**Original Task**

1. How do the most recent deaths per case compare between all the counties of Virginia?
2. Do the deaths per case in each county of Virginia correlate to the population density?

**Modified Task**

You are being asked to analyze COVID data for three states - Virginia, Texas and Illinois. Prepare a notebook for presentation with the following:

Create the following charts for each state:

1. Bar chart showing top 10 counties with highest cases
2. Bar chart showing top 10 counties with highest deaths
3. Bar chart showing top 10 counties with highest deaths per case
4. Scatterplot showing the correlation between cases and deaths by county (include the correlation coefficient)
5. Bar chart showing top 10 counties with the highest number of cases relative to population
6. Bar chart showing top 10 counties with the highest number of deaths relative to population.

Using only the charts you have created in part 1 answer the following questions:

1. Which state had the county with the highest number of cases?
2. Which state had the county with the highest number of deaths?
3. Which state had the county with the highest number of deaths per case?
4. Which state had the highest correlation between cases and deaths?
5. Which state had the county with the highest number of cases relative to population density?
6. Which state had the county with the highest number of deaths relative to population density?
7. How many counties with the top 10 deaths relative to population were also in the top 10 deaths per case for that state?

Prepare the notebook for presentation of your findings.