

# GDP Analysis!

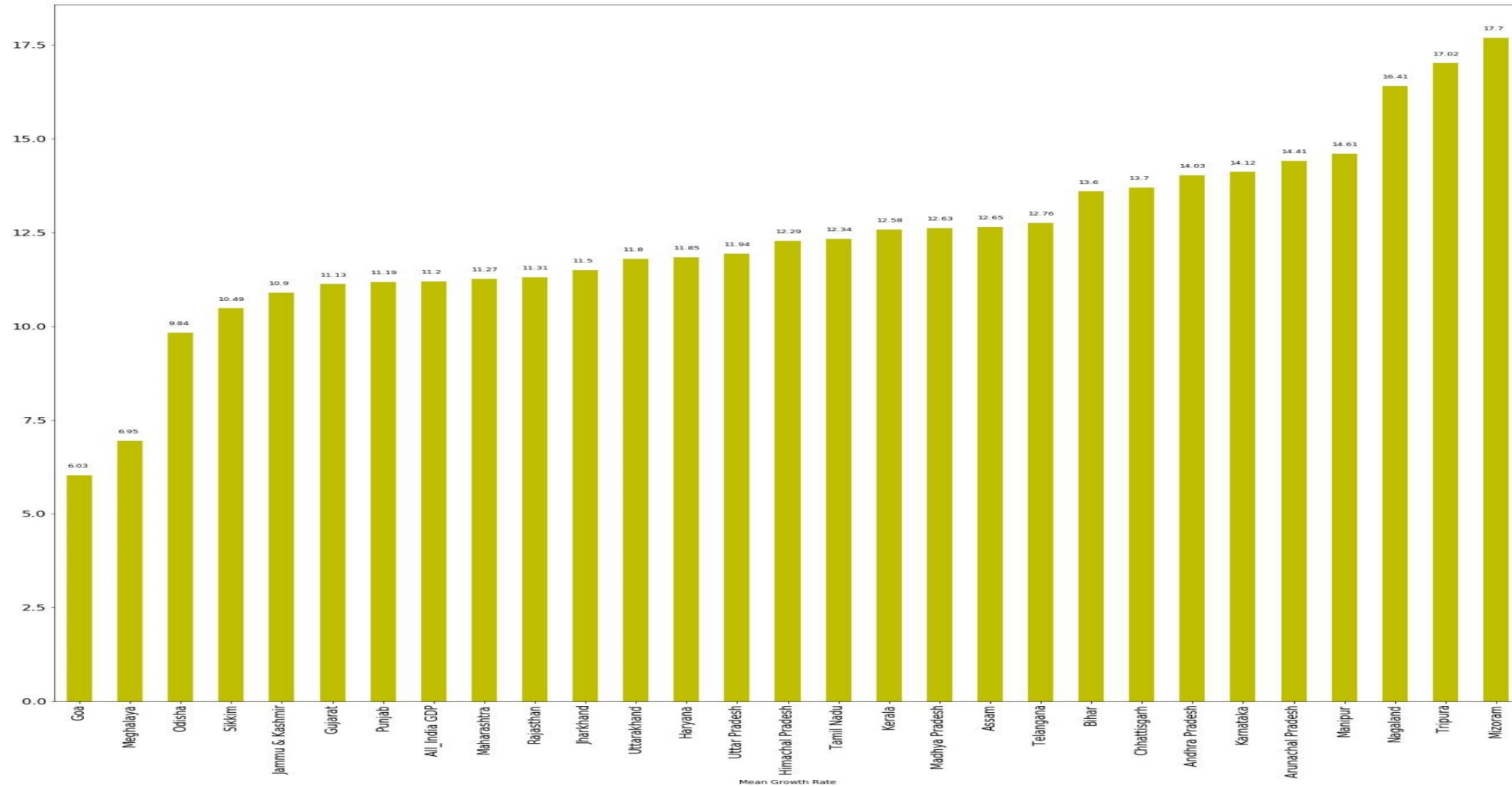
To perform:

- Exploratory Data Analysis over the Given Duration for Contribution of Each State and Sector!
- Performance of each sector in a State
- Highest GDP residing and Lowest GDP Residing State.
- Top 5 and Bottom 5 States in the contribution towards GDP..!!

