Assignment:

Study different charts and maps used in information visualization such as proportional symbol maps, scatterplots, histograms, heat maps, choropleth maps, dendrograms, parallel component plots, etc and apply standard ways of visualizing data. Prepare a "dashboard" using any visualization tools.

Problem Domain

Choose your interesting problem domain (Examples listed below for reference)

Examples:

Poverty, Childhood Obesity, Health Care, Financial Analysis, Disaster Management (floods, earthquake, forest fire etc.), Immigration Stresses, Sports, Agriculture etc.

Note:

Dataset can either created manually or downloaded from repositories
Make your visualizations be sure to add the necessary elements to make them nicely finished presentations includes title, axis, annotations, sorting and coloring/highlighting.

Submission Guidelines:

Dashboard should be interactive and includes different types of data like tables, network, spatial, temporal and stream data.

Problem Definition:

The Covid-19 pandemic has severely affected India, resulting in thousands of deaths and millions of infections. In this context, the government and health organizations are constantly tracking and monitoring the spread of the virus. To aid in this effort, Tableau dashboards have been created to provide real-time data on the number of cases, deaths, recoveries, and other related information.

The main problem being addressed by the Covid-19 in India dashboard analysis in Tableau is to provide accurate and reliable data to the government and health organizations to help them make informed decisions regarding the pandemic. This includes identifying hotspots, monitoring trends, and implementing measures to prevent the spread of the virus.

DATASET:

download the csv files

State/Union	ConfirmedIn	ConfirmedFo	Cured	Deaths	Confirmed	First Dose Ac	Second Dose	Covaxin (Dos	CoviShield (D
Telengana	1	0	0	0	1	7687352	20859	579	47697
Kerala	3	0	0	0	3	7710367	21911	635	57969
Delhi	1	0	0	0	1	8111162	142489	1299	98150
Telengana	1	0	0	0	1	8337600	239626	3017	192508
Rajasthan	0	1	0	0	1	8704698	318541	3946	247334
Kerala	3	0	3	0	3	8862491	475776	5367	360598
Delhi	1	0	0	0	1	9523567	717941	8128	541253
Uttar Prades	6	0	0	0	6	9734505	884608	11192	747816
Kerala	3	0	3	0	3	9757217	893795	13156	821902
Haryana	0	2	0	0	2	10069263	1174416	18858	1258246
Delhi	1	0	0	0	1	10288293	1309475	19604	1274180
Telengana	1	0	0	0	1	10517568	1525390	27377	1699113
Rajasthan	1	14	0	0	15	10846192	1972882	36921	2258570
Delhi	2	0	0	0	2	11141375	2419557	43604	2771199
Haryana	0	2	0	0	2	11141426	2419557	48300	3019436
Kerala	3	0	3	0	3	11141651	2419557	58890	3068217
Rajasthan	1	14	0	0	15	11141651	2419557	69372	3280893
Telengana	1	0	0	0	1	11886320	2647634	76794	3451177
Uttar Prades	7	0	0	0	7	12553326	2830557	86001	3739834
Delhi	3	0	0	0	3	13393538	3142165	99015	4215289
Haryana	0	2	0	0	2	14415912	3455761	133911	4632013
Kerala	3	0	3	0	3	15438495	3732333	195504	4916323
Rajasthan	1	14	0	0	15	15541529	3747137	206130	4961969
Uttar Prades	7	0	0	0	7	16976138	4062362	290785	5324714
Telengana	1	0	0	0	1	14003206	4357037	363692	5638782

lab	state	TotalSample	Negative	Positive
ICMR-Regior	Andaman an	1403	1210	3794
Tomo Riba Ir	Arunachal Pr	2679	163139	3803
Sri Venkates	Andhra Prade	2848	171755	3821
Rangaraya M	Andhra Prade	3754	179126	3835
Sidhartha Me	Andhra Prade	6677	189823	3848
Government	Andhra Prade	6965	199059	3858
Guntur Medi	Andhra Prade	7082	208247	3868
Rajeev Gand	Andhra Prade	7167	217183	3884
Andhra Medi	Andhra Prade	7263	236618	3899
Gauhati Mec	Assam	7327	246279	3912
Regional Me	Assam	7327	255961	3935
Jorhat Medic	Assam	7363	265052	3952
Silchar Medi	Assam	7448	273099	3976
Fakhruddin M	Assam	7499	281452	3992
Tezpur Medi	Assam	7519	290255	4005
Rajendra Me	Bihar	7567	301529	4023
Indira Gandh	Bihar	7567	311680	4036
Patna Medic	Bihar	7706	319731	4046
Darbhanga M	Bihar	7805	329261	4062
S K Medical (	Bihar	8086	338991	4072
All India Inst	Bihar	8295	350544	4083
Post Graduat	Chandigarh	8413	359917	4108
Government	Chandigarh	8694	369177	4126
CSIR - Institu	Chandigarh	9037	379639	4141
All India Inst	Chhattisgarh	9242	391890	4168
Late Baliram	Chhattisgarh	9341	399776	4184

