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BRANCH:	B.E CSE-DS
BATCH:	D
SUBJECT	Advanced Data Visualization
EXPERIMENT No.	3

AIM: Design Interactive Dashboards and Storytelling using Tableau / Power BI / R (Shiny) / Python (Streamlit/Flask) / D3.js to be performed on the dataset - Disease spread / Healthcare

● Create interactive dashboard - Write observations from each chart given below
● (Advanced - Word chart, Box and whisker plot, Violin plot, Regression plot (linear and nonlinear), 3D chart, Jitter, Line, Area, Waterfall, Donut, Treemap, Funnel
● Basic - Bar chart, Pie chart, Histogram, Timeline chart, Scatter plot, Bubble plot)

DATASET:
This dataset contains latest Covid-19 India state-wise data as on **September 12, 2023**. This dataset can be used to analyze covid in India.
This dataset is great for **Exploratory Data Analysis**
Attribute Information
1. **State/UTs** - Names of Indian States and Union Territories.
2. **Total Cases** - Total number of confirmed cases
3. **Active** - Total number of active cases
4. **Discharged** - Total number of discharged cases
5. **Deaths** - Total number of deaths
6. **Active Ratio (%)** - Ratio of number of active cases to total cases
7. **Discharge Ratio (%)** - Ratio of number of discharged cases to total cases
8. **Death Ratio (%)** - Ratio of number of deaths to total cases
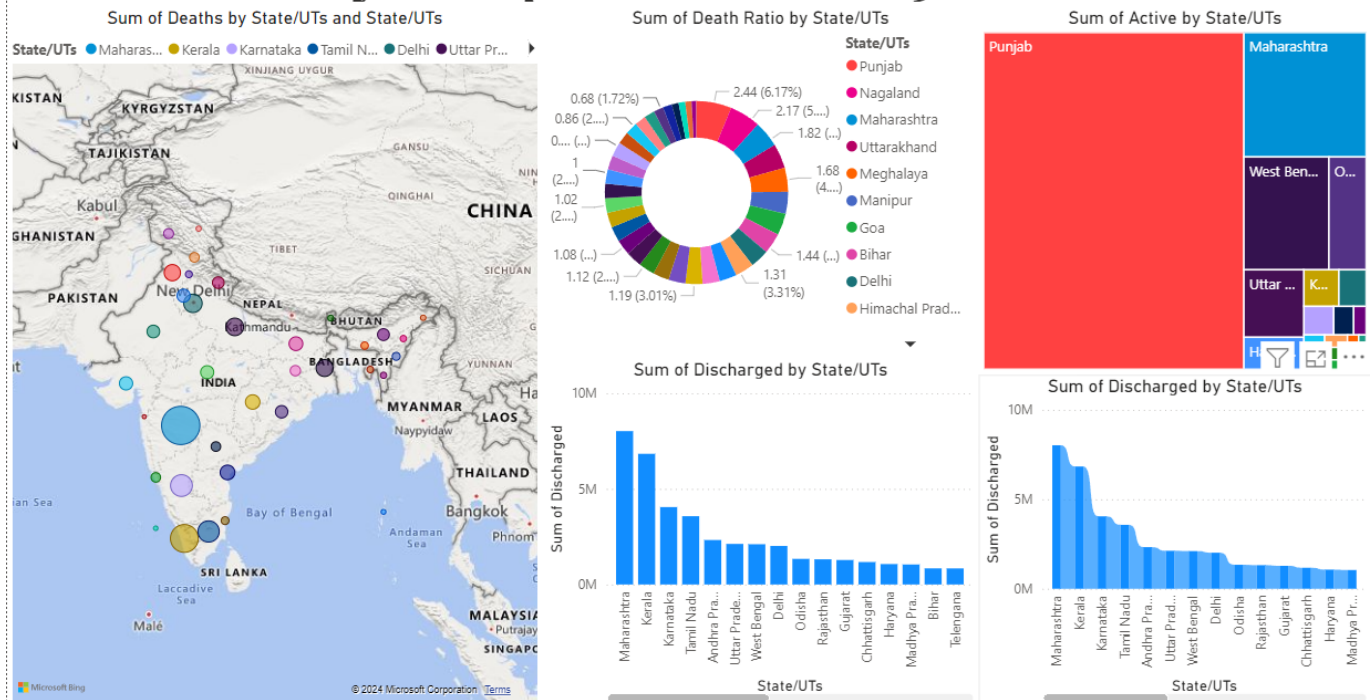9. **Population** - Population of State/UT