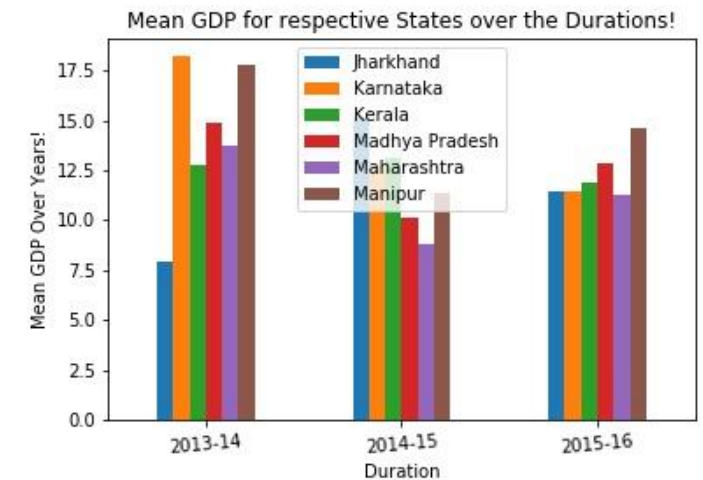
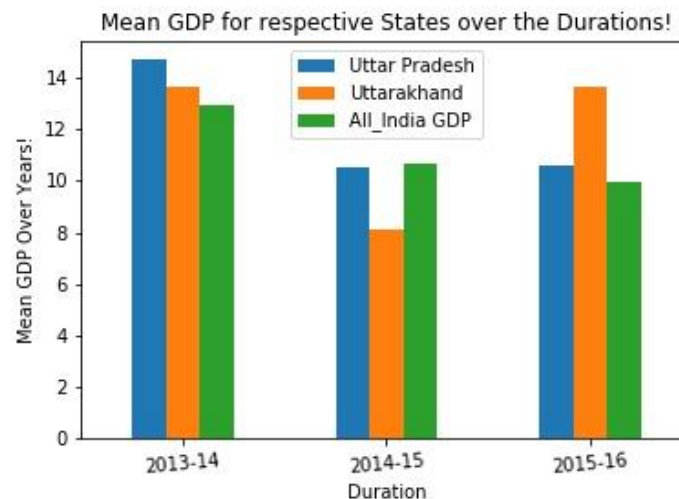
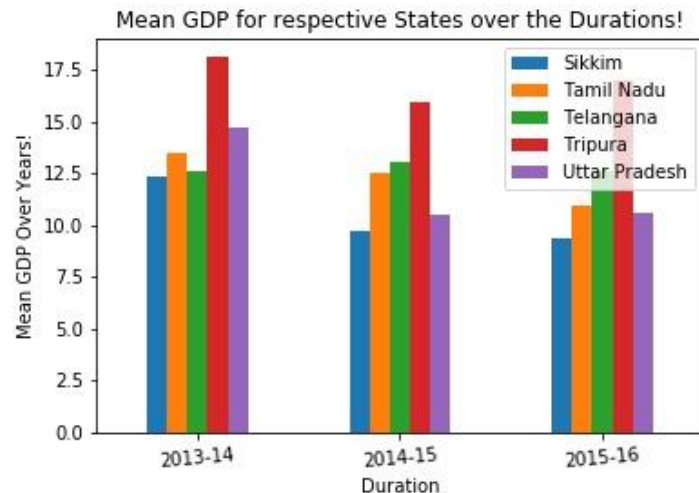
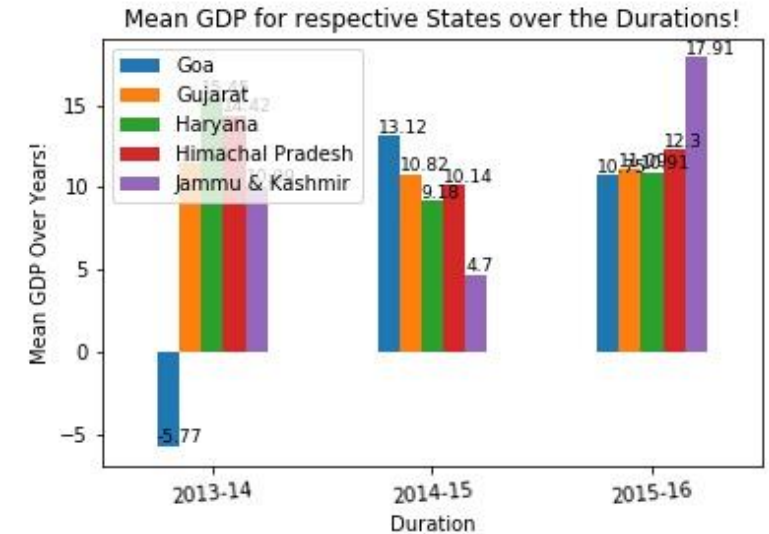
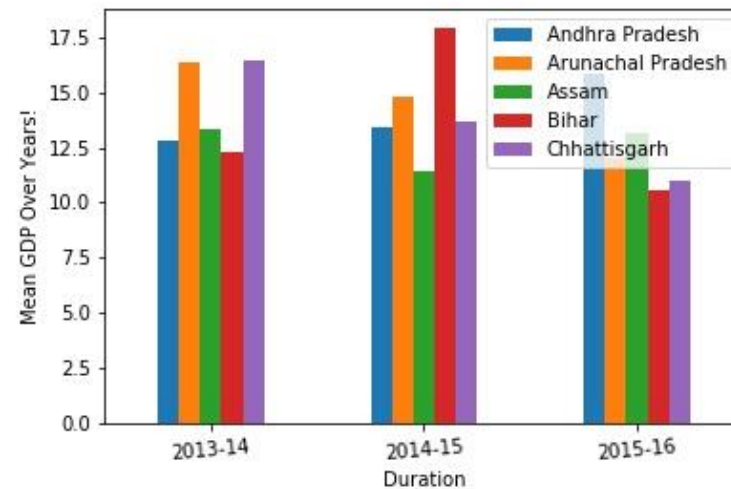
