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**DS210** 

Homework 5

Collaborators: None

## Dataset 1

For my first data set, I chose a set called us-counties provided by The New York Times. This dataset contains US COVID-19 cases by county throughout the country.

One of the important features I was looking for was a larger set with time-series data. In addition, this dataset is relevent and it would be interesting to look at COVID trends paired with another dataset, president\_county\_candidate. I would like to see if there is any correlation between counties that voted REP versus DEM versus OTHER and their COVID cases.

```
In [1]: import pandas as pd
In [10]: covid = pd.read_csv('us-counties.csv')
    pres = pd.read_csv('president_county_candidate.csv')
In [8]: covid.head()
```

Out[8]:		date	county	state	fips	cases	deaths
	0	2022- 10-21	Carroll	New Hampshire	33003.0	11568	68.0
	1	2022- 10-21	St. Joseph	Michigan	26149.0	15421	223.0
	2	2022- 10-21	Cheshire	New Hampshire	33005.0	17887	125.0
	3	2022- 10-21	Coos	New Hampshire	33007.0	8007	124.0
	4	2022- 10-21	Grafton	New Hampshire	33009.0	22040	82.0

In [9]: covid.describe()

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fips	cases	deaths
3217.000000	3.257000e+03	3179.000000
31501.370532	2.975667e+04	334.327147
16368.431244	1.118776e+05	1259.674228
1001.000000	0.000000e+00	0.000000
19039.000000	3.002000e+03	44.000000
30029.000000	7.553000e+03	105.000000
46121.000000	1.961800e+04	249.000000
78030.000000	3.476634e+06	42238.000000
	3217.000000 31501.370532 16368.431244 1001.000000 19039.000000 30029.000000 46121.000000	3217.000000 3.257000e+03 31501.370532 2.975667e+04 16368.431244 1.118776e+05 1001.000000 0.000000e+00 19039.000000 3.002000e+03 30029.000000 7.553000e+03 46121.000000 1.961800e+04

In [11]: pres.head()

Out[11]:			state	county	candidate	party	total_votes	won
	0	Dela	aware	Kent County	Joe Biden	DEM	44552	True
	1	Dela	aware	Kent County	Donald Trump	REP	41009	False
	2	Dela	aware	Kent County	Jo Jorgensen	LIB	1044	False
	3	Dela	aware	Kent County	Howie Hawkins	GRN	420	False
	4	Dela	aware	New Castle County	Joe Biden	DEM	195034	True
In [12]:	pres.describe()							
Out[12]:	total_votes			_votes				
	count		3.217700e+04					
	m	ean	4.9603	21e+03				
		std	3.5815	77e+04				
		min	0.00000	00e+00				
	2	25%	3.00000	00e+00				
	5	0%	3.4000	00e+01				
	7	′5%	7.45000	00e+02				
	r	max	3.02888	35e+06				

## Dataset 2

For my second dataset, I chose a set called Top 100 Cryptocurrencies Historical Dataset . I began

crypto trading in 2014 and this dataset contains the top altcoins. While it would be a challenge, I would like to use this dataset to identity the most viable altcoin(s) for the future.

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