state of New York and observe that the infections decreased but increased again from 2018 and 2019.