AgeGroup	TotalCases	Percentage
0-9	22	3.18%
Oct-19	27	3.90%
20-29	172	24.86%
30-39	146	21.10%
40-49	112	16.18%
50-59	77	11.13%
60-69	89	12.86%
70-79	28	4.05%
>=80	10	1.45%
Missing	9	1.30%

SOURCE CODE/ DETAILED STEPS TO MAKE DASHBOARD:

Step 1: Connect to Data
The first step is to connect to the data source. In Tableau, go to "Connect" and choose the appropriate data source, such as an Excel file or a database.

Step 2: Create Worksheets
Next, create worksheets that will be used in the dashboard. These worksheets can include charts, tables, and maps.

Step 3: Organize Worksheets
Organize the worksheets on a Tableau dashboard by dragging and dropping them onto the canvas. Use the formatting options to adjust the size, position, and layout of each worksheet.

Step 4: Add Interactivity
Add interactivity to the dashboard by using filters, actions, and parameters. These can be used to create dynamic and interactive visualizations that respond to user input.

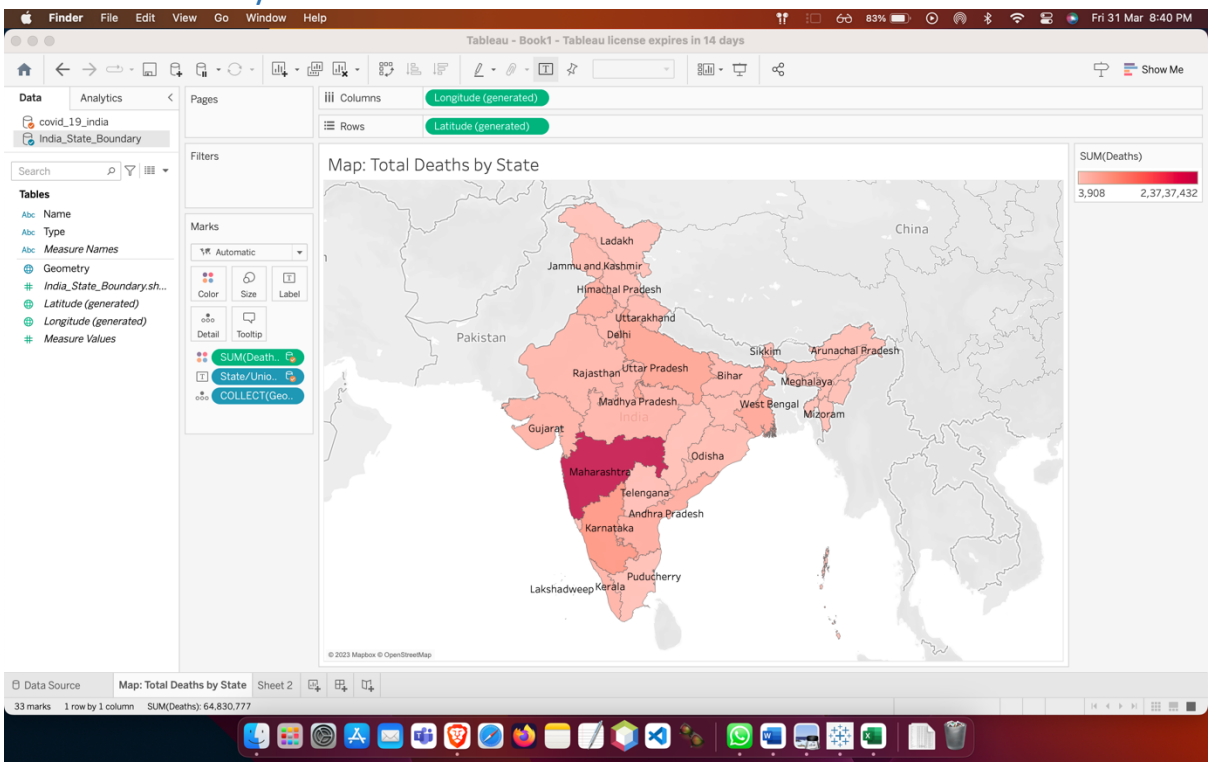
Step 5: Add Text and Images
Add text and images to the dashboard to provide context and enhance the overall design. This can include titles, captions, and logos.