Source
Covid Data : https://www.mygov.in/covid-19
Population Data : https://www.indiacensus.net/
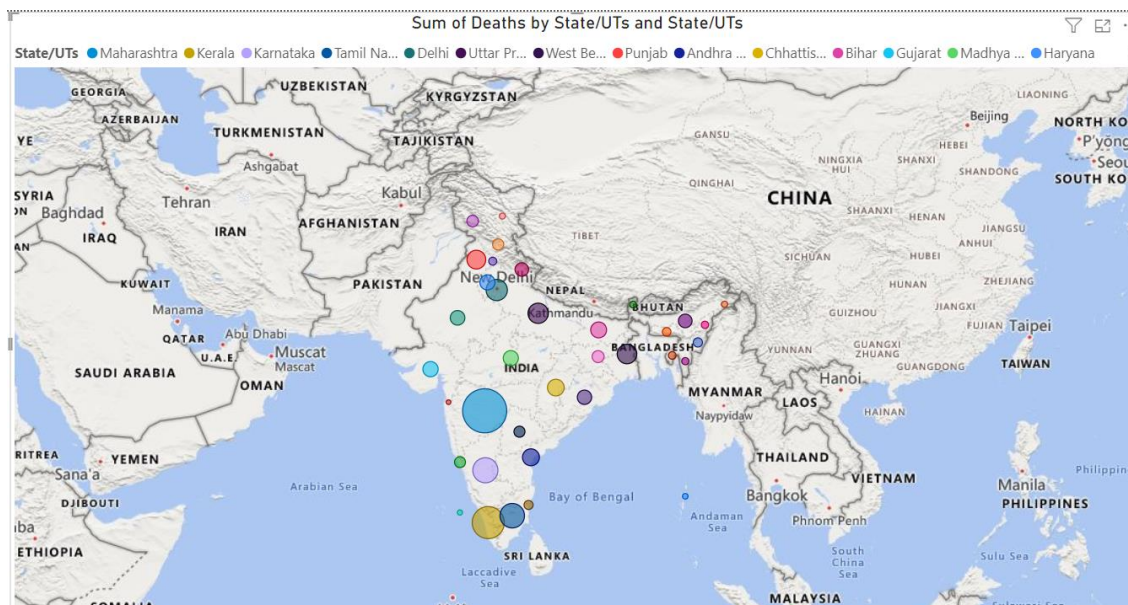
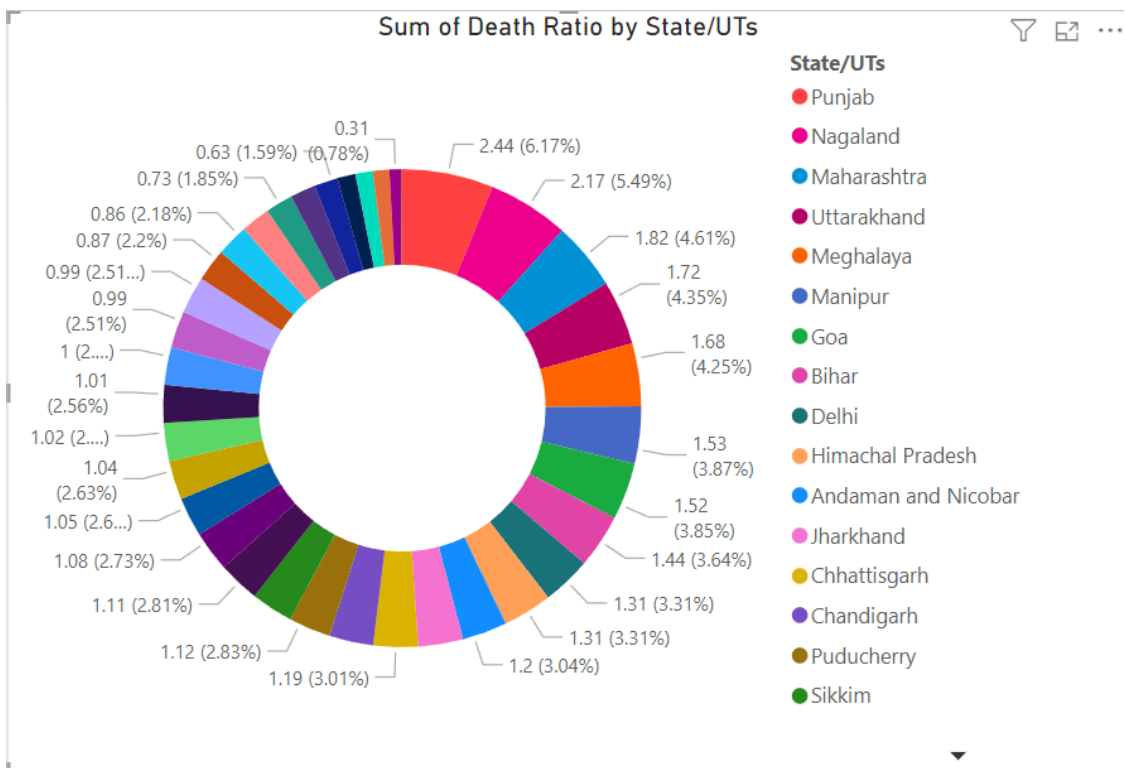# Analysis:

Analysis report of Covid-19 in India

The above dashboard gives the report of the covid-19 in India, where different charts were used to create and give visual idea of how many deaths and active cases are there across the country.
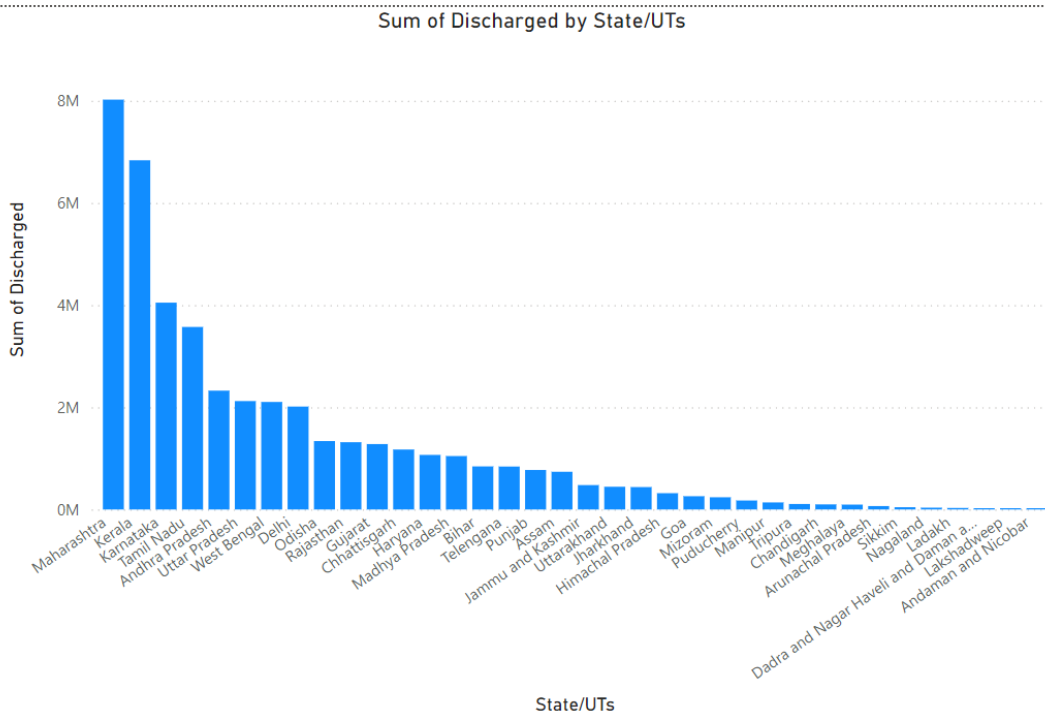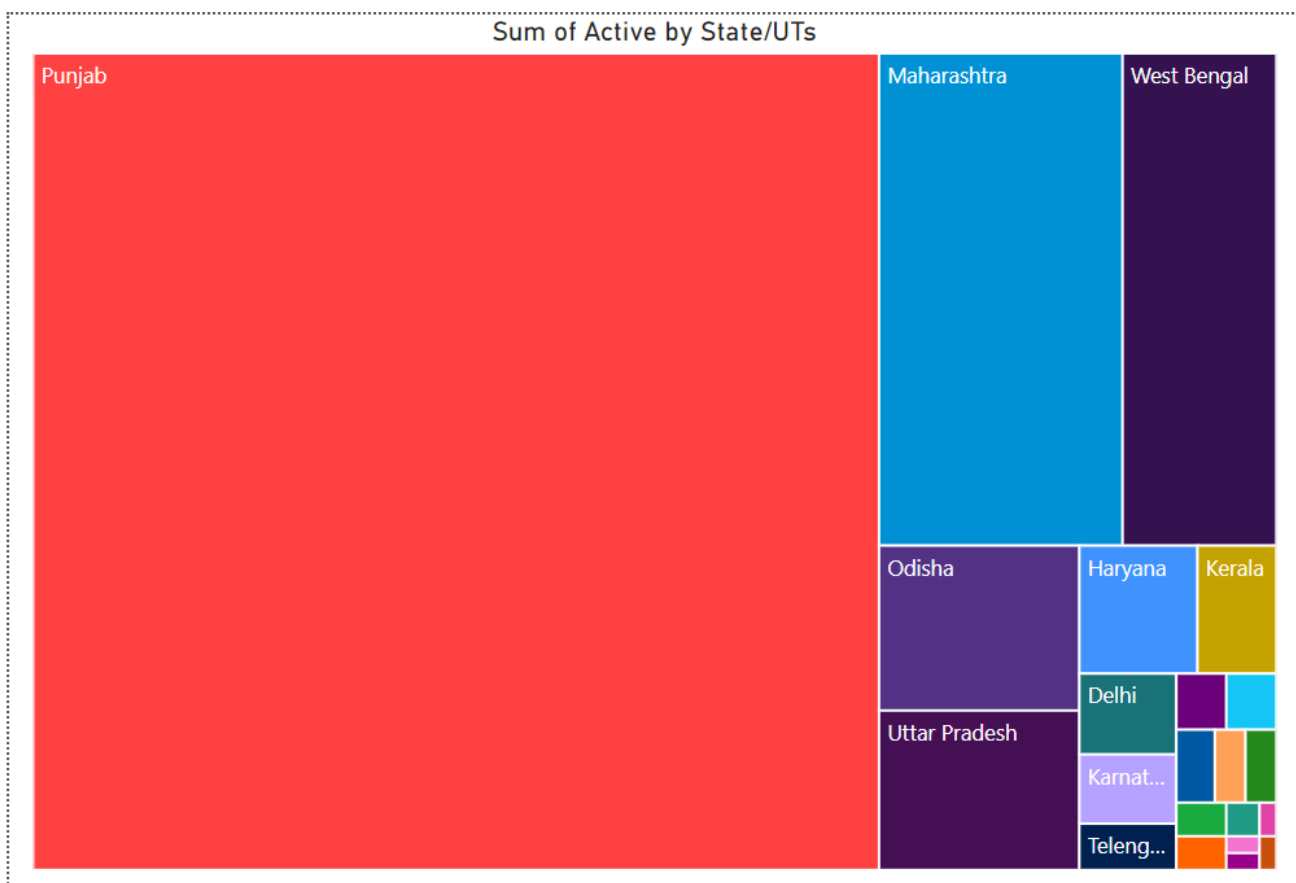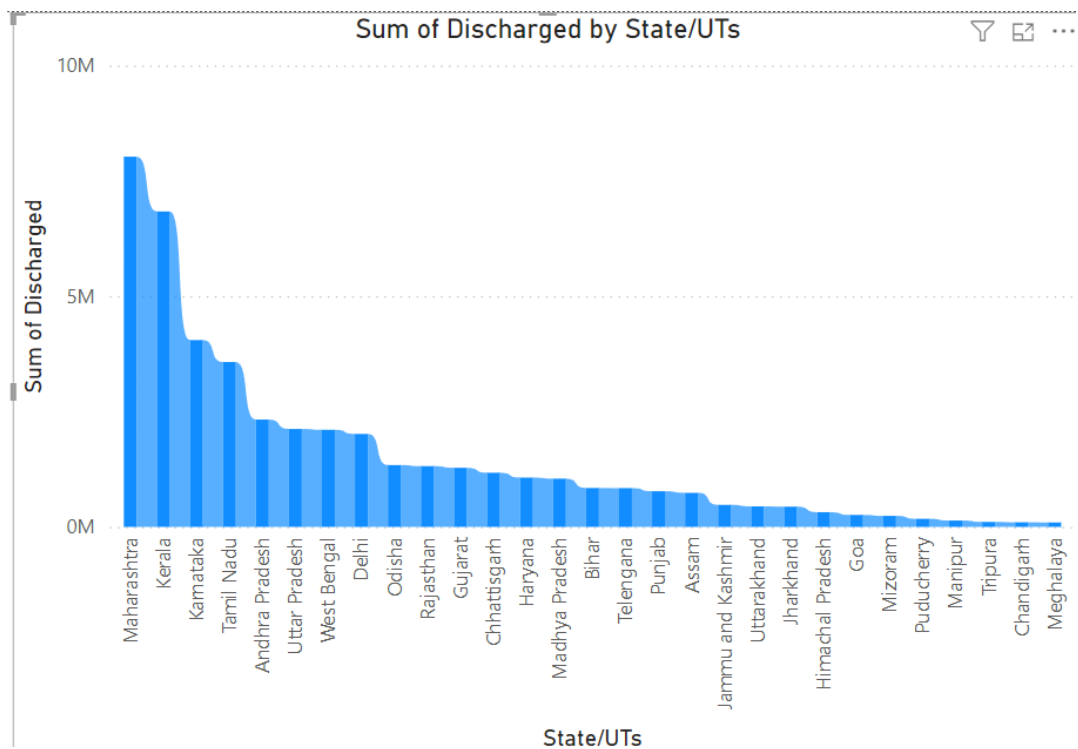
Charts used:
Map

