Advanced Data Visualization Lab
Sem 7 B.Tech. Program Elective
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Expt 10: Education Sector

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Design Big Data Dashboards using Tableau on the datasets - Education sector

- Basic - Bar chart, Pie chart, Histogram, Time line chart, Scatter plot, Bubble plot
- Advanced - Word chart, Box and whisker plot, Violin plot, Regression plot (linear and nonlinear), 3D chart, Jitter
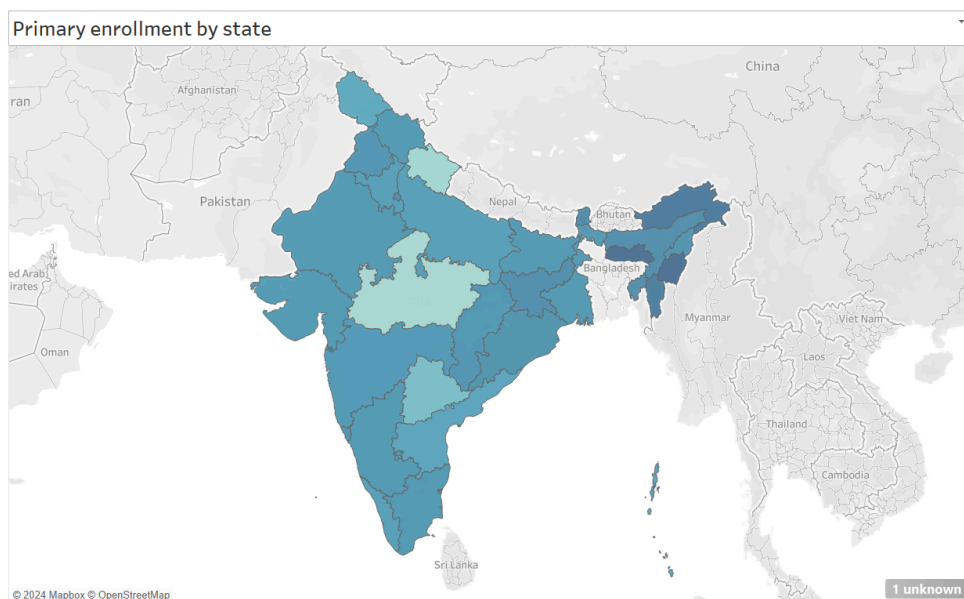- Write observations from each chart

Software Used: Tableau
Dataset Used:

https://www.kaggle.com/datasets/vidyapb/indian-school-education-statistics?select=percentage-of-schools-with-water-facility-2013-2016.csv
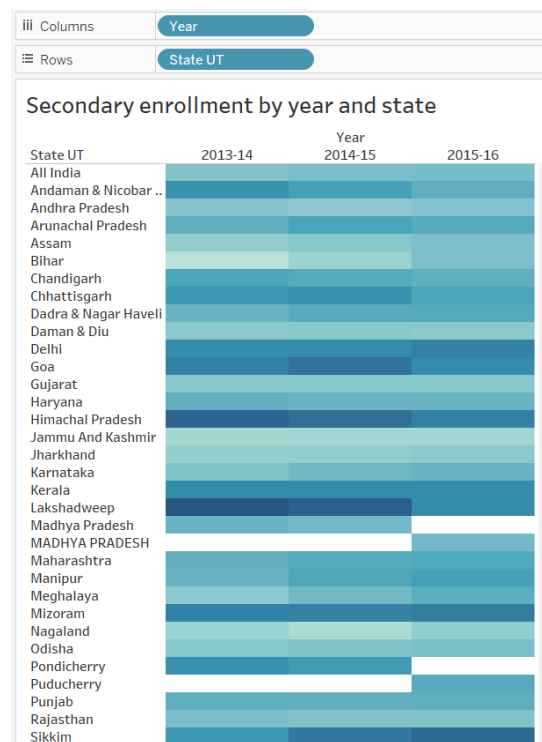
This dataset contains information about Indian School Education Statistics of the year 2013-2014 to 2015-2016. Many public datasets from Indian Government are scattered and the goal here is to have all those datasets under one umbrella so that it is easy for beginners to find important datasets like this to start their Data Science journey.
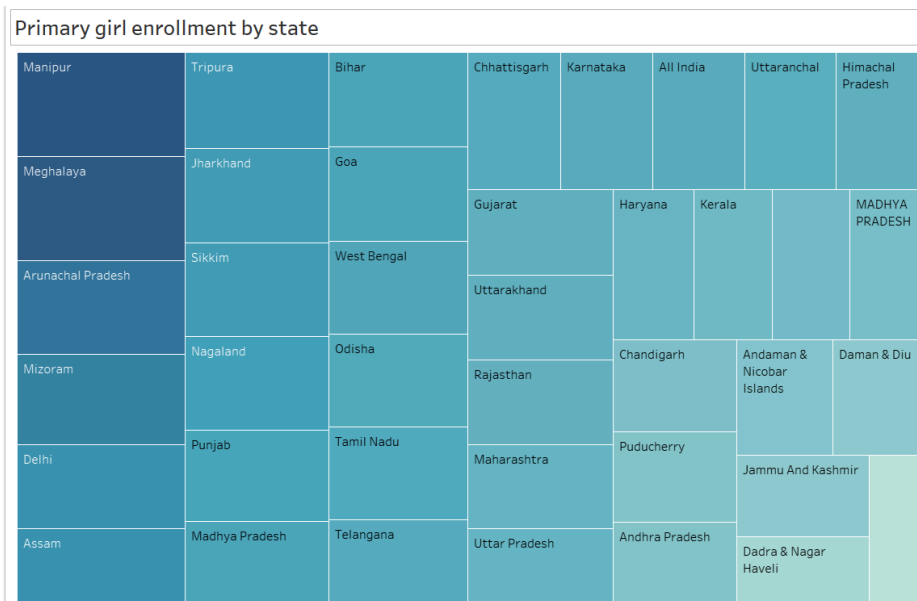
Heatmap

This map tells us enrollment in primary education (percentage) for each state, however the data is population biased showing high percentage in north east. However less enrollment in uttarakhand, madhya pradesh and telangana is a real concern.

Heatmap

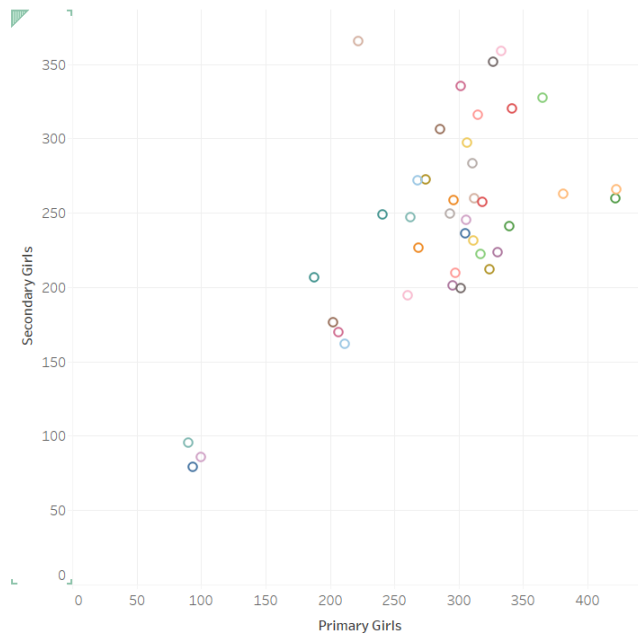Shockingly this graph shows decline in secondary education over the years.