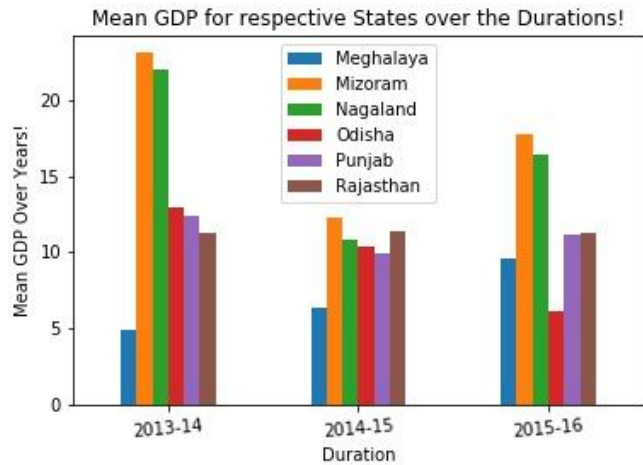
# Mean Growth of GDP for all States!

Top Contributor is Mizoram.

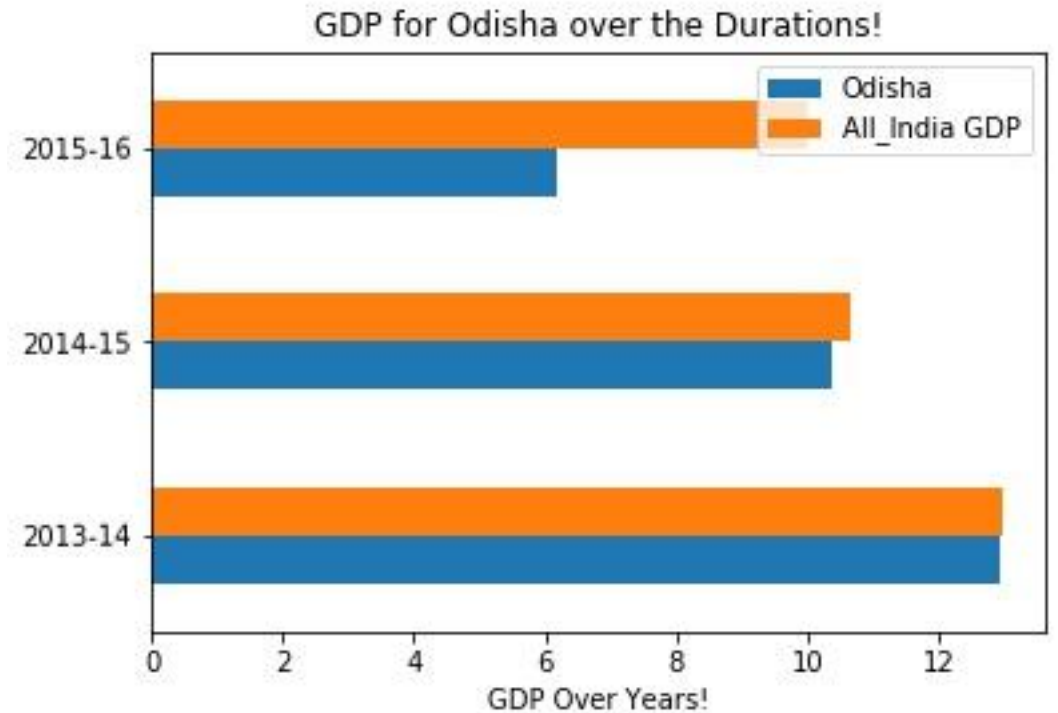
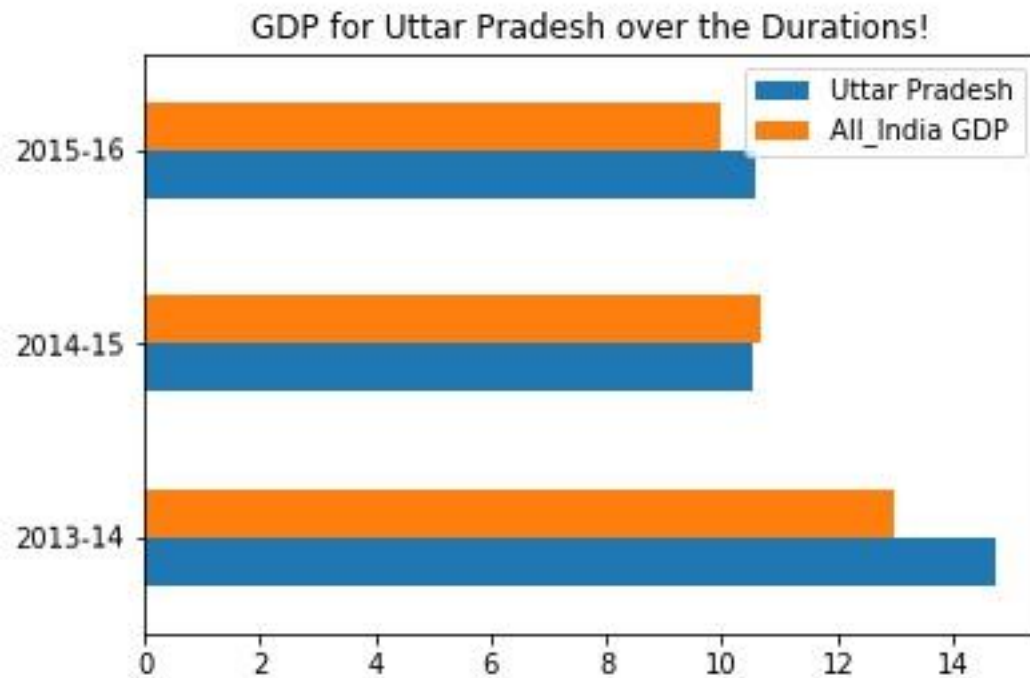
Bottom Contributor is Goa!



