Milestone 1:
Empathy map creation

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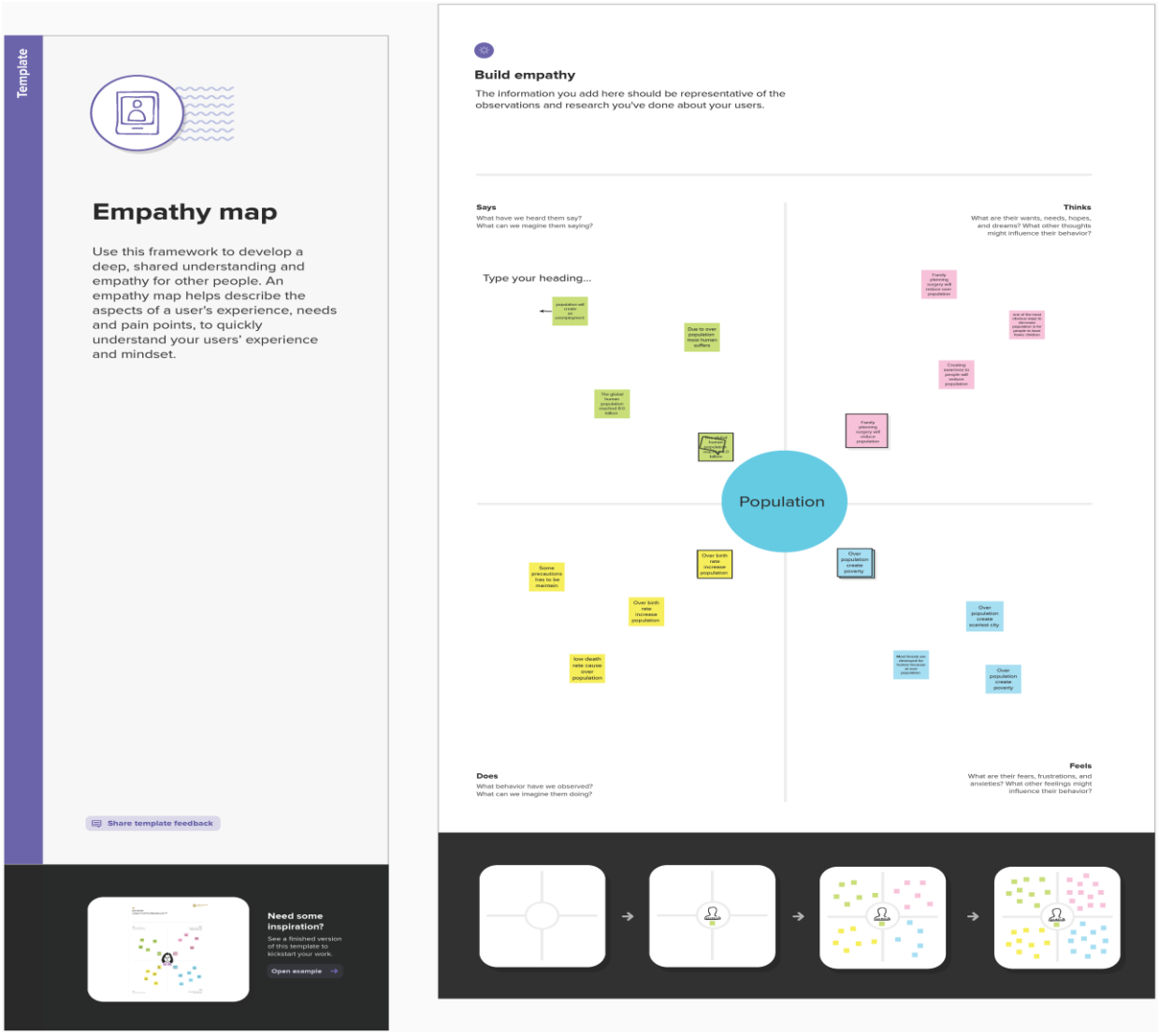


Milestone 2: Data Collection & Extraction from Database

Milestone 2: Data Collection & Extraction from Database

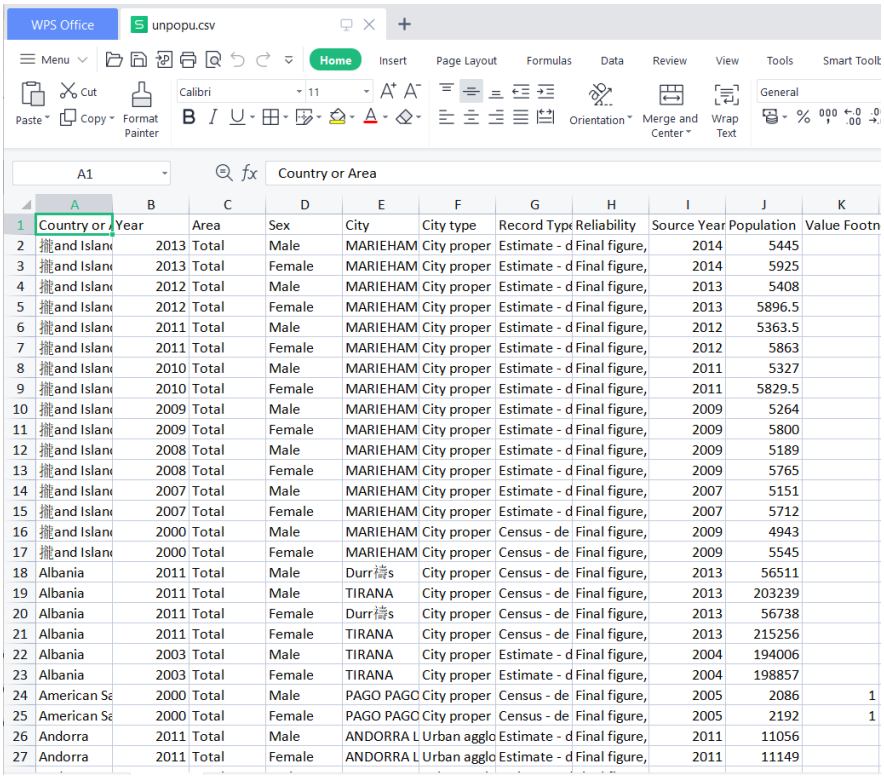
Data collection is the process of gathering and measuring information on variables of interest, in an established systematic fashion that enables one to answer stated research questions, test hypotheses, and evaluate outcomes and generate insights from the data.

