**North Carolina**

After analyzing COVID-19 cases and deaths from 3rd Feb to 10th Feb for the North Carolina State, it was clearly found that the cases count increased rapidly. Comparing from 3rd Feb to 10th Feb, there was 2.44% increase per day in cases count and there was 2.85% increase per day in Death count. The highest number of covid deaths was 21600 people. Also, we could see from the below graph, the cases rose very sharp in the mid of the week i.e., from 6th Feb to 7th Feb, As cases, the death count seems to be increased in the mid of the week in February. The below plot for Death Vs Confirmed cases shows liner relationship.

Chart, line chart

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Chart, line chart, scatter chart

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**Enrichment Data:**

**Census Data:**

For this enrichment dataset, data is gathered from the United States Census Bureau. The dataset contains measures that represent the current demographic information, such as age distribution and racial makeup. The data collected by the United States Census Bureau covers the fifty states, the District of Columbia, and Puerto Rico. The Census Demographic ACS enrichment data can help in the analysis of COVID-19 spread by allowing one to compare the COVID-19 spread in different areas to the demographic data of the areas

* Initial Hypothesis I: If there is a greater population density in a county, then the number of confirmed cases in that area will be greater. This is hypothesized as social distancing is crucial to stopping the spread of COVID-19. This is relevant to population density due to the fact that in areas of high population density, it can be much more difficult to social distance, as opposed to more rural areas, where houses could be miles away from each other.
* Initial Hypothesis II: If the median age demographic of a county is on the older side, then the number of COVID-19 deaths in that area will be greater. This is hypothesized as it has been said that the oldest among us are most vulnerable to the virus and are much more likely to have their COVID-19 case either require hospitalization or turn fatal.