# Multiple insights over the Course of Duration!

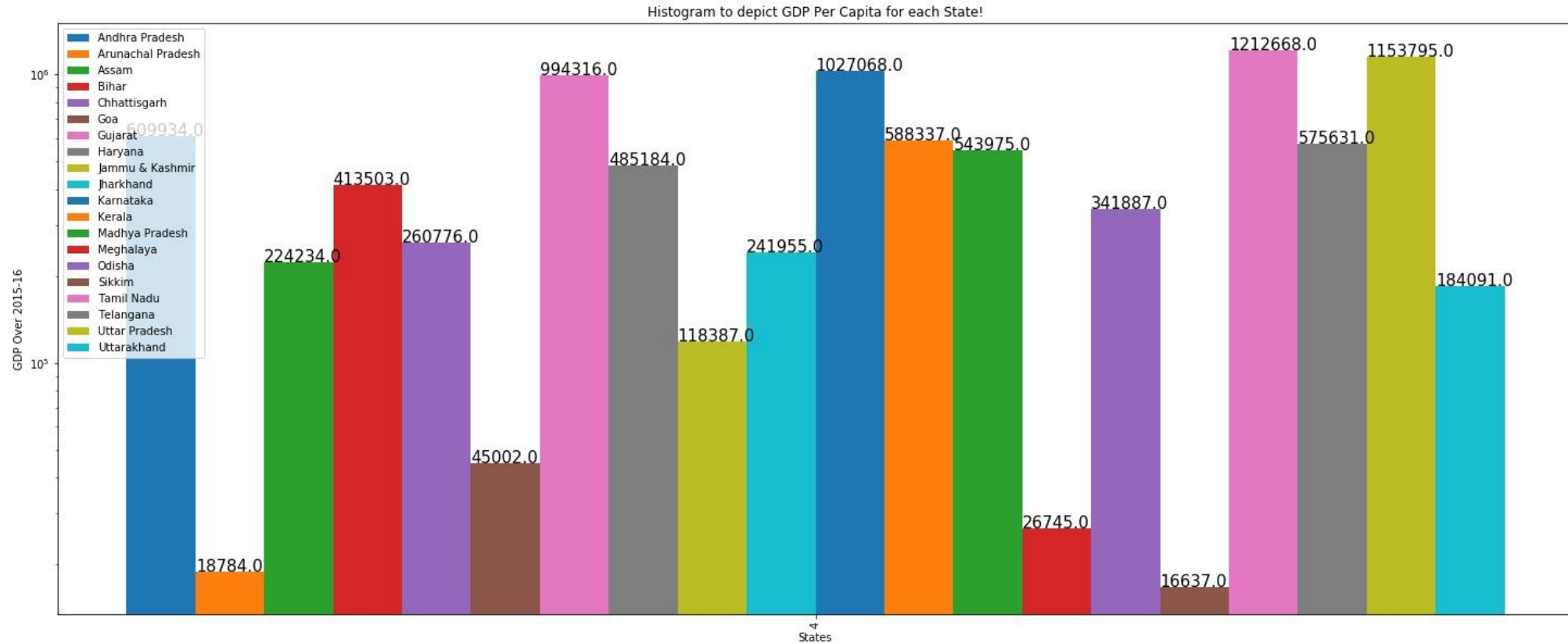


# GDP Comparison for UP and Odisha as Curiosity Exercise!



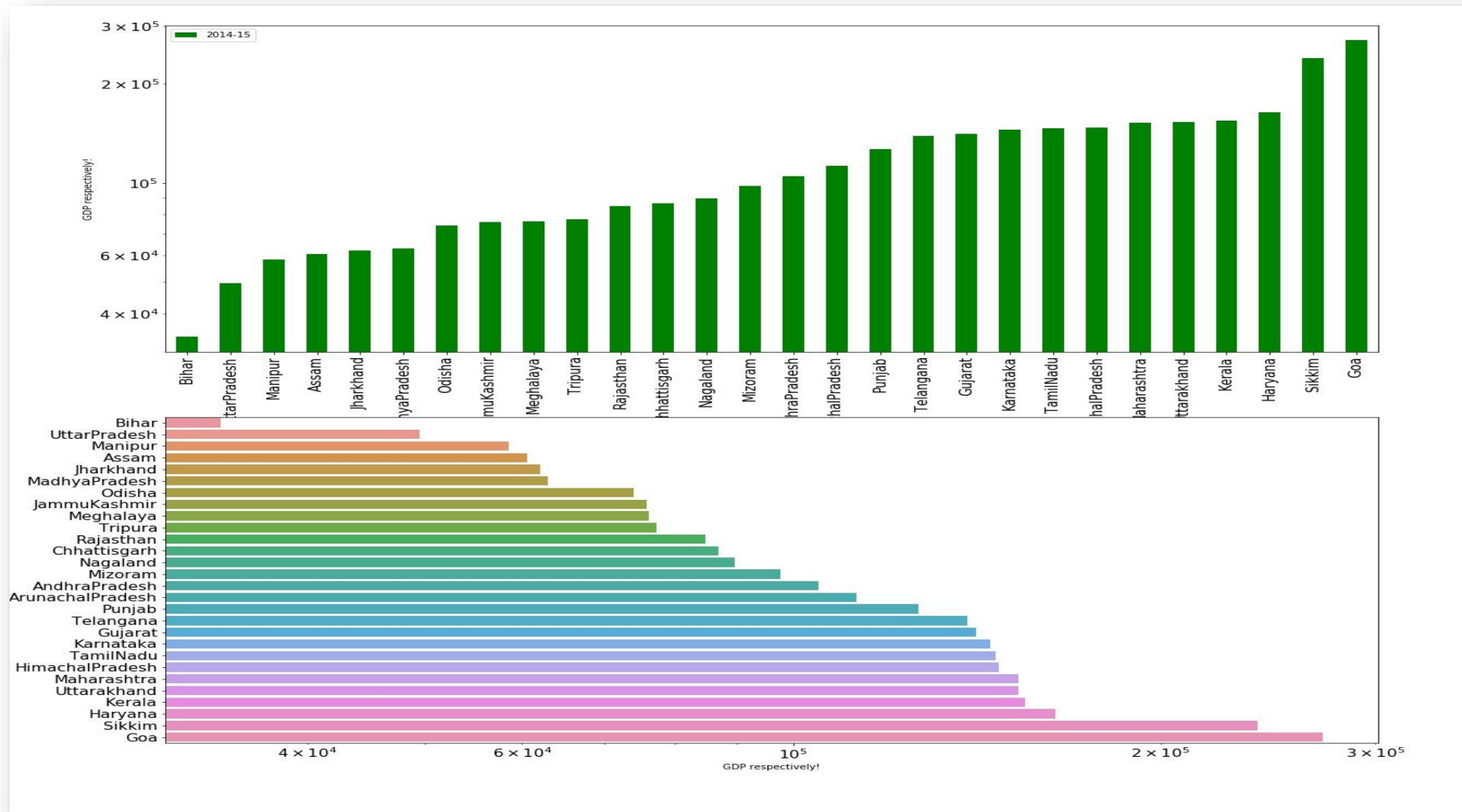
We see that Uttar Pradesh has been performing better than Odisha in terms to match the GDP!

# GDP Per Capita for Each State!

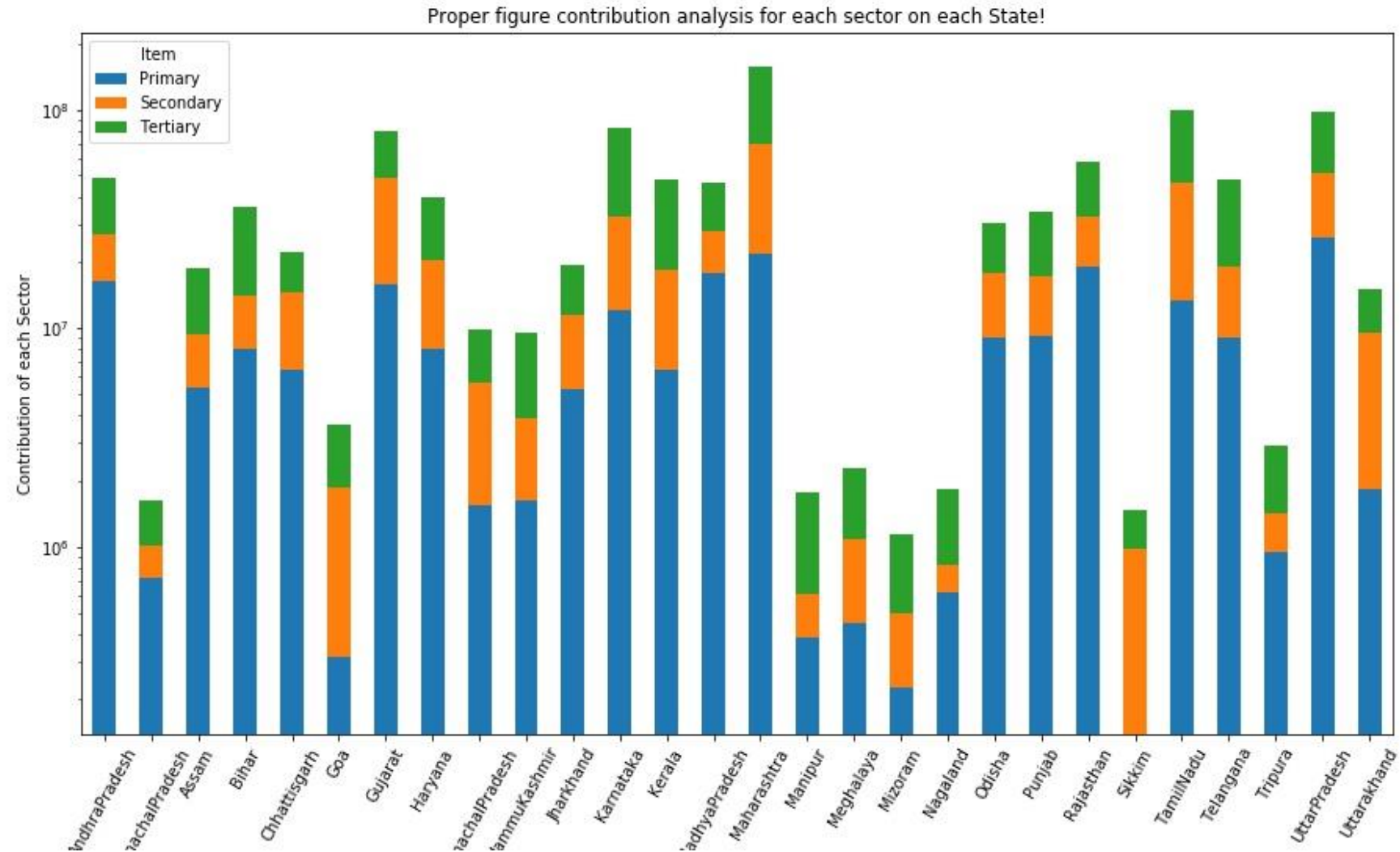


We see that Tamil Nadu has contributed highest in terms of GDP Per Capita!