Activity 1: Collect the dataset

Please use the link to download the dataset: https://drive.google.com/file/d/1NRrQhbZ8KuzpkvXl9C6MBzFrXg2sE- J6/view?usp=share_link

Solution:

We collected the data set



WPS Office | unpopu.csv

Menu | Home | Insert | Page Layout | Formulas | Data | Review | View | Tools | Smart Toolt

Paste | Cut | Copy | Format Painter | Calibri | 11 | Orientation | Merge and Center | Wrap Text | General

A1 | Country or Area

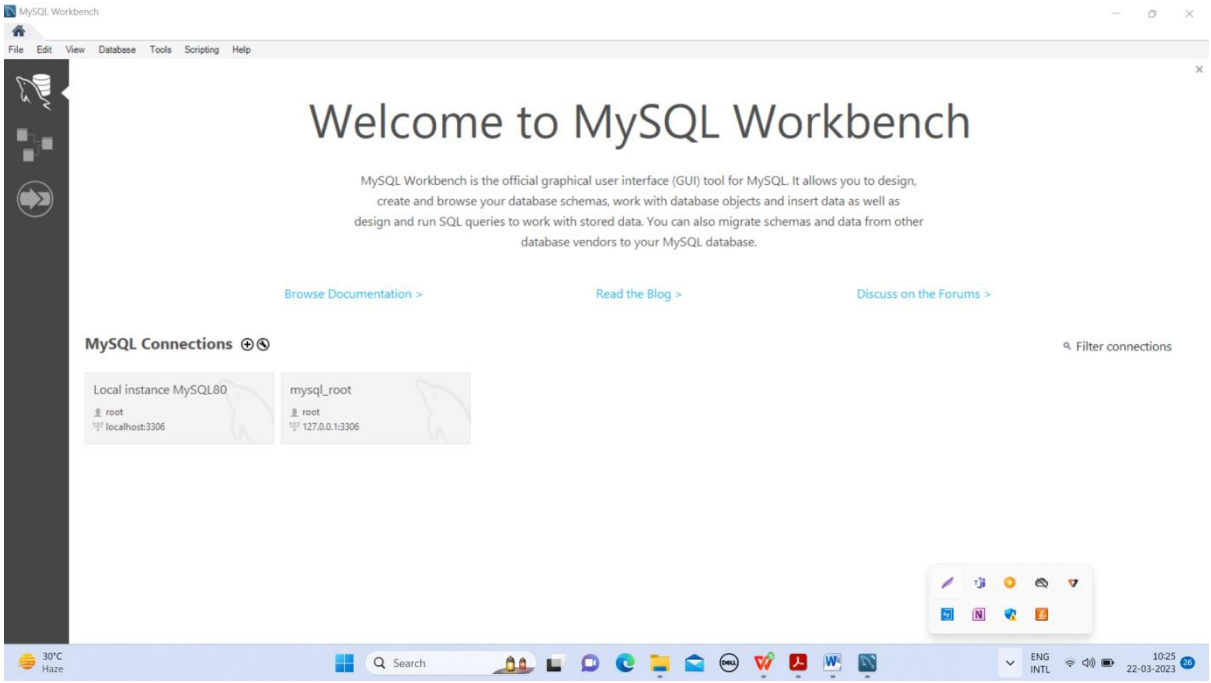
	A	B	C	D	E	F	G	H	I	J	K
1	Country or A	Year	Area	Sex	City	City type	Record Type	Reliability	Source Year	Population	Value Footn
2	拢and Islan	2013	Total	Male	MARIEHAM	City proper	Estimate - d	Final figure,	2014	5445	
3	拢and Islan	2013	Total	Female	MARIEHAM	City proper	Estimate - d	Final figure,	2014	5925	
4	拢and Islan	2012	Total	Male	MARIEHAM	City proper	Estimate - d	Final figure,	2013	5408	
5	拢and Islan	2012	Total	Female	MARIEHAM	City proper	Estimate - d	Final figure,	2013	5896.5	
6	拢and Islan	2011	Total	Male	MARIEHAM	City proper	Estimate - d	Final figure,	2012	5363.5	
7	拢and Islan	2011	Total	Female	MARIEHAM	City proper	Estimate - d	Final figure,	2012	5863	
8	拢and Islan	2010	Total	Male	MARIEHAM	City proper	Estimate - d	Final figure,	2011	5327	
9	拢and Islan	2010	Total	Female	MARIEHAM	City proper	Estimate - d	Final figure,	2011	5829.5	
10	拢and Islan	2009	Total	Male	MARIEHAM	City proper	Estimate - d	Final figure,	2009	5264	
11	拢and Islan	2009	Total	Female	MARIEHAM	City proper	Estimate - d	Final figure,	2009	5800	
12	拢and Islan	2008	Total	Male	MARIEHAM	City proper	Estimate - d	Final figure,	2009	5189	
13	拢and Islan	2008	Total	Female	MARIEHAM	City proper	Estimate - d	Final figure,	2009	5765	
14	拢and Islan	2007	Total	Male	MARIEHAM	City proper	Estimate - d	Final figure,	2007	5151	
15	拢and Islan	2007	Total	Female	MARIEHAM	City proper	Estimate - d	Final figure,	2007	5712	
16	拢and Islan	2000	Total	Male	MARIEHAM	City proper	Census - de	Final figure,	2009	4943	
17	拢and Islan	2000	Total	Female	MARIEHAM	City proper	Census - de	Final figure,	2009	5545	
18	Albania	2011	Total	Male	Durr禱s	City proper	Census - de	Final figure,	2013	56511	
19	Albania	2011	Total	Male	TIRANA	City proper	Census - de	Final figure,	2013	203239	
20	Albania	2011	Total	Female	Durr禱s	City proper	Census - de	Final figure,	2013	56738	
21	Albania	2011	Total	Female	TIRANA	City proper	Census - de	Final figure,	2013	215256	
22	Albania	2003	Total	Male	TIRANA	City proper	Estimate - d	Final figure,	2004	194006	
23	Albania	2003	Total	Female	TIRANA	City proper	Estimate - d	Final figure,	2004	198857	
24	American Sa	2000	Total	Male	PAGO PAGO	City proper	Census - de	Final figure,	2005	2086	1
25	American Sa	2000	Total	Female	PAGO PAGO	City proper	Census - de	Final figure,	2005	2192	1
26	Andorra	2011	Total	Male	ANDORRA L	Urban agglo	Estimate - d	Final figure,	2011	11056	
27	Andorra	2011	Total	Female	ANDORRA L	Urban agglo	Estimate - d	Final figure,	2011	11149	

Activity 2: Storing Data in DB & Perform SQL Operations

Explanation video link:
https://drive.google.com/file/d/1uUaPt7PE3t-jPk4txwyGsbVDkcXzDwOl/view?usp=sharing

Solution:

1. We stored the un population data
2. SQL downloaded and installed

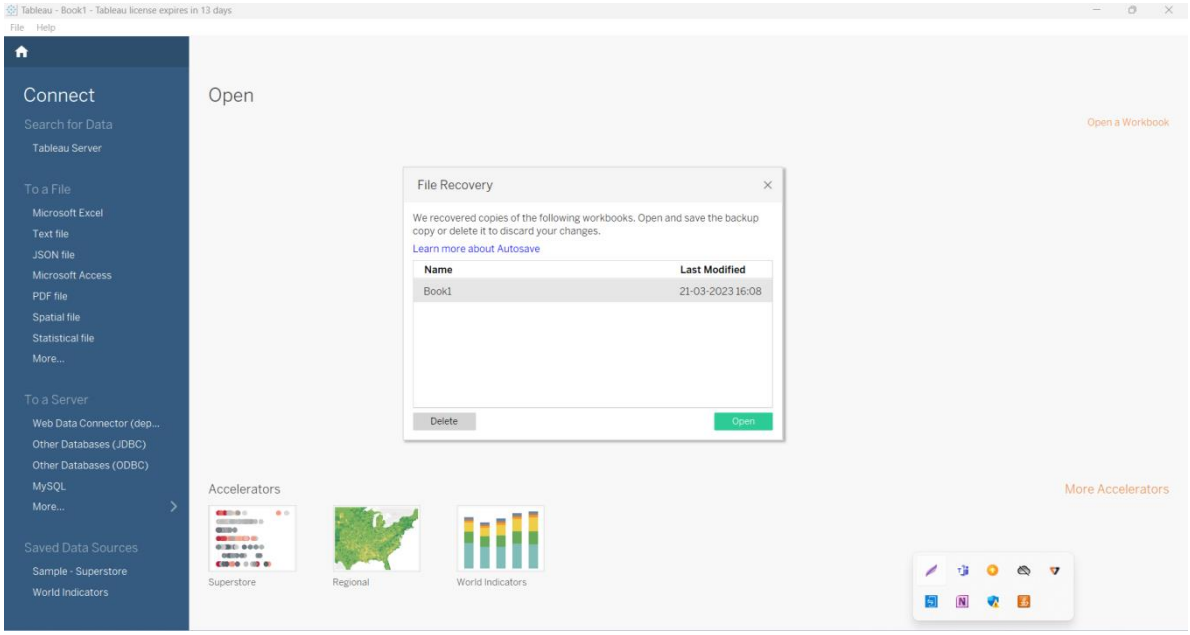


Activity 3: Connect DB with Tableau

Explanation video link:
https://drive.google.com/file/d/11uLSwvMxLVtZdHCkvdSWfRZjriMvaQJB/view?usp=share_lin

Solution:

We installed tableau and workbench.



We open our UN population file and draw the first picture.

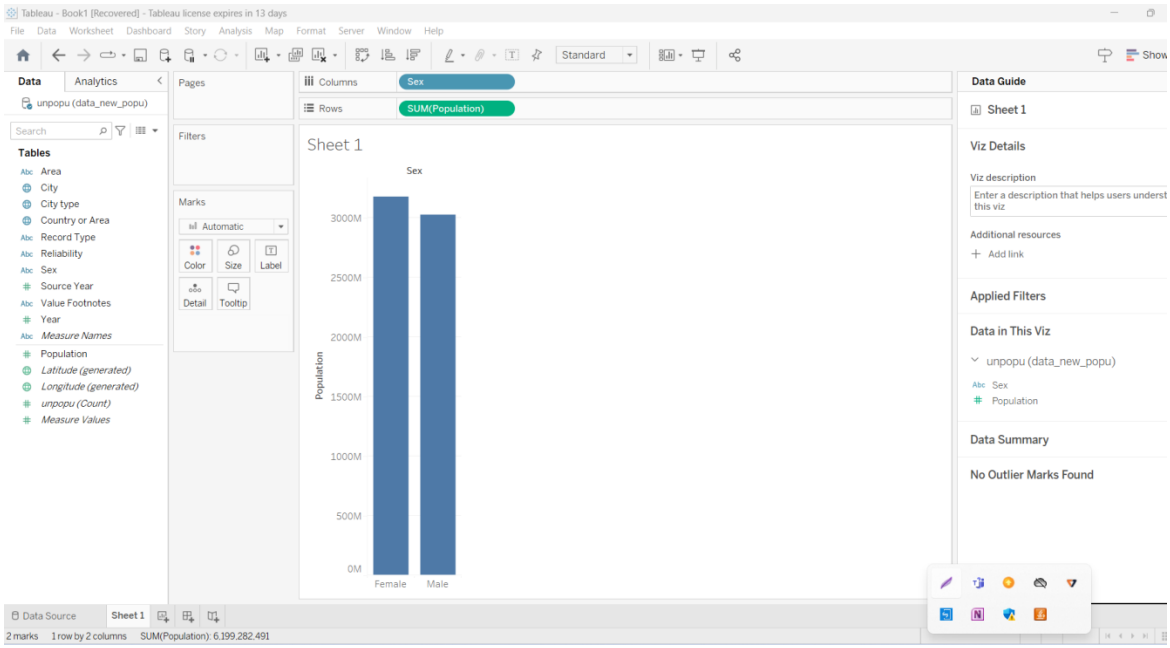


Tableau - Book1 [Recovered] - Tableau license expires in 13 days
File Data Worksheet Dashboard Story Analysis Map Format Server Window Help
Standard
Data
Analytics
unpopu (data_new_popu)
Search
Tables
Abc Area
City
City type
Country or Area
Abc Record Type
Abc Reliability
Abc Sex
Source Year
Abc Value Footnotes
Year
Abc Measure Names
Population
Latitude (generated)
Longitude (generated)
unpopu (Count)
Measure Values
Pages
Filters
Marks
Automatic
Color
Size
Label
Detail
Tooltip
Columns
Sex
Rows
SUM(Population)
Sheet 1
Sex
Population
3000M
2500M
2000M
1500M
1000M
500M
0M
Female
Male
Data Guide
Sheet 1
Viz Details
Viz description
Enter a description that helps users underst this viz
Additional resources
Add link
Applied Filters
Data in This Viz
unpopu (data_new_popu)
Abc Sex
Population
Data Summary
No Outlier Marks Found
Data Source
Sheet 1
2 marks
1 row by 2 columns
SUM(Population): 6,199,282,491

Milestone 3:
Data Preparation

Milestone 3: Data Preparation

Activity: Prepare the Data for Visualization

Solution:

We collected the data set. The followings are in the set as

1. csv file is noted.

2. A gender based (female/male) distribution is given.

3. The data consists of years around 2010-2020.

4. The numbers related to the population in various countries around world like Albania, America, Australia etc.

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Milestone 4:
Data Visualization

Milestone 4: Data Visualization

Data visualization is the process of creating graphical representations of data in order to help people understand and explore the information. The goal of data visualization is to make complex data sets more accessible, intuitive, and easier to interpret. By using visual elements such as charts, graphs, and maps, data visualizations can help people quickly identify patterns, trends, and outliers in the data.

