

DATANATION Project Report

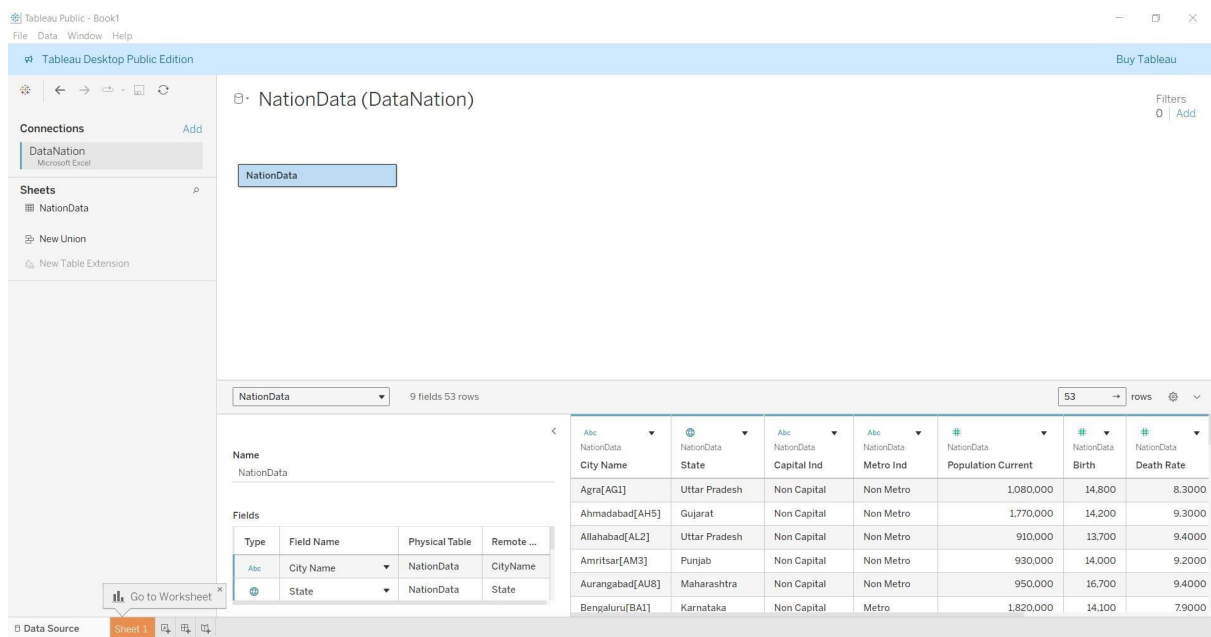
Project Question/Objective

- Using the **DataNation** dataset, perform the following tasks:**Step-by-Step**
- Create separate **City names** by removing city codes.
- Create a **State → City hierarchy**
- Build a **Filled Map**
- Calculate **Death Rate** and show it using **Shape Map**
- Change color of shapes for better interpretation
- Create a Dashboard and Story

Implementation Guide

Step 1: Data Connection & Preparation

1. Open Tableau Desktop
2. Connect to the **DataNation.csv** dataset
3. Check that fields like **State**, **City**, **Confirmed Cases**, and **Deaths** have correct data types



Data successfully loaded into Tableau with proper field recognition

Verified data types using Fields table at the bottom right of tableau.

State automatically recognized as **Geographic Role**

City, Capital Ind, Metro Ind recognized as **Text (ABC)**

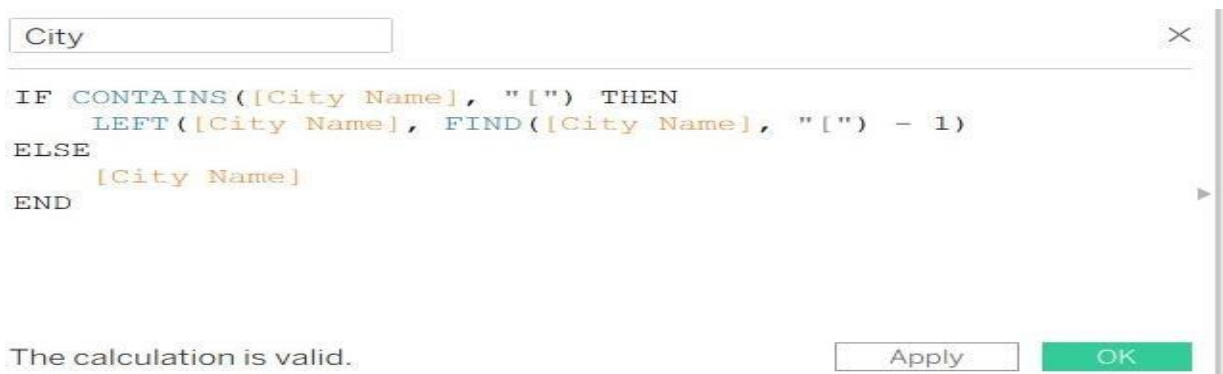
Population, Birth Rate, Death Rate, Per Person Income recognized as **Number (#)**

Last Election Date identified correctly as **Date**.