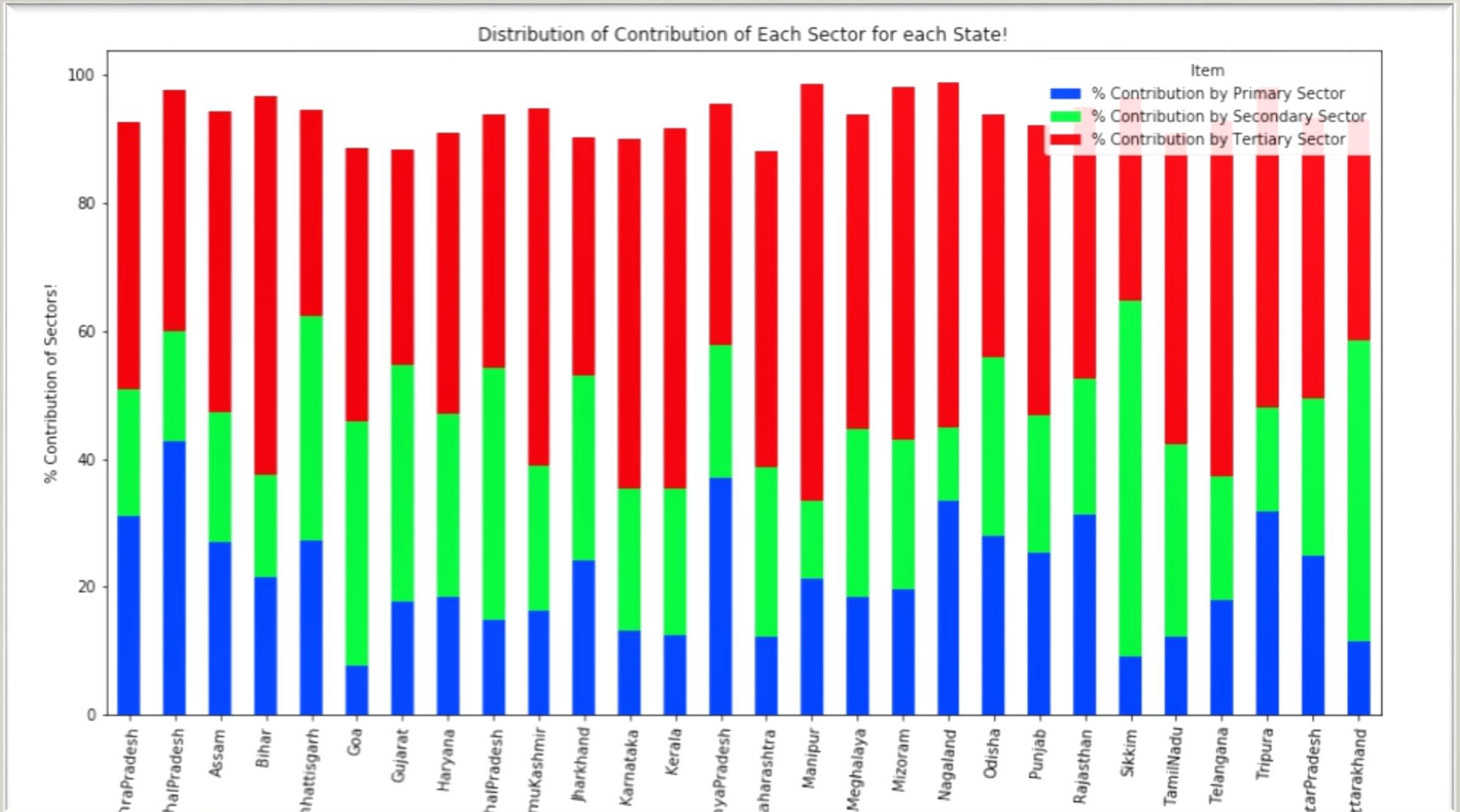
# Comparison of GDP Per Capita (Extended Version!)



# Contribution of Each Sector towards GDP



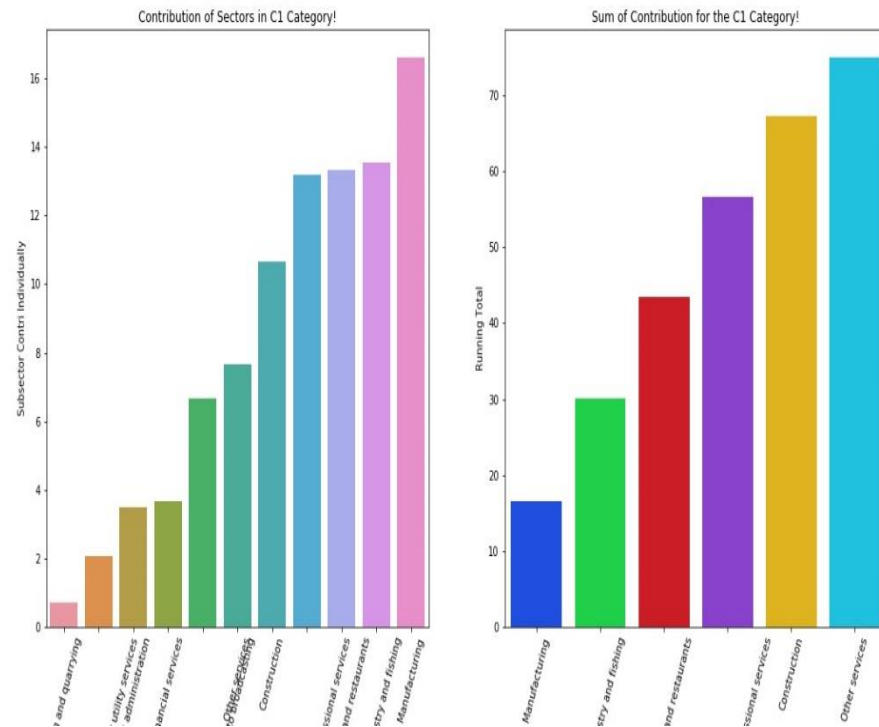
# % Contribution of Each Sector!



