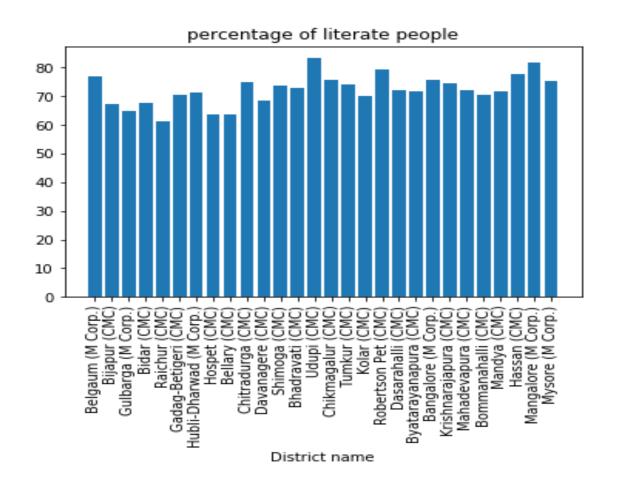
## **Karnataka State Education**

Data Analysis by
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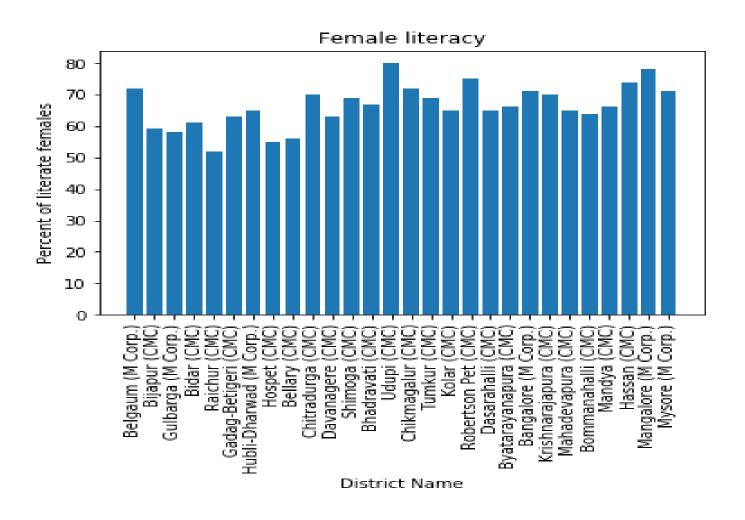
## Data Description:

Our data set is the number of literate people in different districts/areas in Karnataka, with their being specifications such as literacy numbers for different age groups (such as 0-6,13,14,15 etc.) as well as for different levels of literacy(such as literate without education, diploma graduates.etc). It is from https://www.kaggle.com/pavansanagapati/karnatakastate-education .There are 812 rows and 46 columns (we do not use all the columns her, except to clean them). This is a large dataset to me, but it is probably tiny compared to the datasets companies and corporates analyze.

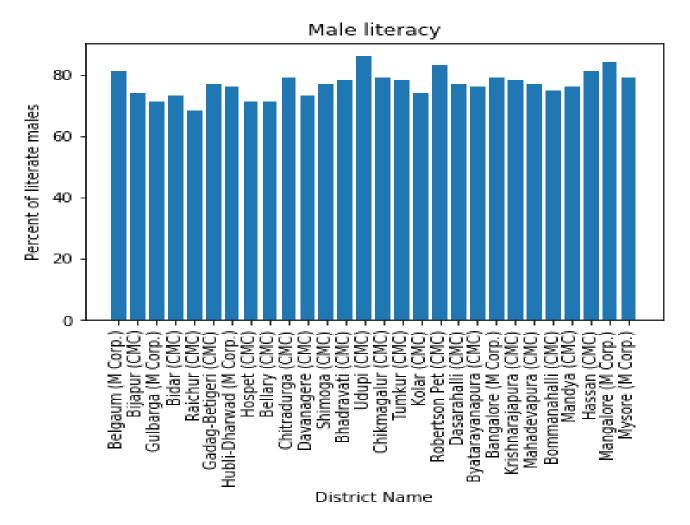
Literacy rates across different areas in Karnataka. As expected, more developed areas like Udupi, Bangalore, Mangalore, Mysore have higher literacy rates as they are more developed. Bangalore is not the highest, despite being the only metropolitan city. This may be because of a lot of movement of unskilled labor form rural areas looking for work and going to Bangalore. Raichur is the lowest, being the least developed of all these areas.



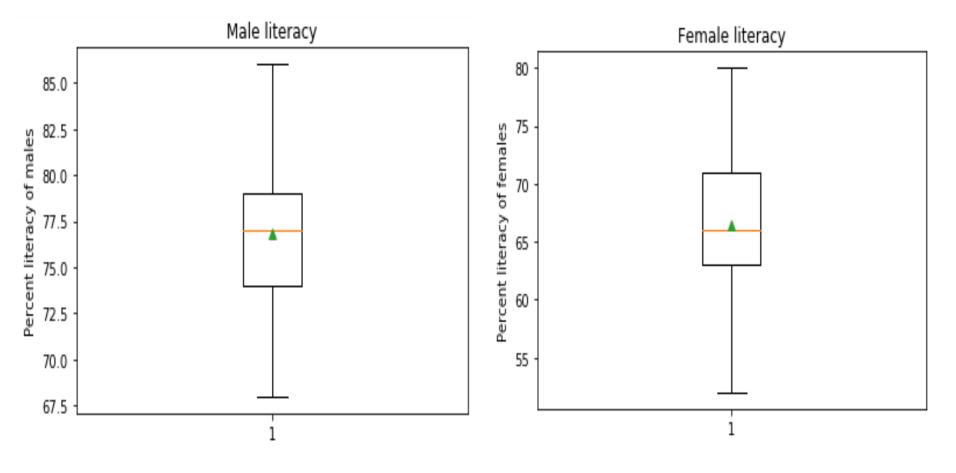
This bar chart shows the literacy rate of females of all age groups in various districts of Karnataka. From the graph it is evident that Udupi district has the highest female literacy,80% where as Raichur has the least with 52%. The average female literacy rate of Karnataka is 66%. So by looking at the graph we can conclude that most of the northern districts of Karnataka have a lesser female literacy than the mean.



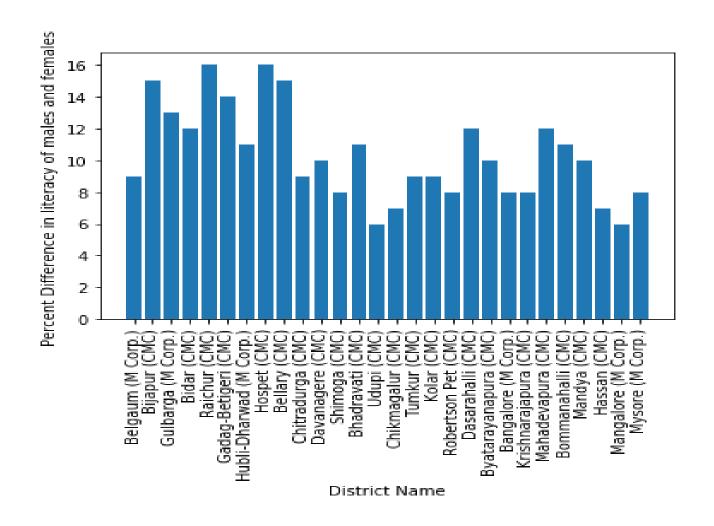
This bar chart shows the literacy rate of males of all age groups in various districts of Karnataka. From the graph it is evident that Udupi district has the highest male literacy,86% where as Raichur has the least with 68%. The average male literacy rate of Karnataka is 77%. So by looking at the graph we can conclude that most of the northern districts of Karnataka have a lesser male literacy than the mean.



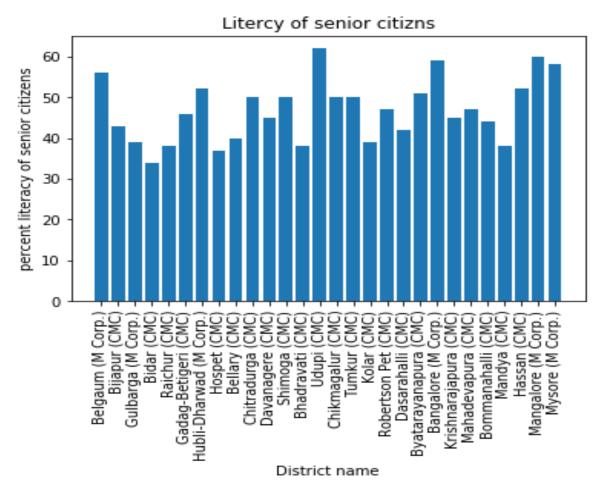
These are the box plots for percent literacy of males and females .By observing these two boxplots we can see that the mean and median of the male literacy of all the districts of Karnataka is greater than that of the female literacy. Also the upper whisker and lower whisker of the male literacy is greater than that of the female literacy. So we can conclude that males are more literate than females in Karnataka



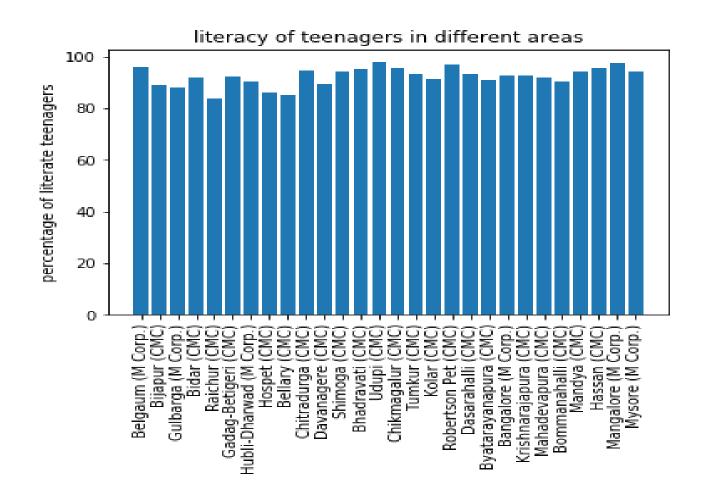
This bar chart shows the difference in the literacy rate of females and males in various districts of Karnataka. In all the districts the percentage of male literates are more than that of the female literates. From the bar chart it is evident that Udupi has the least difference in male and female literacy rate whereas Raichur and Hospet have the highest difference



As seen in the other graphs, bangalore has a pretty high literacy rate, being a metropolitan city and more advanced. However, it is not the highest. This maybe because number of senior citizens in bangalore are higher than in other places. perhaps they are from rural areas, gone to bangalore to make a living in the city. since many of these senior citizens are not necessarily from bangalore, this data indicates how progressive these areas were in terms of educating children many years ago, as well as how well developing industries in these areas has made these people choose to become ltierate

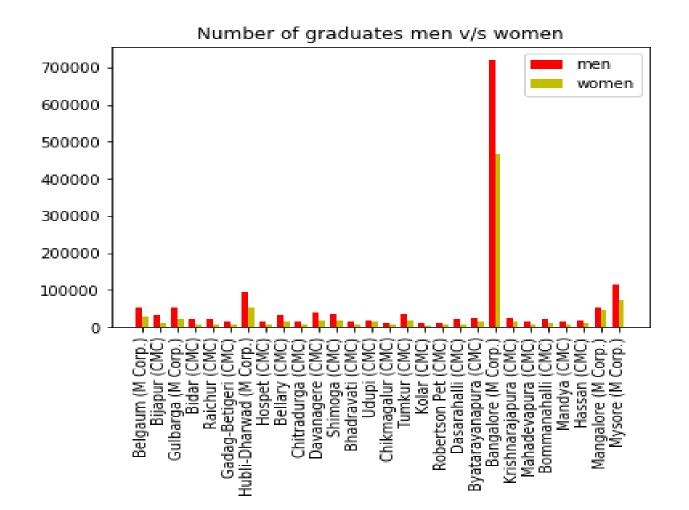


Our dataset consists only of urban areas, so as expected, most of the rates are high. Consistent with other graphs, Udupi is again the highest in this. Raichur is also the lowest, as is the case in most of the other graphs. This fits the general trend of toppers coming from Udupi, and Raichur is the most underdeveloped of these areas.



Here we see total number of graduates (NOT PERCENTAGE) and we see how difference in population gives us a false sense of inequality. Actually, this graph is like this because Bangalore's population is more.

In the next graph, which is a percentage, it shows the true difference between areas.



As expected, when taking percentage of total population, the number of graduate are pretty low. This is the highest level of education in our dataset. From the previous slide, we see a huge difference. Now, the areas are much more close in values (though bangalore is still the highest).

We do see that in all the states, male graduates are more in number. Udupi again shows it is a great place, with high percentages AND a relatively lower difference in percentages between males and females.

