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CLASS : BE COMPS A
BATCH : ADV BATCH F

ADV EXPERIMENT 3

DATASET :
Covid-19 dataset - https://www.kaggle.com/datasets/arnav1911/arnav-covid/data

DATASET DESCRIPTION :

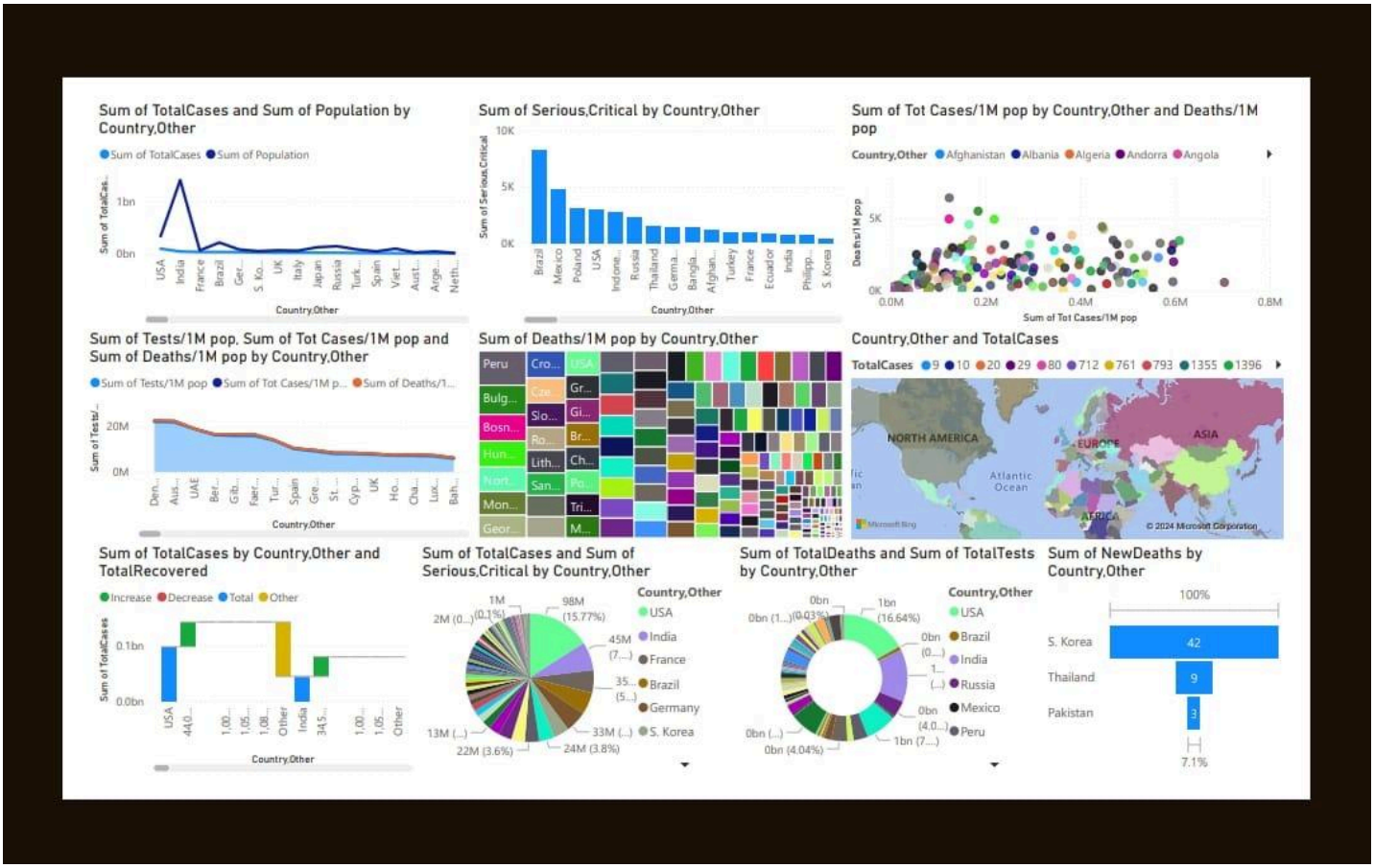
This dataset contains information on global COVID-19 statistics for various countries, including key metrics such as total cases, deaths, recovered cases, and population.

Each row represents data for a specific country or region, with fields providing detailed statistics.

The fields are as follows:

- **Country/Other:** The name of the country or region.
- **Total Cases:** The total number of confirmed COVID-19 cases.
- **Total Deaths:** The total number of deaths attributed to COVID-19.
- **New Deaths:** The number of new deaths recorded (where available).
- **Total Recovered:** The total number of recovered cases.
- **Active Cases:** The number of active COVID-19 cases.
- **Serious, Critical:** The number of patients in serious or critical condition.
- **Tot Cases/1M pop**: Total confirmed cases per 1 million population.
- **Deaths/1M pop:** Total deaths per 1 million population.
- **Total Tests:** Total number of COVID-19 tests conducted.
- **Tests/1M pop:** Number of tests conducted per 1 million population.
- **Population:** The total population of the country or region.

REPORT :



Q. What can be inferred from the sum of total cases and population by country?
Ans. Countries like the USA and India have both high populations and total COVID-19 cases. However, smaller countries such as France and the UK show a disproportionately high number of cases relative to their population size, indicating higher infection rates.

Q. What does the chart of tests per million, total cases per million, and deaths per million reveal?
Ans. Countries like Denmark, UAE, and Gibraltar have conducted the highest number of tests per million population. Despite high testing, countries like the UK and Spain show higher deaths per million, suggesting that high testing alone did not prevent severe outcomes in certain regions.

Q. What trends are seen in the sum of serious and critical cases by country?
Ans. Brazil, Mexico, and the USA report the highest number of serious and critical cases, reflecting the severe impact of COVID-19 in these regions. This could be linked to both healthcare capacity and underlying health conditions.

Q. What does the comparison between total cases per million and deaths per million by country indicate?
Ans. Countries with high cases per million, such as the USA and the UK, also report higher deaths per million. However, certain countries like Peru, with fewer total cases per million, have a disproportionately high death rate, suggesting other factors like healthcare capacity or response effectiveness contributed to higher mortality.

Q. What does the sum of total recovered cases by country show?
Ans. Countries like the USA and India have a high number of recovered cases, closely following their high case count. This indicates effective recovery rates in countries with large populations, though the percentage of recovered versus total cases may vary depending on healthcare facilities and response time.

CONCLUSION :

- Using visualizations in PowerBi, I was able to make many inferences from the dataset like smaller countries like the UK and Spain face a higher burden of COVID-19 cases and deaths per million, showing a severe impact relative to their population.
- High testing rates, seen in Denmark and the UAE, do not always correspond with lower death rates, highlighting the role of healthcare systems and interventions in managing outcomes.
- Brazil, Mexico, and the USA show the highest number of serious cases, while nations like the USA and India report a large number of recoveries, indicating successful recovery management.
- Countries such as Peru and the USA have high deaths per million, suggesting that certain regions faced challenges in managing severe COVID-19 cases, regardless of total infection numbers.