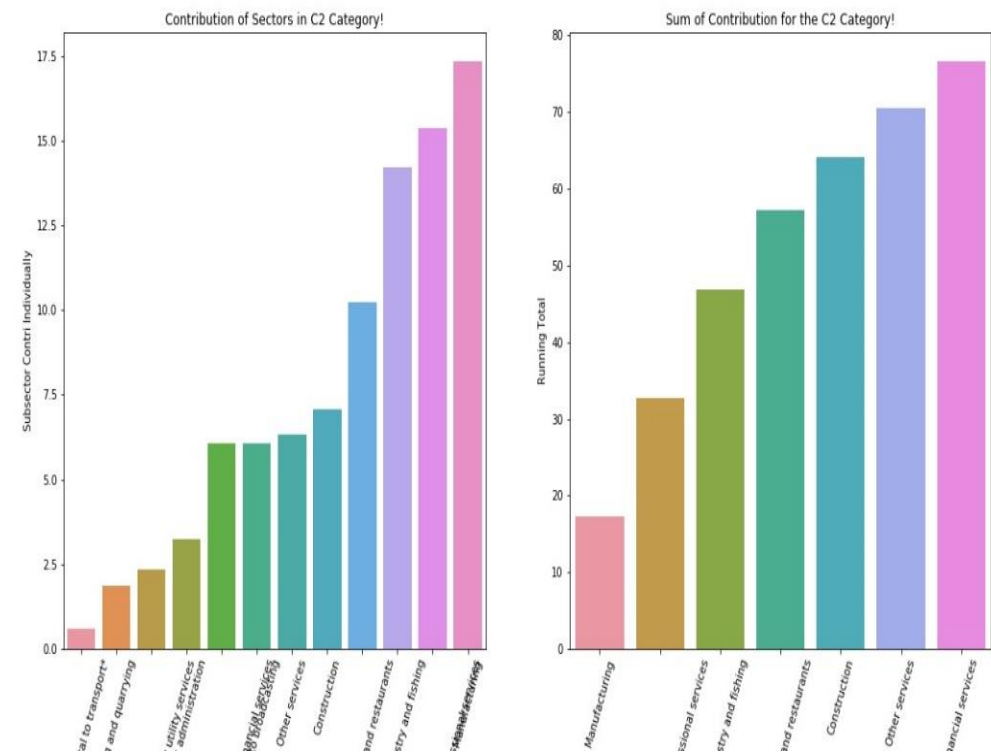


# Category Comparison of Contribution towards the GDP!

## Category C1

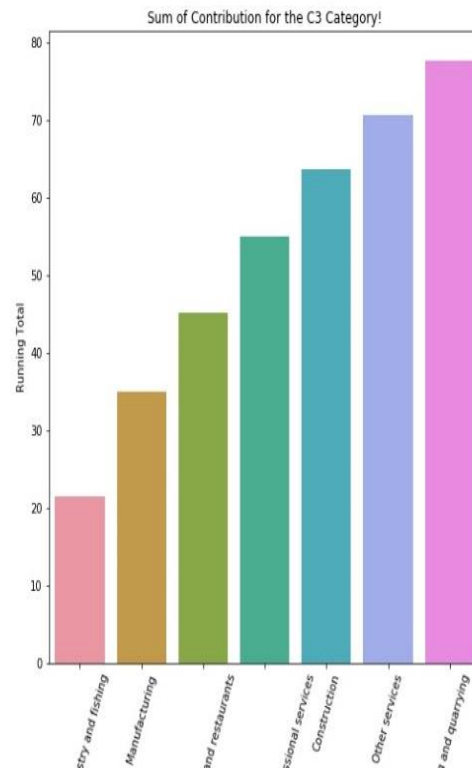
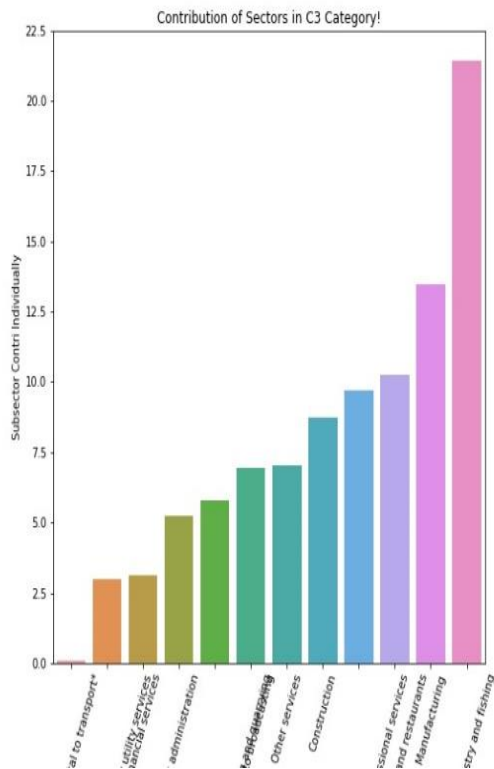


## Category C2

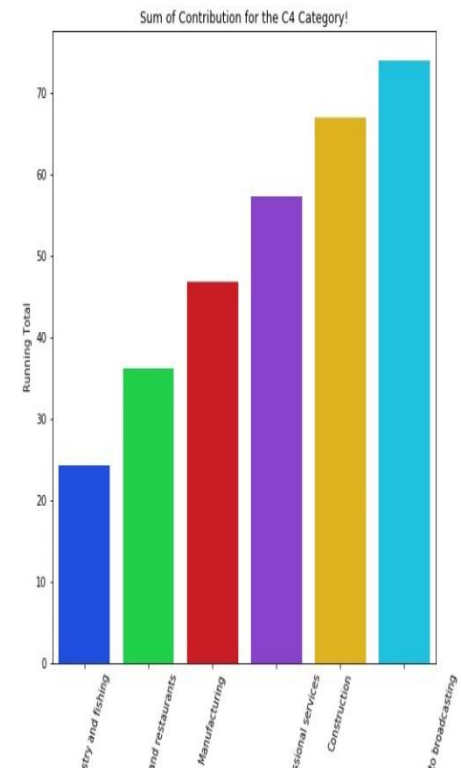
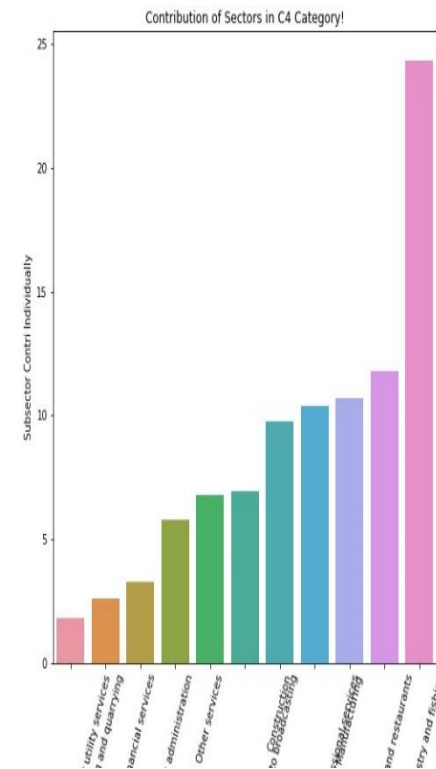