Step 6: Publish and Share
Once the dashboard is complete, publish it to Tableau Server or Tableau Online so that others can access it. Share the dashboard with others by embedding it on a website or sharing a link.

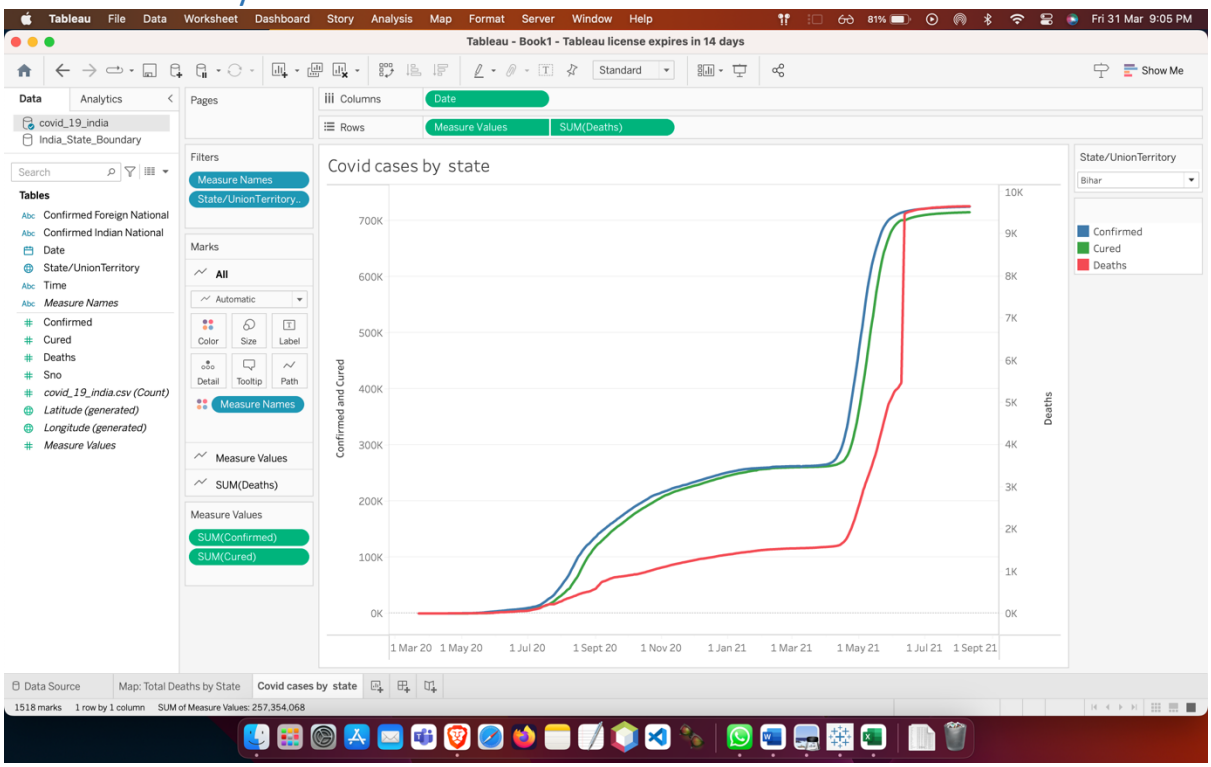
Step 7: Update and Maintain
Finally, update and maintain the dashboard as new data becomes available or as user needs change. This can include adding new worksheets or modifying existing ones.

Tasks to do and their visualizations:

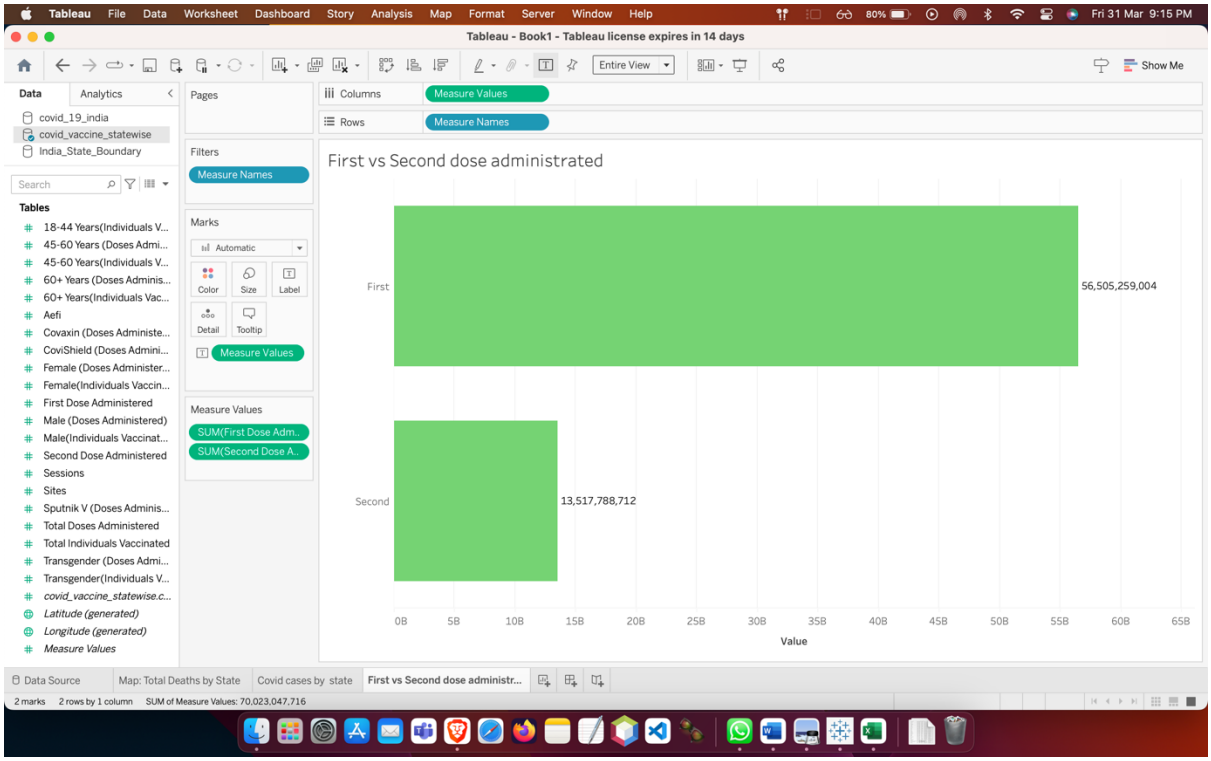
1.Total Deaths by State



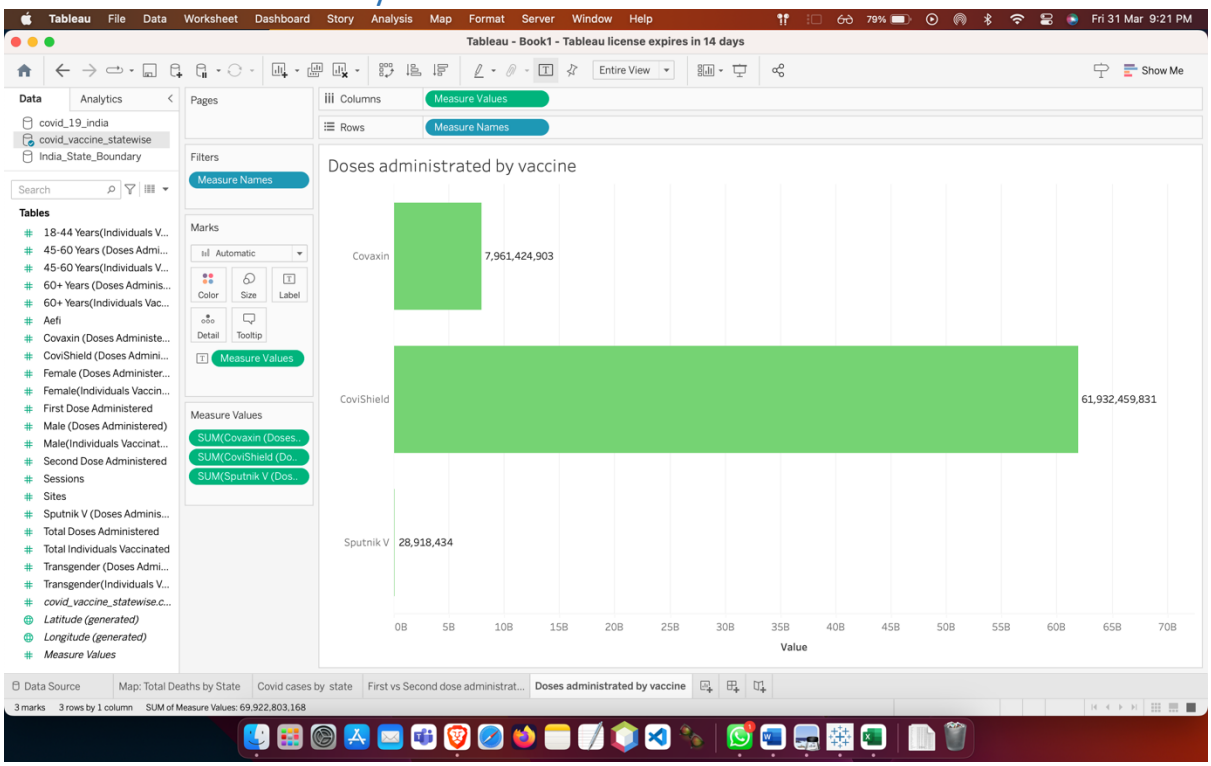
2.Covid cases by state



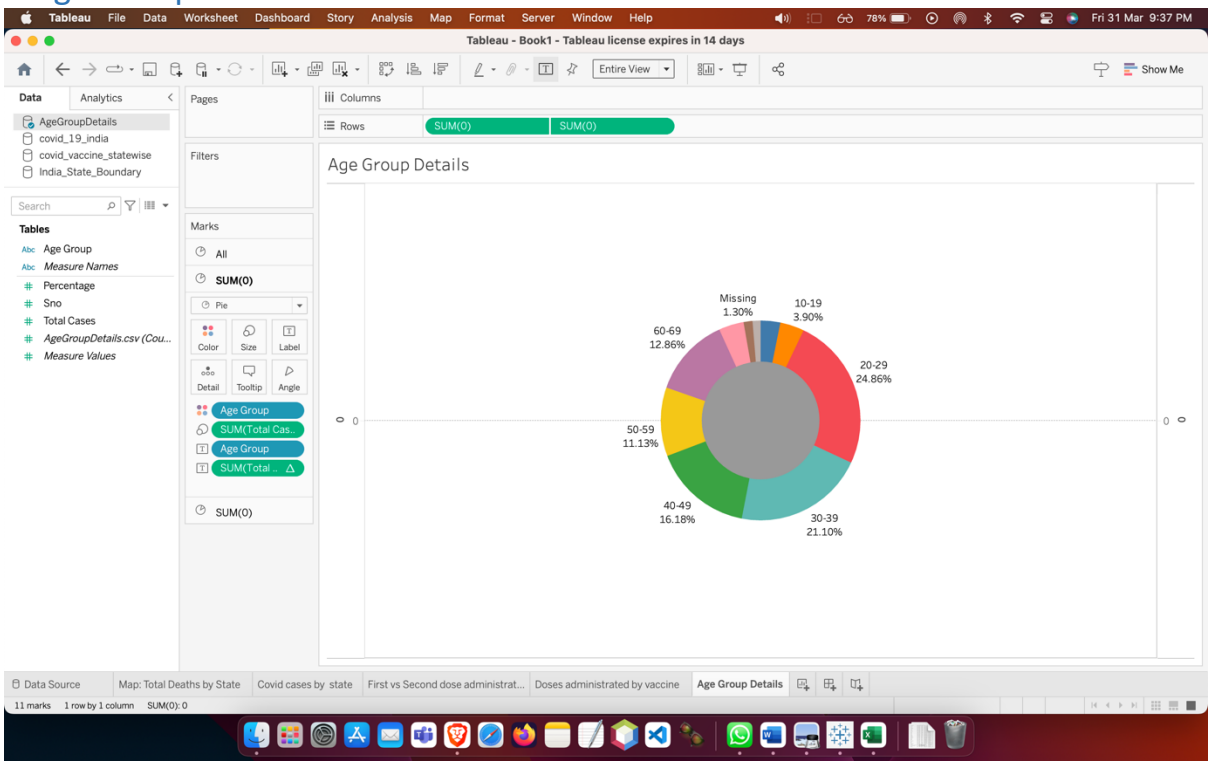
3.First vs Second dose administrated



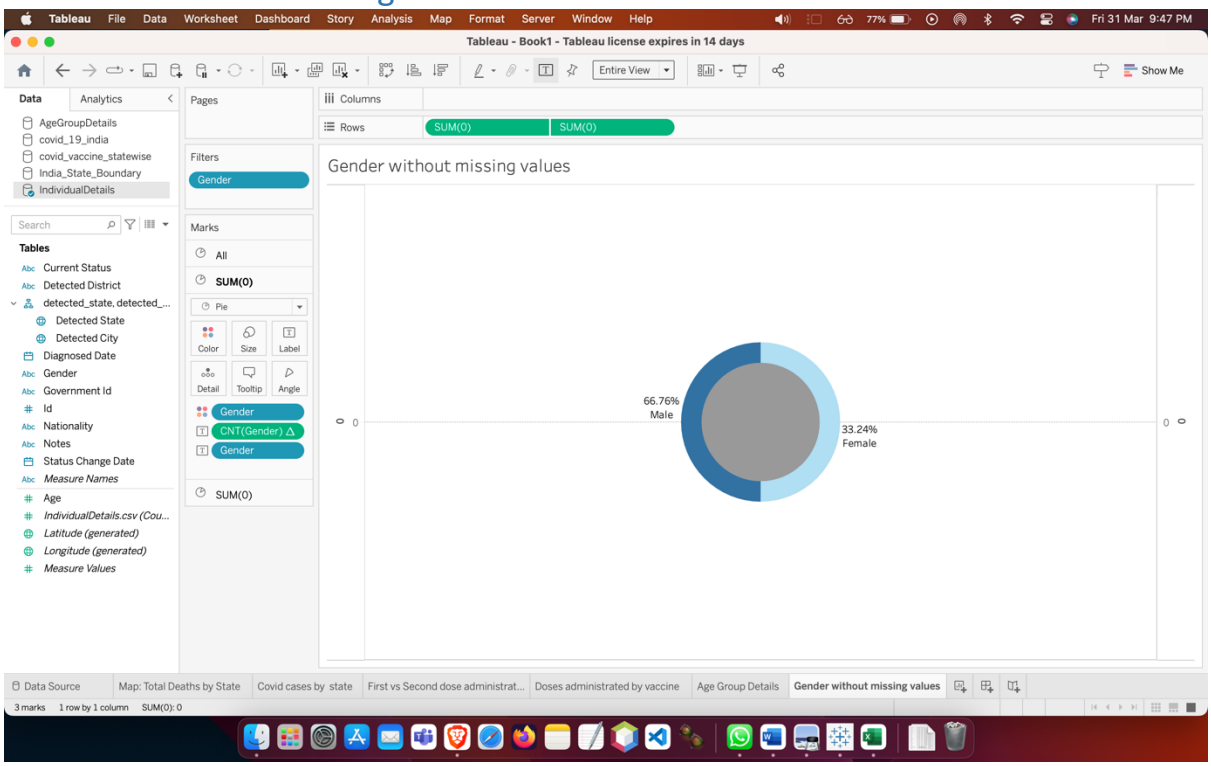
4.Doses administrated by vaccine



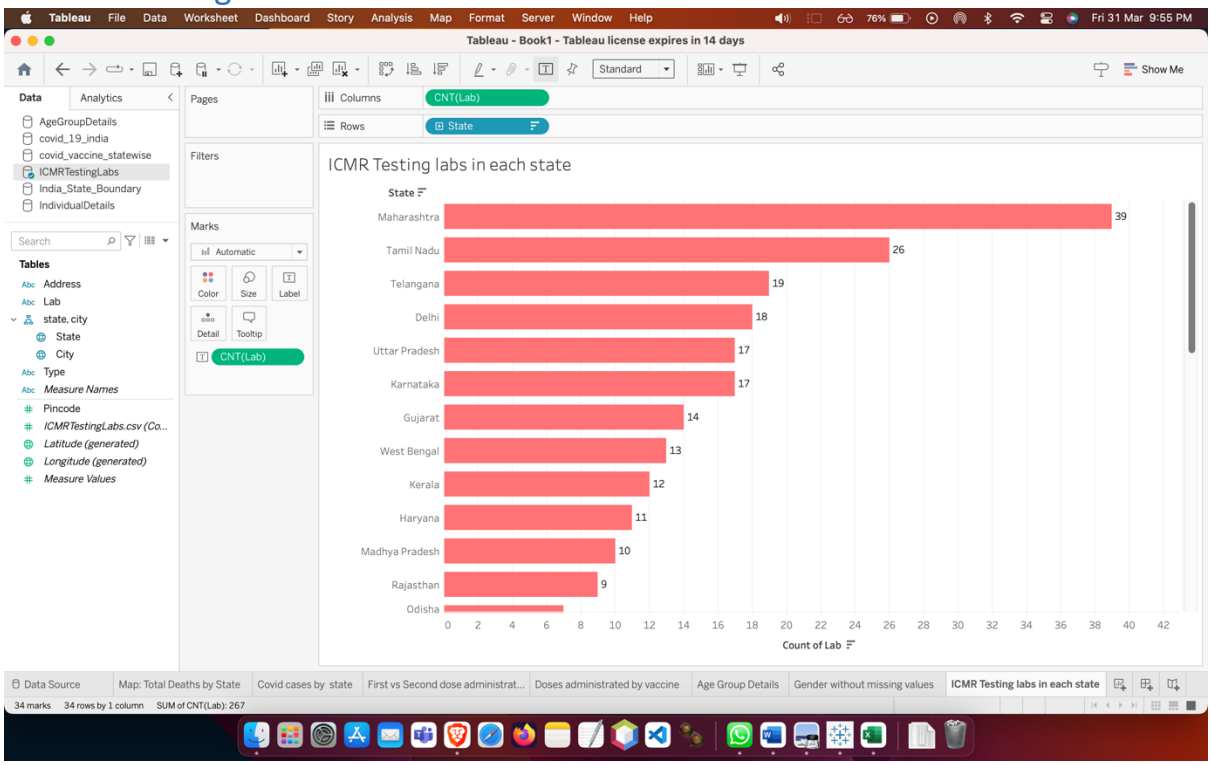
5.Age Group Details



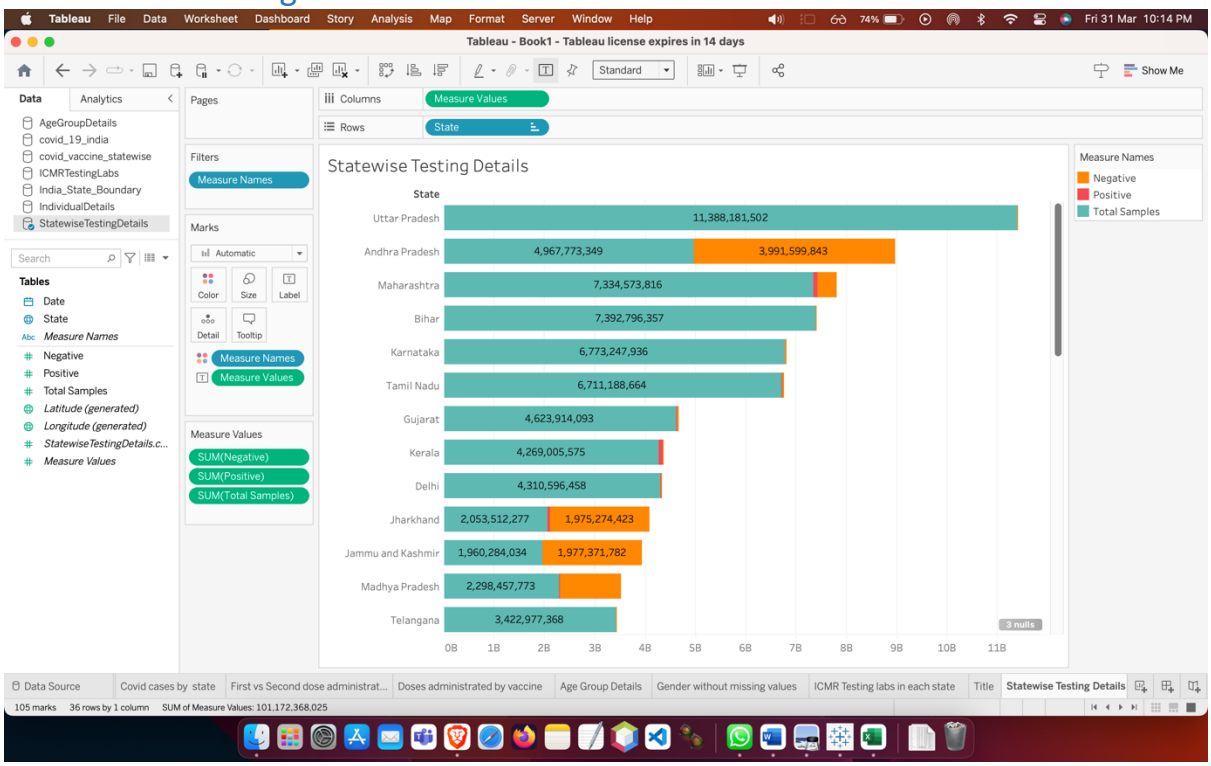