Step 2: Create separate Cities by removing the Code associated with each cities.

Created a **calculated field** City with the formula:

Dragged City to **Rows shelf**



The screenshot shows the Tableau interface with the 'NationData' data source selected. A context menu is open over the 'City' calculated field, showing options like 'Rename', 'Reset Name', 'Copy Values', 'Hide', 'Aliases...', 'Create Calculated Field...', 'Create Group...', 'Split', 'Custom Split...', and 'Pivot (select multiple fields)'. The 'Fields' shelf on the right shows the 'City' field with a '#' icon, indicating it is a number. The 'Columns' shelf shows the 'City' field with a 'Text (ABC)' icon, indicating it is a text field. The 'Rows' shelf is empty.

Type	Field Name	Physical Table	Remote ...
#	Per Person Income	NationData	Per Perso...
📅	Last Election Date	NationData	Last Elect...

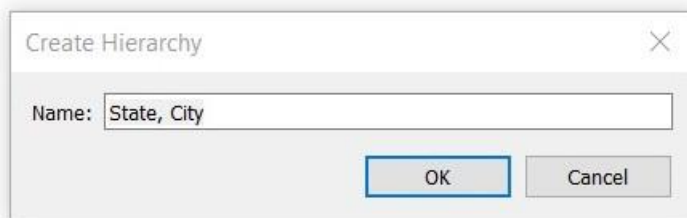
City Name	State	Capital Ind
Agra[AG1]	Uttar Pradesh	Non Capital
Ahmadabad[AH5]	Gujarat	Non Capital
Allahabad[AL2]	Uttar Pradesh	Non Capital
Amritsar[AM3]	Punjab	Non Capital
Aurangabad[AU8]	Maharashtra	Non Capital
Bengaluru[BA1]	Karnataka	Non Capital



Step 3: Create a heirarchy of the state and city

Drag **City** onto **State** → **Create Hierarchy** → name it State → City.

Drag the hierarchy to **Rows shelf** to see states expandable to cities.



Rows	State	City
Sheet 1		
	State	City
	Andhra Pradesh	Vijayawada
		Vishakhapatnam
	Assam	Guwahati
	Bihar	Patna
	Chandigarh	Chandigarh
	Chhattisgarh	Raipur
	Delhi	New Delhi
	Gujarat	Ahmadabad
		Rajkot
		Surat
		Vadodara
	Haryana	Faridabad
	Jammu and Kashmir	Srinagar
	Jharkhand	Dhanbad
		Ranchi
	Karnataka	Bengaluru
		Hubli
		Mysore
	Madhya Pradesh	Bhopal
		Gwalior
		Indore
		Jabalpur
	Maharashtra	Aurangabad
		Kalyan
		Mumbai
		Nagpur
		Nashik
		Navi Mumbai
		Pimpri-Chinchwad
		Pune
		Solapur
		Thane

Step 4 : Visualize cities on a map.

1. In the **Data pane**, **double-click** `state` → Tableau will automatically create a map showing all states.
2. **Double-click** `city` → Tableau now plots city points on top of the states.