Activity 1: No of Unique Visualizations

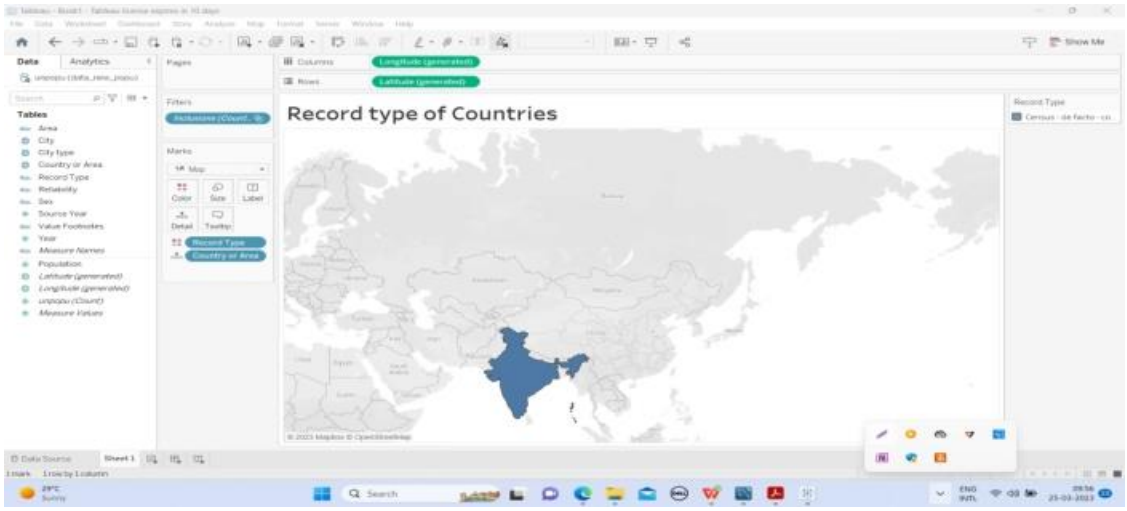
The number of unique visualizations that can be created with a given dataset. Some common types of visualizations that can be used to analyze the population growth in the cities, include bar charts, line charts, heat maps, scatter plots, pie charts,Maps etc. These visualizations can be used to compare performance, track changes over time, show distribution, and relationships between variables

Activity 1.1: Population records by type of Countries

Solution:

A graph related to population of various countries is pictured with tableau

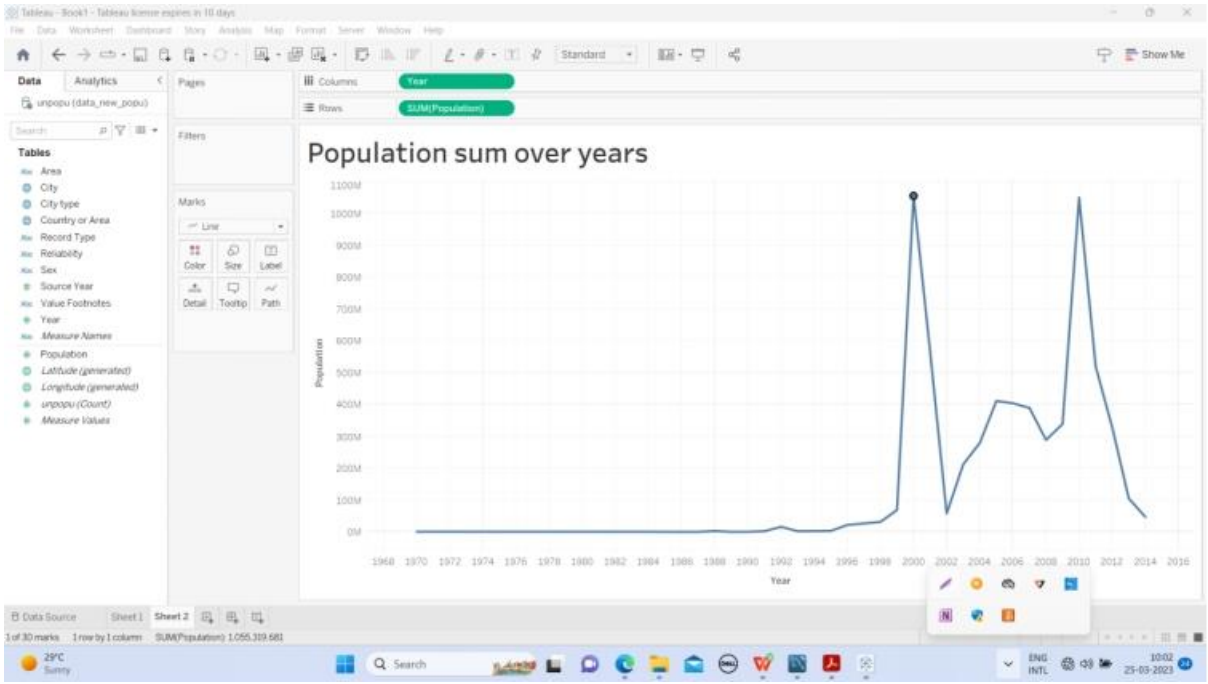
Our India map is specified in the following graph.



Activity 1.2: Population trends over the Year

Solution:

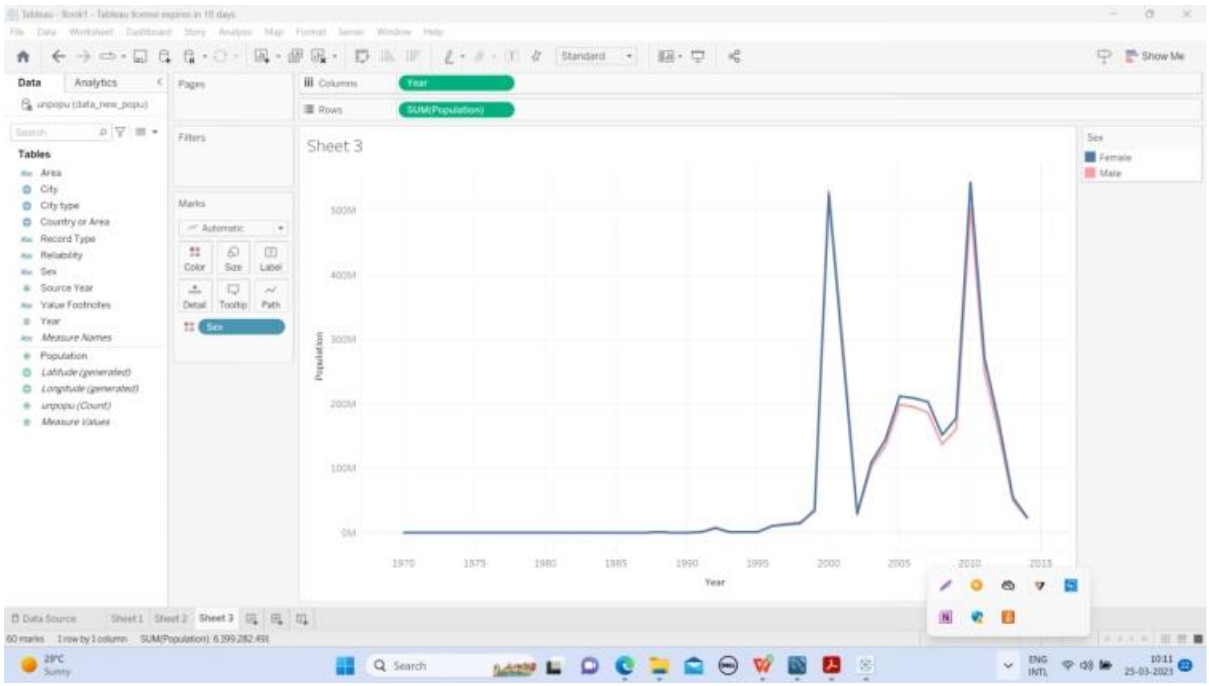
The map of population over the years is drawn from 1970 to 2014. The highest peak at 2010 and 2014 are marked.