6.Gender without missing values



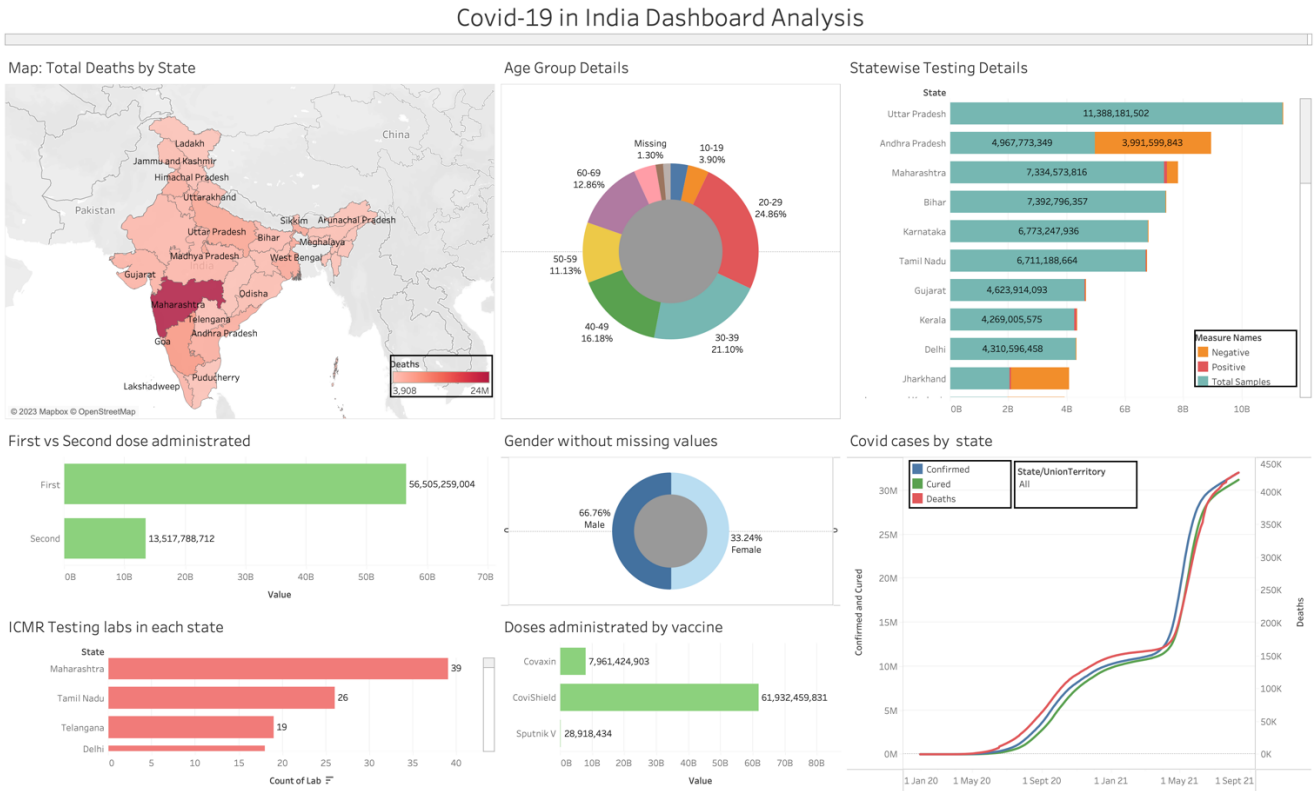
7.ICMR Testing labs in each state



8.Statewise Testing Details



DASHBOARD:


Covid-19 in India Dashboard Analysis
Map: Total Deaths by State
Ladakh
Jammu and Kashmir
Himachal Pradesh
Uttarakhand
Pakistan
China
Sikkim
Arunachal Pradesh
Uttar Pradesh
Bihar
Meghalaya
Madhya Pradesh
West Bengal
Gujarat
Odisha
Maharashtra