Gives the details of deaths across the country and bubble indicates the intensity that bigger bubble means more death in that region.
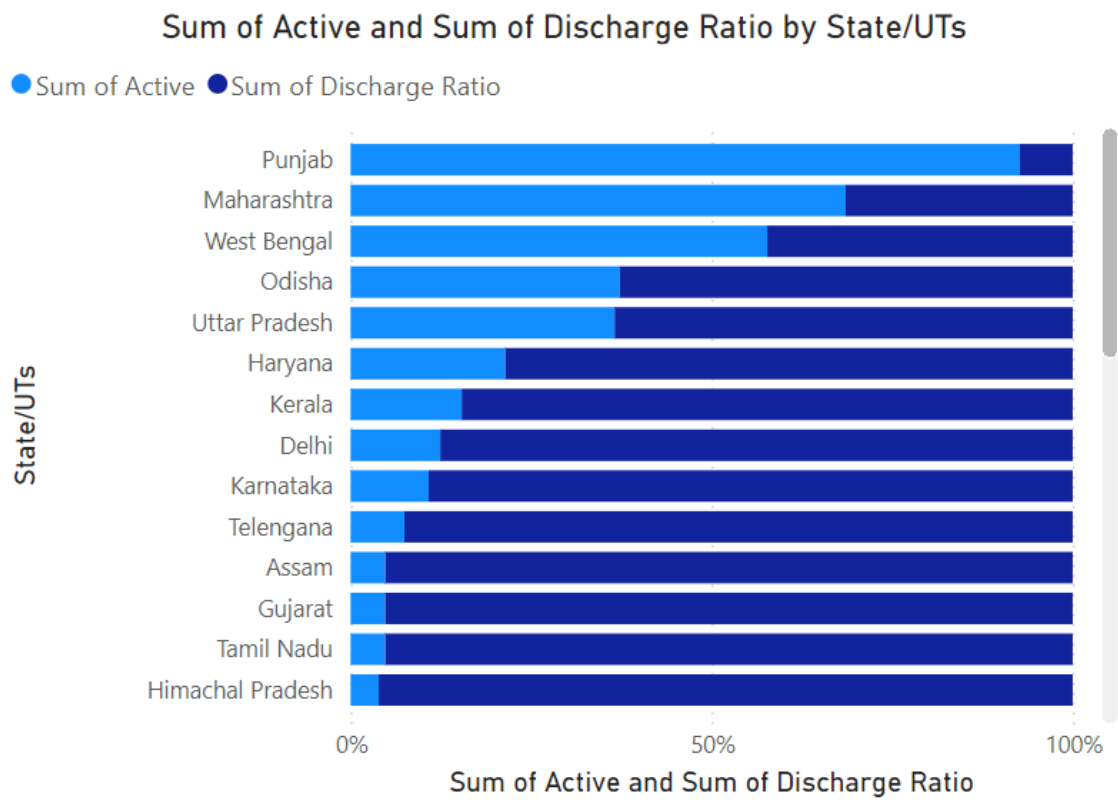
Sum of Death Ratio by State/UTs