Activity 1.3: Population trends over the years by sex

Solution:

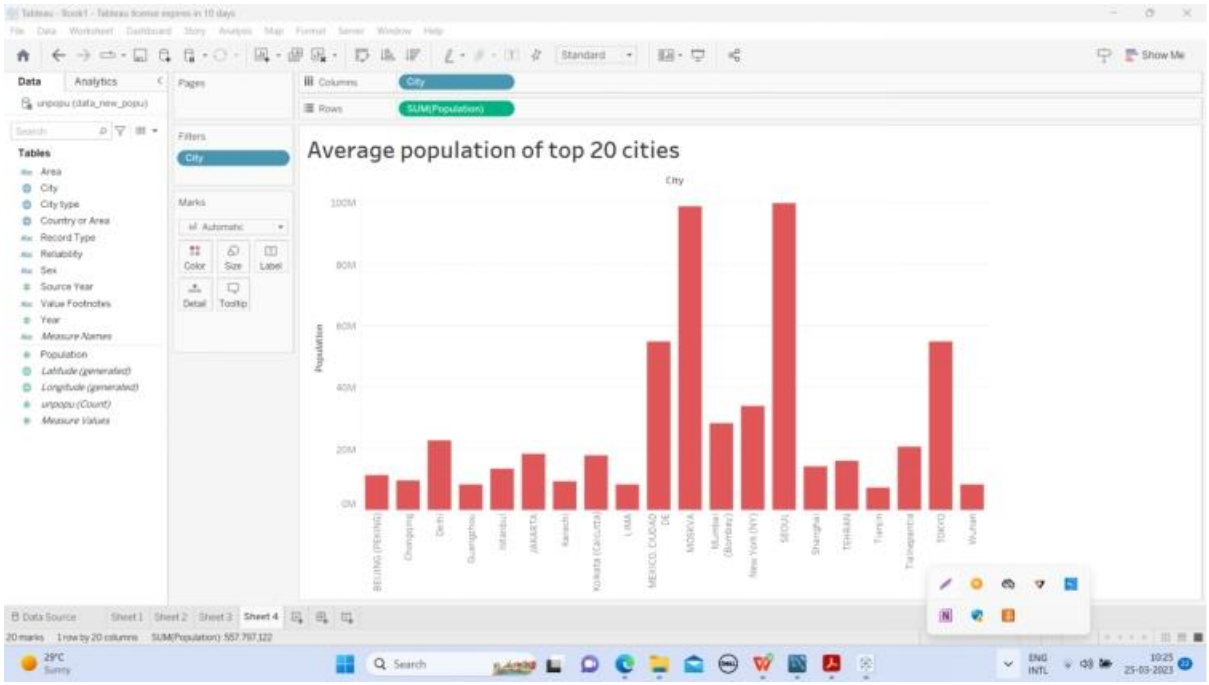
The gender wise population over the years is mentioned in the following picture.



Activity 1.4: Cities with highest average populations

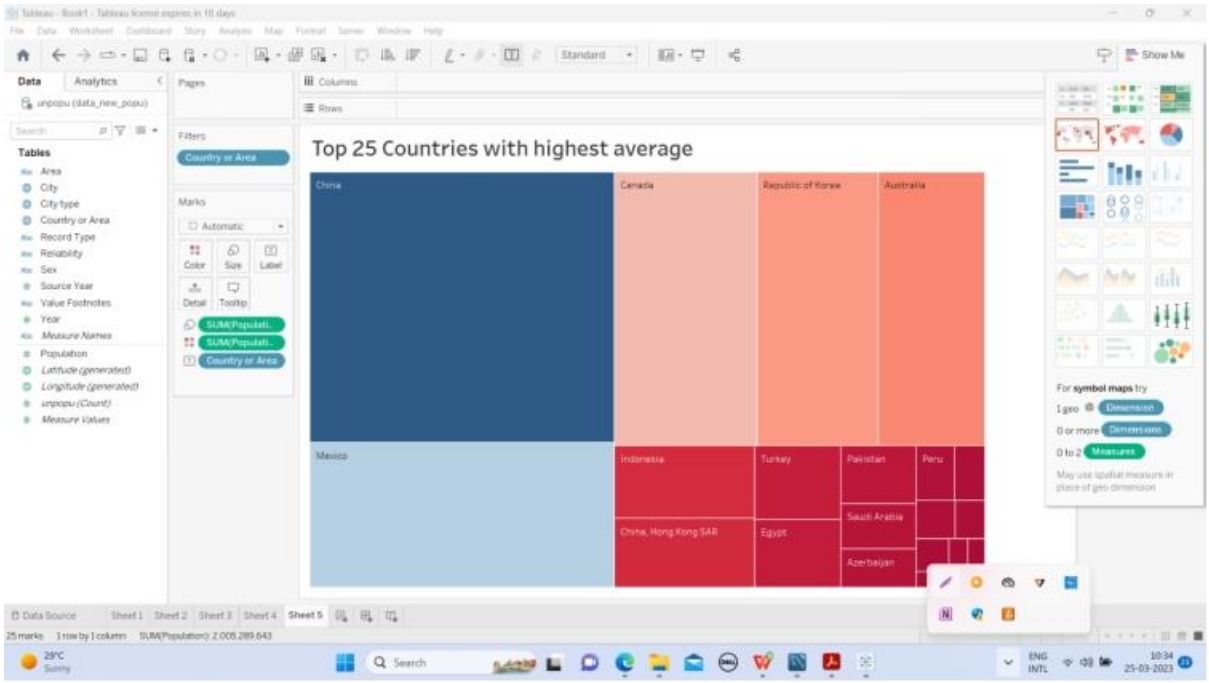
Solution:

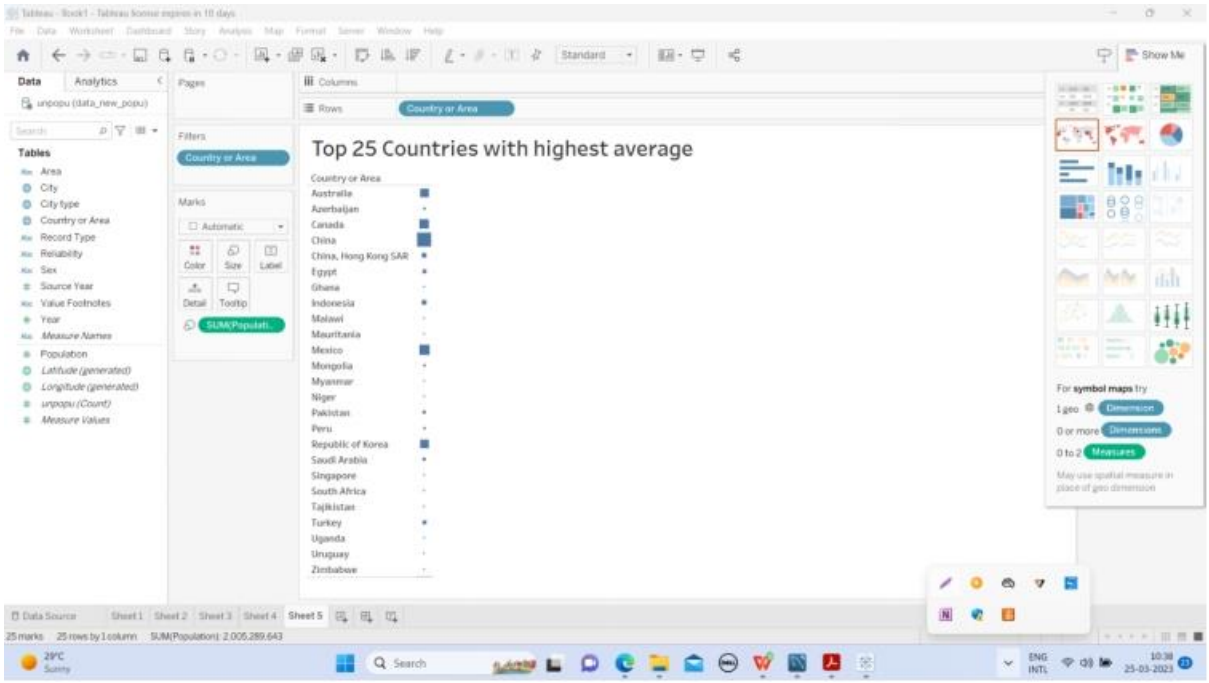
The highest average population for top 20 cities are drawn in the following picture. (Moskva and Seoul are having hightest averages)



Activity 1.5: Countries with highest average population from 2000-2014

Solution: The map of top 25 countries with highest average population is created and presented in stack type and name with size type.




Top 25 Countries with highest average
Country or Area
Australia
Azerbaijan
Canada
China
China, Hong Kong SAR
Egypt
Ghana
Indonesia
Malawi
Mauritania
Mexico
Mongolia
Myanmar
Niger
Pakistan
Peru
Republic of Korea
Saudi Arabia
Singapore
South Africa
Tajikistan
Turkey
Uganda
Uruguay
Zimbabwe

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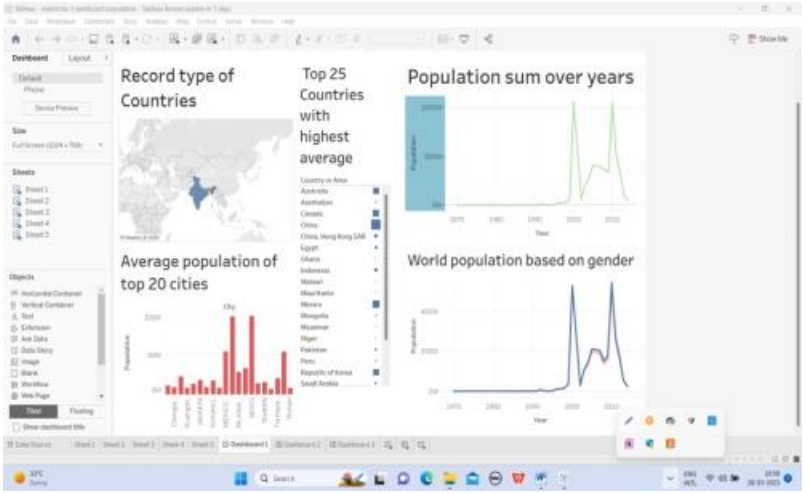
Milestone 5: Creation of Dashboards