# Category Comparison of Contribution towards the GDP!

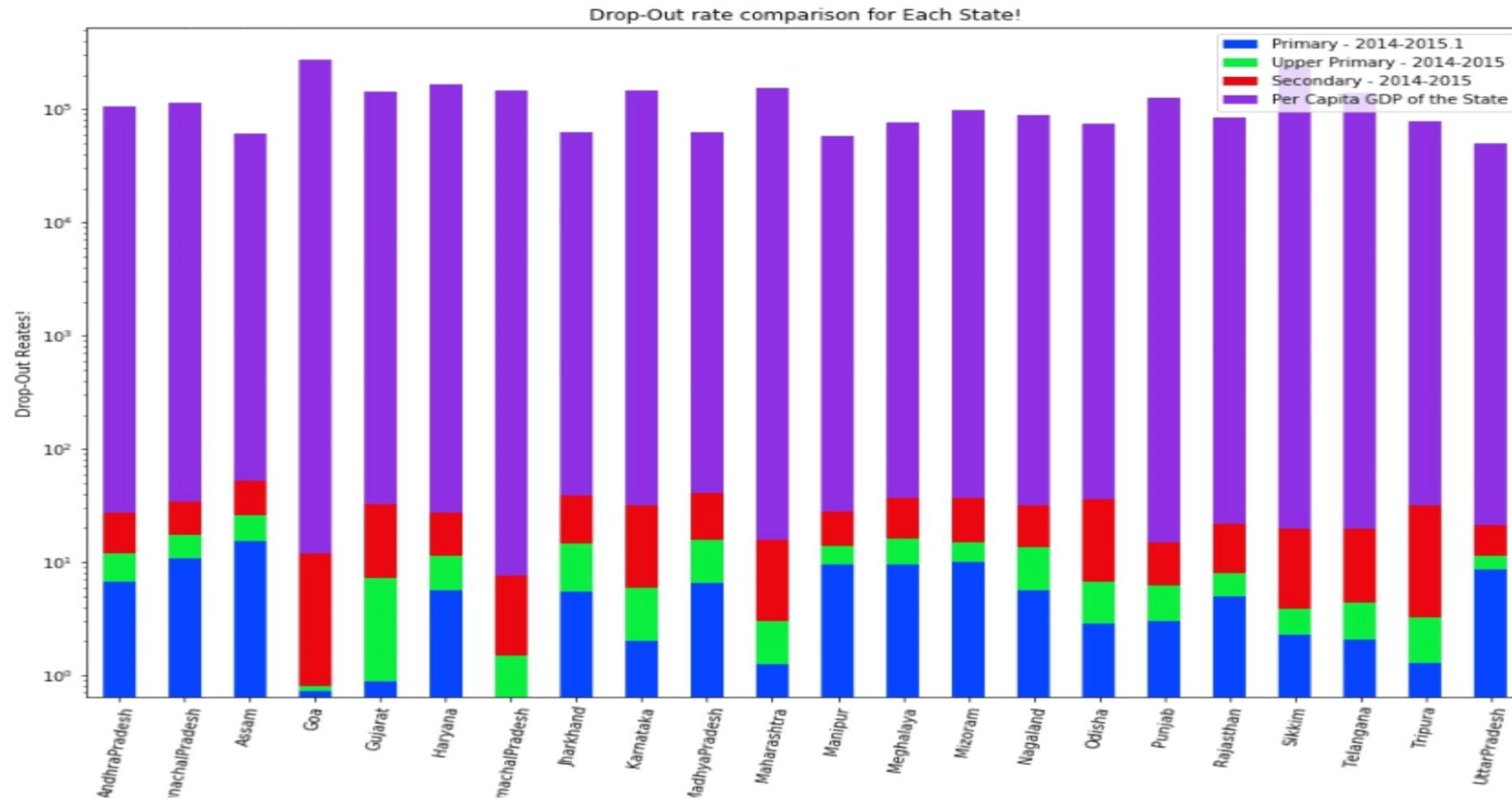
## Category C3



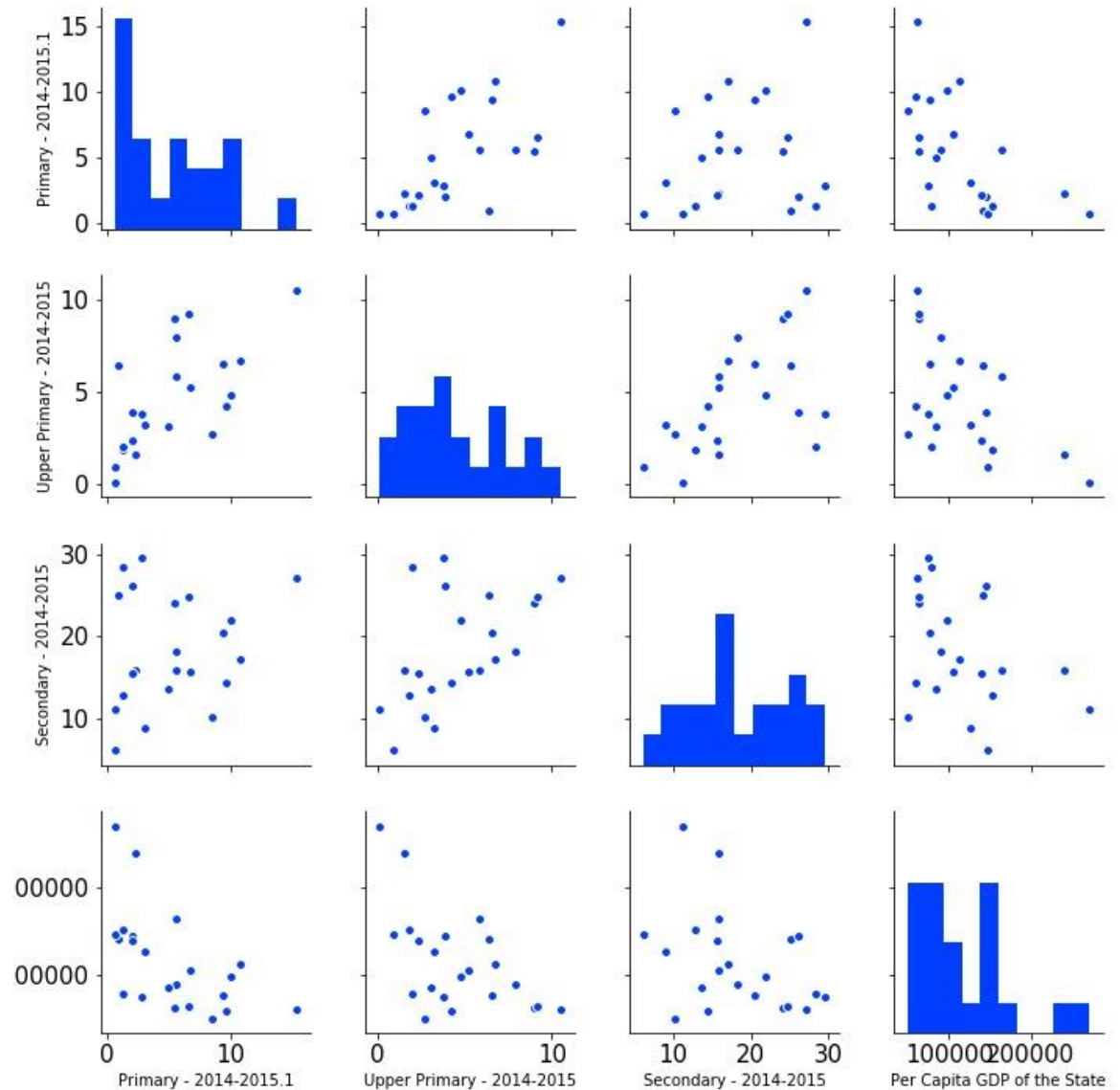
## Category C4



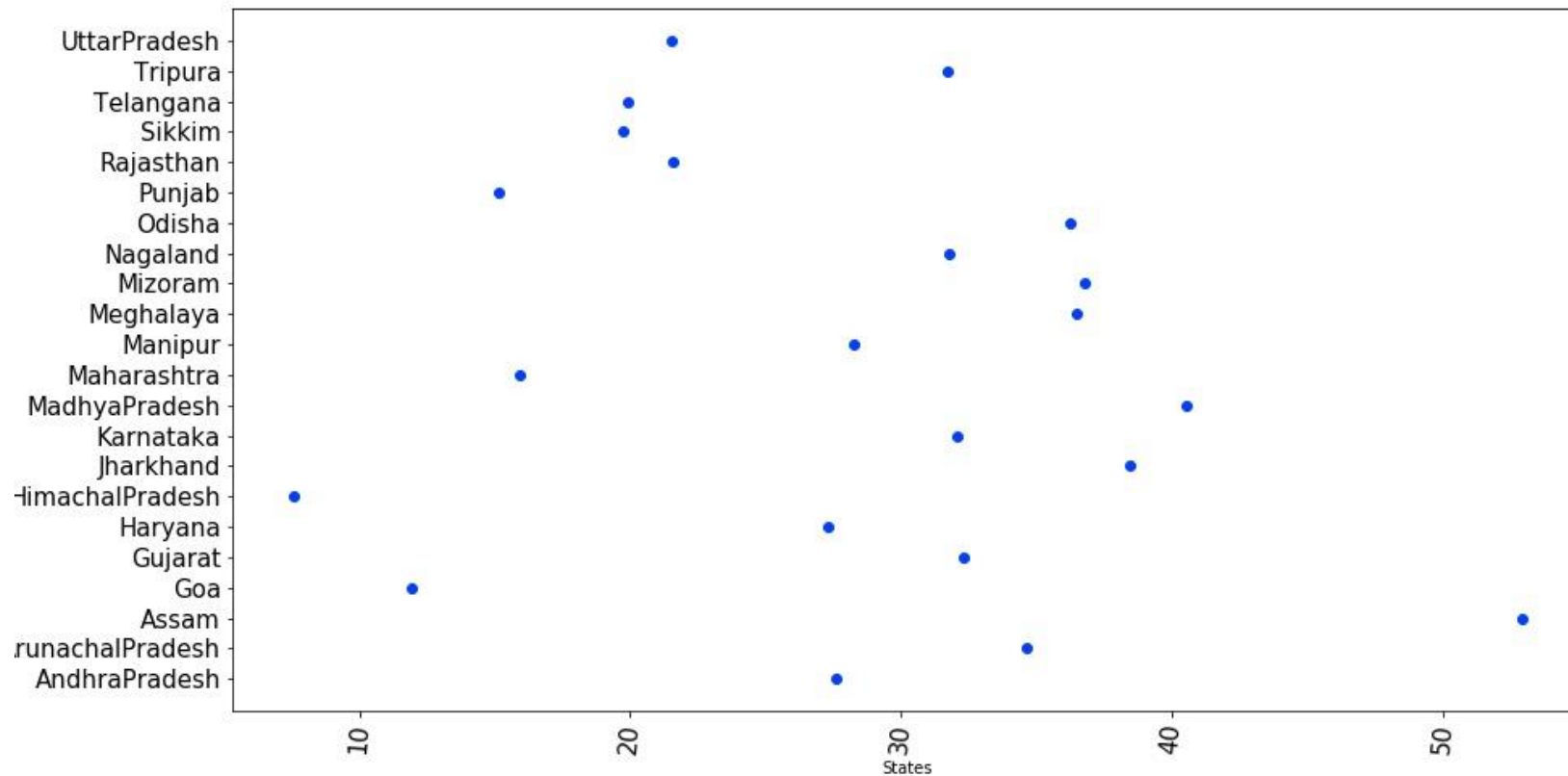
# Drop Out rate Comparison for Each State!



# Pair Plot to find any Correlation between Different Rates!



# To visualize the Correlation between All Education Level for Drop out rates on each State!



We see that Assam has the highest Drop Out rate sum and Himachal Pradesh with the lowest!

## Road Map to the Result:

- Plotted Mean growth of States over the Duration of 2013 to 2016 (Found Mizoram is the best performing State and Goa is the state that has been struggling!)
- To support my judgment, went on with creating bar plots for different states over different duration of years in order to see the insight as why it has happened!
- Plotted Two current states to which I am linked and visualized their GDP over the years with the All India GDP to see the performance!
- Plotted GDP Per Capita for all States as GSDP.
- Plotted Percentage Contribution of GDP Per Capita for individual States using Bar plot of PLT and SEABORN.
- Further we dived into the main Sectors(Primary/Secondary and Tertiary) and plotted their percentage contribution towards the GDP of that State.
- To Analyze on a broader aspect, we created the Categories(C1/C2/C3 and C4) based on the Quartiles mentioned.
- For each category, found the Top 3/4/5 contributors that contribute up to 80% and plotted them using Bar Plots..
- Part of the IInd Exercise, Found the Drop Out rates for the duration of 2014-15 (Primary, Upper Primary and Secondary), and plotted their comparison for each state on GDP Per Capita.