Telangana
Andhra Pradesh
Goa
Puducherry
Lakshadweep
Deaths
3,908
24M
© 2023 Mapbox © OpenStreetMap
Age Group Details
Missing 1.30%
10-19 3.90%
20-29 24.86%
30-39 21.10%
40-49 16.18%
50-59 11.13%
60-69 12.86%
Statewise Testing Details
State
Uttar Pradesh 11,388,181,502
Andhra Pradesh 4,967,773,349 3,991,599,843
Maharashtra 7,334,573,816
Bihar 7,392,796,357
Karnataka 6,773,247,936
Tamil Nadu 6,711,188,664
Gujarat 4,623,914,093
Kerala 4,269,005,575
Delhi 4,310,596,458
Jharkhand
0B 2B 4B 6B 8B 10B
Measure Names
Negative
Positive
Total Samples
First vs Second dose administrated
First 56,505,259,004
Second 13,517,788,712
0B 10B 20B 30B 40B 50B 60B 70B
Value
Gender without missing values
66.76% Male
33.24% Female
Covid cases by state
Confirmed
Cured
Deaths
State/UnionTerritory
All
30M 25M 20M 15M 10M 5M 0M
Confirmed and Cured
450K 400K 350K 300K 250K 200K 150K 100K 50K 0K
Deaths
1 Jan 20 1 May 20 1 Sept 20 1 Jan 21 1 May 21 1 Sept 21
ICMR Testing labs in each state
State
Maharashtra 39
Tamil Nadu 26
Telangana 19
Delhi
0 5 10 15 20 25 30 35 40
Count of Lab
Doses administrated by vaccine
Covaxin 7,961,424,903
CoviShield 61,932,459,831
Sputnik V 28,918,434
0B 10B 20B 30B 40B 50B 60B 70B 80B
Value