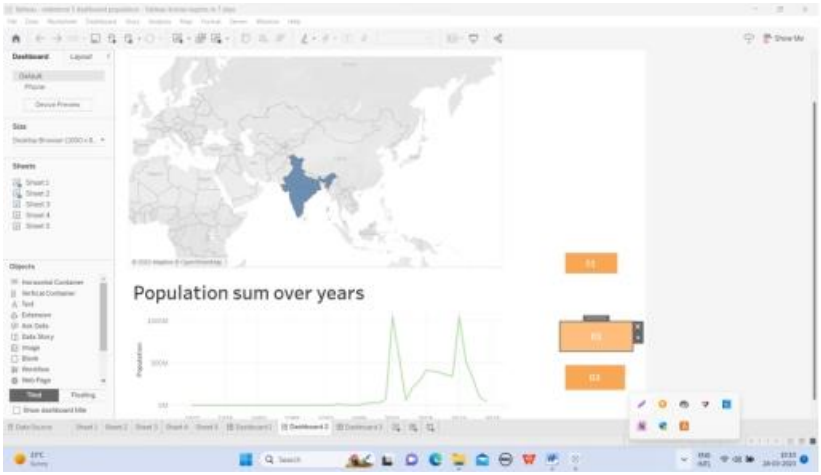
Milestone 5: Creation of Dashboards

We created the following three dash boards

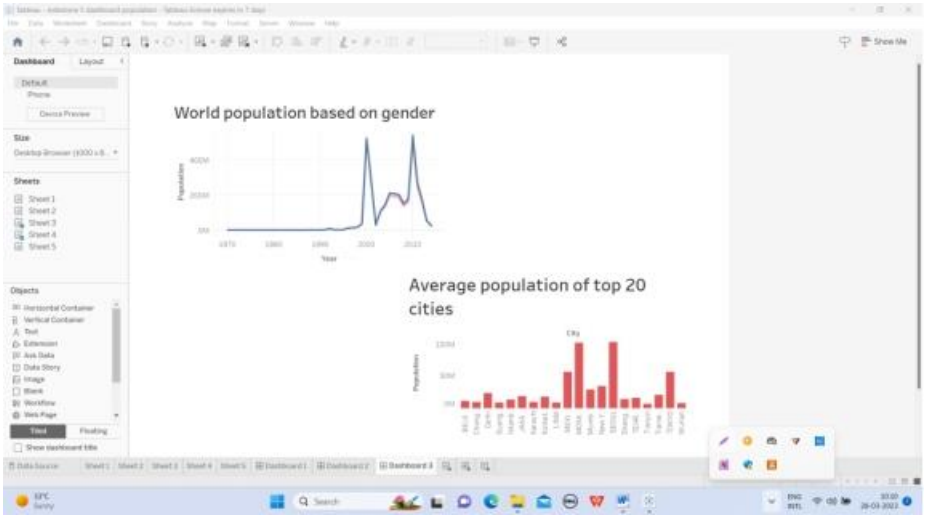
1. Full view of all created sheets



2. Dash boards with navigation keys s1, D1, D3 are created.



3. World population based on gender and Average populaion of Top 20 cities-dashboard created.



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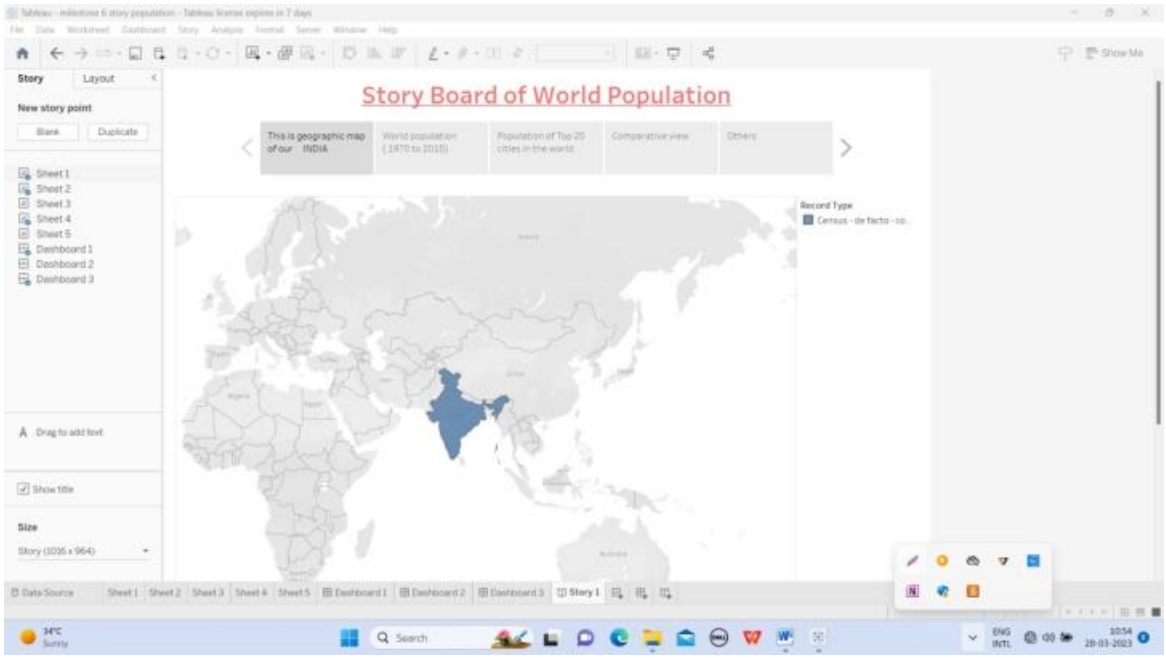
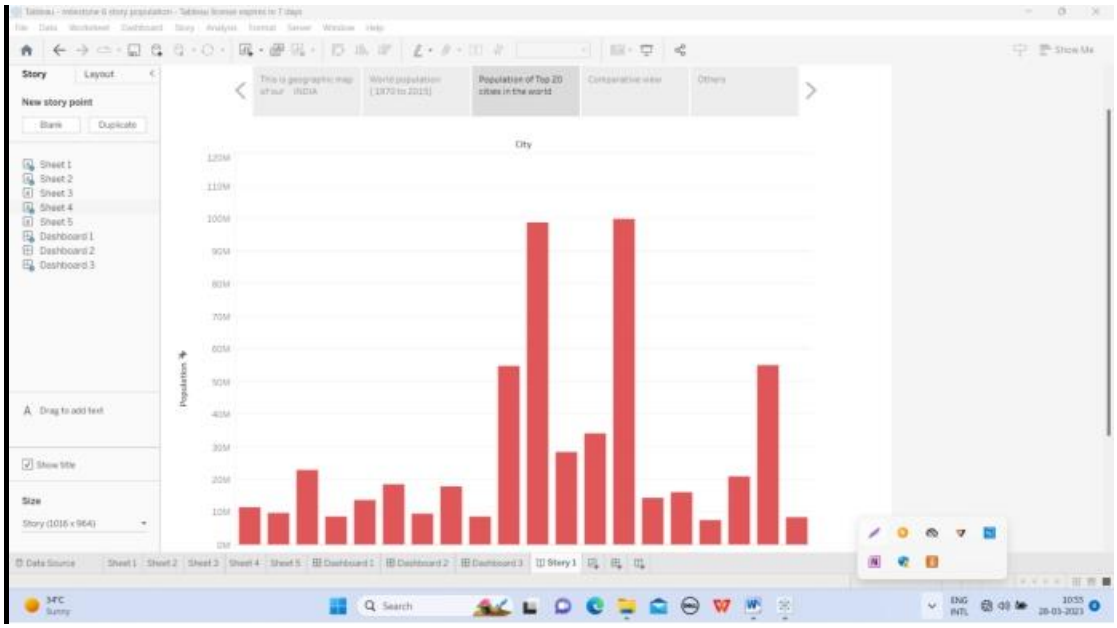
Milestone 6:
Creating story for World Population

Milestone 6: Creating story for World Population

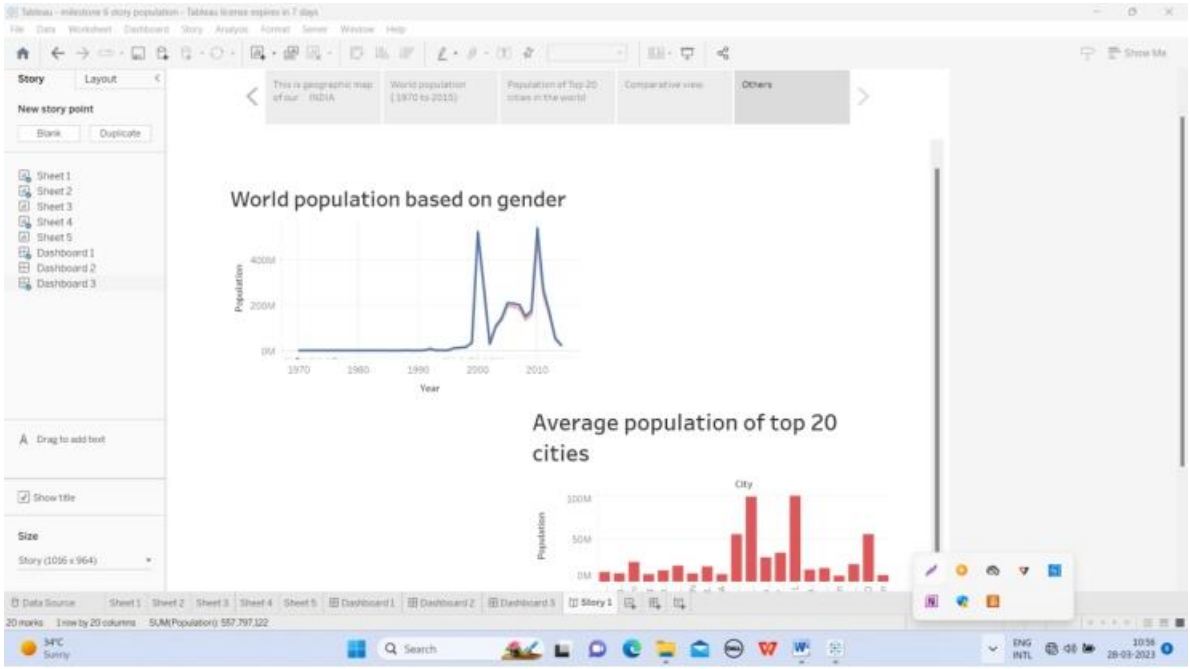
1. The First Dashboard shows the geographical map of our India.