Treemap

This is again population biased, but low girl education empowerment in haryana, kerala, madhya pradesh is a concern.
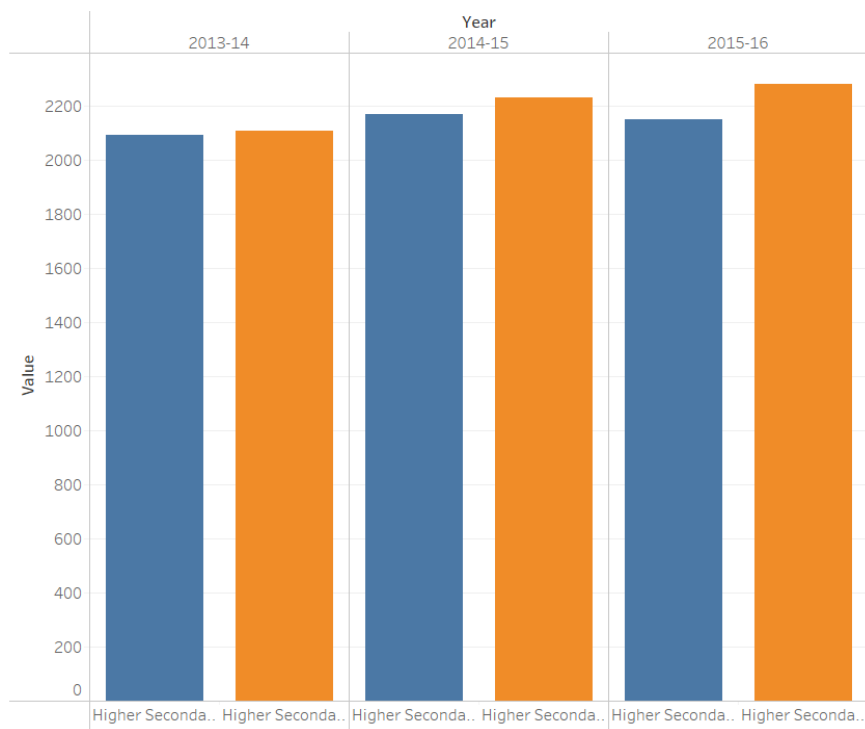
Scatter Plot

Correlation in Primary Girl enrollment and Secondary Girl enrollment

States where primary education for girls is high tends to have higher secondary enrollment for girls too, indicating that primary education is the right step towards development.

Combined Bar Chart

Higher Secondary enrollment copmarision by year

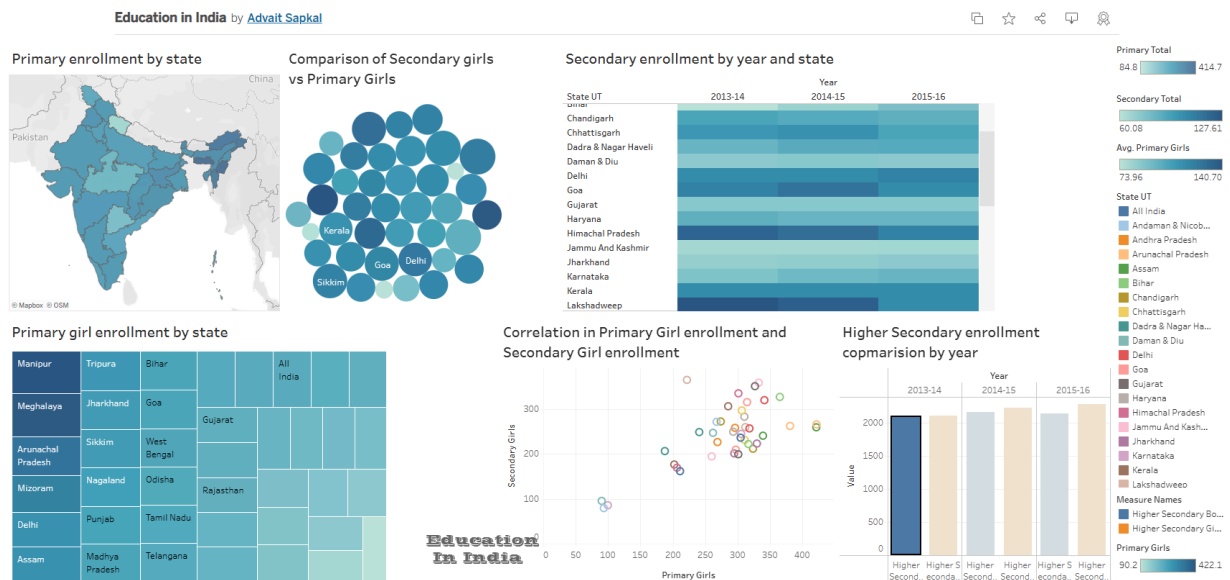Higher education seems on the rise over the years.

Bubble Chart

Comparison of Secondary girls vs Primary Girls

Overall as shown before, more is the primary girls(size of bubble) more are the secondary girls.

Dashboard: