DataEng: Data Integration Activity

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repo: https://github.com/brialee/data-integration

A. Aggregate Census Data to County Level

Question: Show your aggregated county-level data rows for the following counties: Loudon County Virginia, Washington County Oregon, Harlan County Kentucky, Malheur County Oregon

2230 2241	state Oregon Oregon	county Malheur Washington	30421	24.414286	17966.428571
2968	state Virginia	,	total_population 374558	mean_poverty 3.884375	mean_incomepercap 50391.015625
1040	state Kentucky	_ *	total_population 27548	mean_poverty 33.318182	mean_incomepercap 16010.363636

B. Simplify the COVID Data

Question: Show your simplified COVID data for the counties listed above.

C. Integrate COVID Data with ACS Data

Question: List your integrated data for all counties in the State of Oregon.

```
Oregon
           Malheur
           county total_deaths
oudoun 4729.0
                           total_cases
376223
                                                 mean_poverty
3.884375
                                                                          cases per 100k
100444.523946
                                                                                     deaths per 100k
1262.554798
      state
                                    total population
                total_deaths total_cases total_population 506.0 38959 27548
      state
          county
                               county
                                              total_deaths
                state
                                                                        total_cases
           Virginia
                             Loudoun
                                                         4729.0
                                                                                 376223
2994
                state county total_deaths
                                                                      total_cases
           Kentucky
                             Harlan
                                                         506.0
1047
                                                                                 38959
```

D. Analysis

- 1. Across all of the counties in the State of Oregon
 - a. COVID total cases vs. % population in poverty
 - b. COVID total deaths vs. % population in poverty
 - c. COVID total cases vs. Per Capita Income level
 - d. COVID total cases vs. Per Capita Income level
 - e. COVID cases during December 2020 vs. % population in poverty
 - f. COVID deaths during December 2020 vs. % population in poverty
 - g. COVID cases during December 2020 vs. Per Capita Income level
 - h. COVID cases during December 2020 vs. Per Capita Income level
- 2. Across all of the counties in the entire USA
 - a. COVID total cases vs. % population in poverty
 - b. COVID total deaths vs. % population in poverty
 - c. COVID total cases vs. Per Capita Income level
 - d. COVID total cases vs. Per Capita Income level
 - e. COVID cases during December 2020 vs. % population in poverty
 - f. COVID deaths during December 2020 vs. % population in poverty
 - g. COVID cases during December 2020 vs. Per Capita Income level
 - h. COVID cases during December 2020 vs. Per Capita Income level

None of the above comparison were within the threshold for my analysis.