- Finally plotted a Pair plot to see any pattern which could tell us the Correlation between the Drop Out Rates!

## Recommendations!

1. Mean Growth rate depends on the GDP Per Capita and we see that for Goa it is smallest. This maybe because it is considered mostly for tourist spot. We have to either increase its Tourism capability or try to develop into a better state, by providing/focusing more on Agriculture and Manufacturing domains.
2. We observe that GDP Per capita is lowest for Bihar. This is because, there are not a lot of opportunities their in private sectors as they can pay heavier taxes. Bringing up employment projects can help in boosting the GDP per capita.
3. For Categories that have High GDP, we have observed that Manufacturing plays an important role. So we can say that States in Category 3 and 4 should work on the sector of manufacturing.
4. Whereas, for the Categories C3 and C4, approx. 25% is contributed by Agriculture, Forestry and Fishing. Maybe the states can share the resources in order to balance up the sectors which require some push in their domains.
5. While comparing % Contribution of GDP Per Capita, Maharashtra is the toppest state. This maybe because of the local corporation working to their best. Other states a=can look upto them and try to create domestic projects which may involve employment and it then leads to a better GDP Per Capita!
6. Gujarat is the state where a huge number of Upper primary Drop Outs are recorded. The state needs to focus on educating them, while Assam has the highest drop out rate in Primary Education which is very injurious to the nation. The State needs to look upto this by providing new policies or refabricating old ones to help the younger generation.