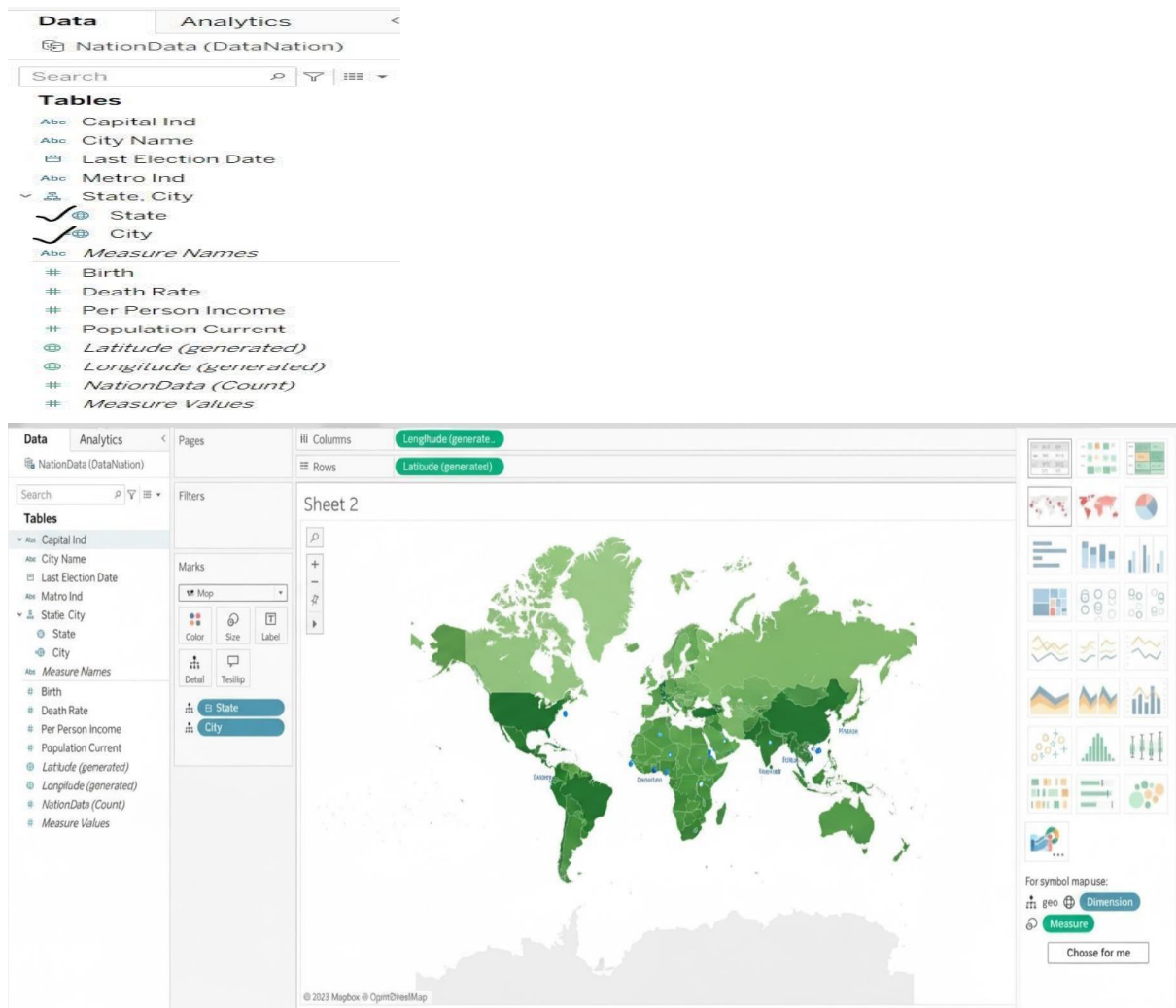
At this point, you should see small dots or marks representing each city.

Go to the **Marks card** (middle-left of the screen).

Currently, it might say **Automatic**. Click the dropdown.

Select **Map** → **Filled Map**.

Now each state appears as a filled shape, and cities are marked on it.



Step 5: Find the Death Rate for Cities with a ShapeCard.

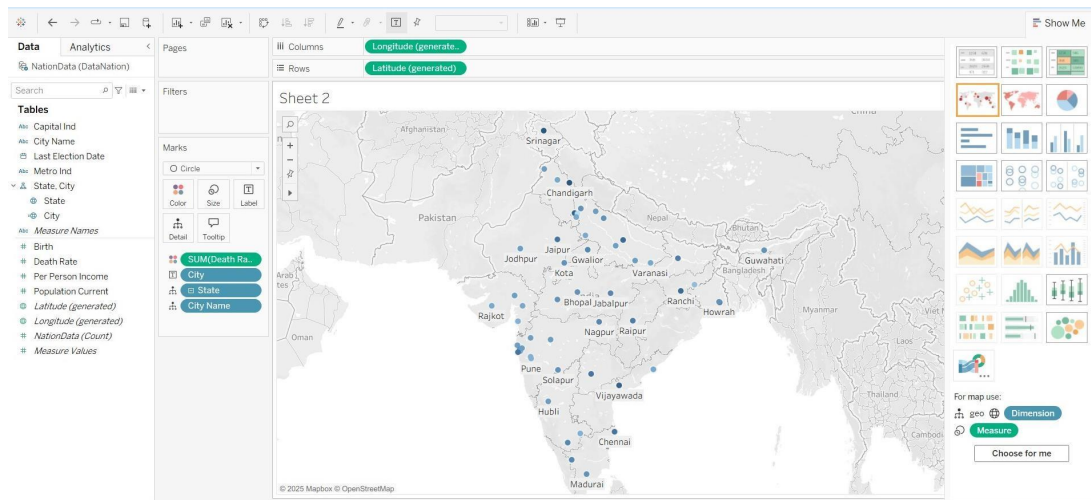
The **State** and **City** fields were set with correct **Geographical Roles**.

The **City** field was used to generate the map view.

The **Marks card** was changed to **Shape** to represent each city.

Death Rate was dragged to **Shape** and **Color** to visually indicate variations.

Colors were adjusted to highlight differences in death rate clearly.



Tools Used

- Tableau Desktop/Public
- Data nation.csv dataset

Files Created

- 'Data nation.twbx' (Tableau packaged workbook)
- Project Report Document