2. The population of top 20 countries in the world is shown in the dashboard 3 of story 1



3. The dashboard 3(“others”) explains the graph of world population based on gender and average population of top 20 cities



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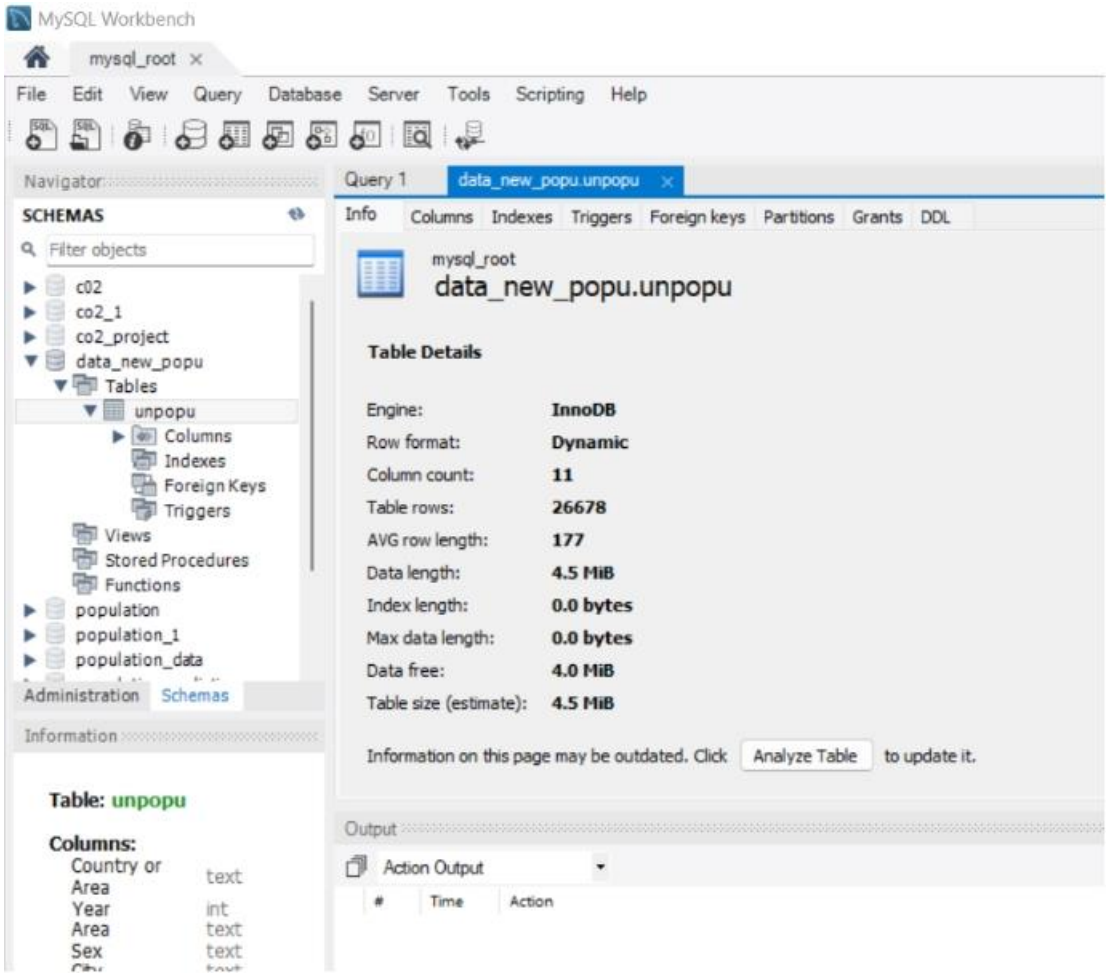
Milestone 7: Performance Testing for population

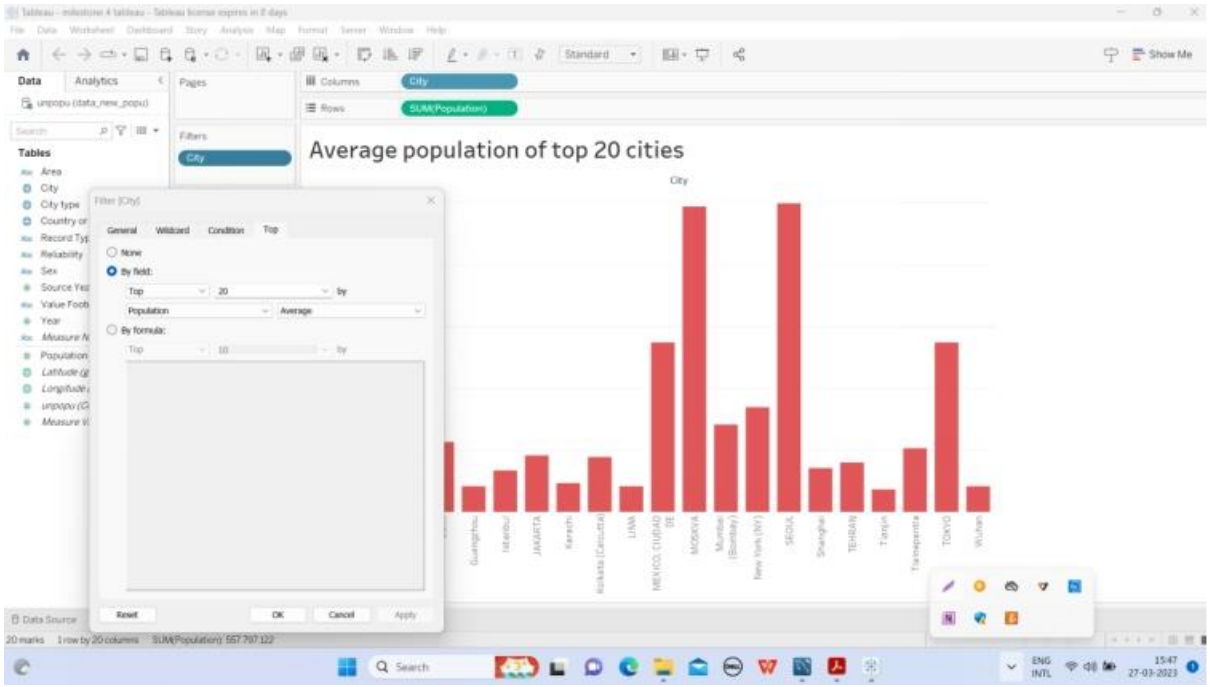
Milestone 7: Performance Testing for population
Activity 1: Amount of Data Rendered to DB

Solution 1: The database schema for population with columns and indexes are stored.



Solution 2:

The usage of filters in population data is given in the following picture. Here we used the filters option to select the Top 20 cities.



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