State/UTs
- Punjab
- Nagaland
- Maharashtra
- Uttarakhand
- Meghalaya
- Manipur
- Goa
- Bihar
- Delhi
- Himachal Pradesh
- Andaman and Nicobar
- Jharkhand
- Chhattisgarh
- Chandigarh
- Puducherry
- Sikkim

Values shown on chart: 0.31 (0.78%), 0.63 (1.59%), 0.73 (1.85%), 0.86 (2.18%), 0.87 (2.2%), 0.99 (2.51...), 0.99 (2.51%), 1 (2....), 1.01 (2.56%), 1.02 (2....), 1.04 (2.63%), 1.05 (2.6...), 1.08 (2.73%), 1.11 (2.81%), 1.12 (2.83%), 1.19 (3.01%), 2.44 (6.17%), 2.17 (5.49%), 1.82 (4.61%), 1.72 (4.35%), 1.68 (4.25%), 1.53 (3.87%), 1.52 (3.85%), 1.44 (3.64%), 1.31 (3.31%), 1.31 (3.31%), 1.2 (3.04%)

Gives the information about the death ratio across the country and helps to analyze the highest death ratio state.

Sum of Discharged by State/UTs

Gives the detail about the no of the discharges patients across the country.

Sum of Discharged by State/UTs

Sum of Active by State/UTs

Sum of Active and Sum of Discharge Ratio by State/UTs

Conclusion: Successfully plotted all the charts and made dashboard report about the Covid-19 dataset specifically for India.