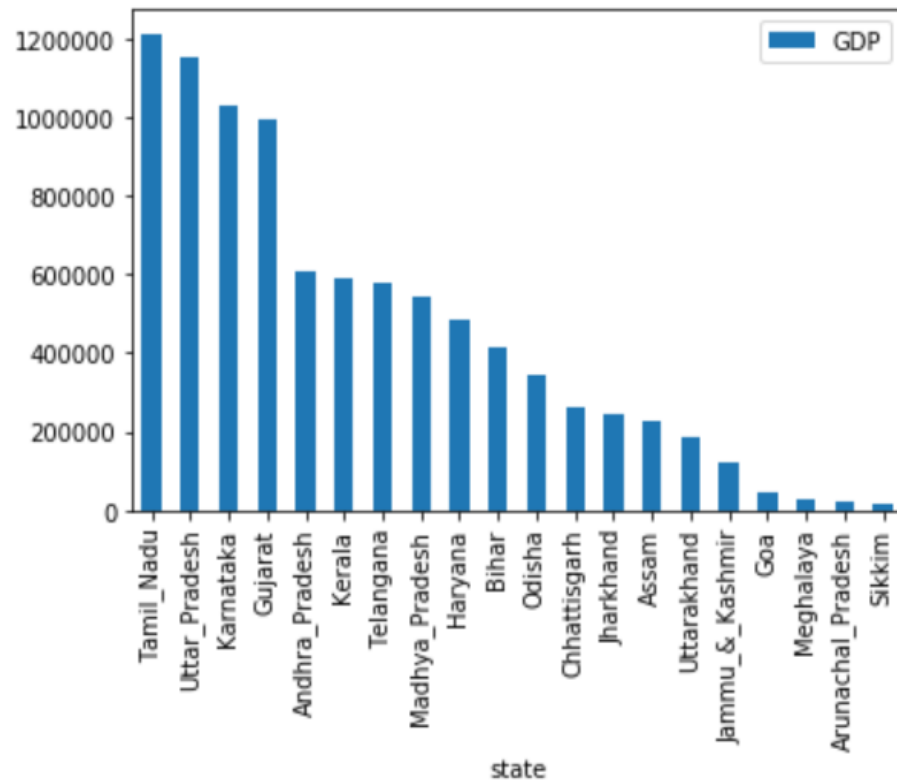# GDP – Assignment

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Assignment Info

Deriving insights from GDP data, by analyzing and plotting the data in graphs prepared in the Jupyter notebook.
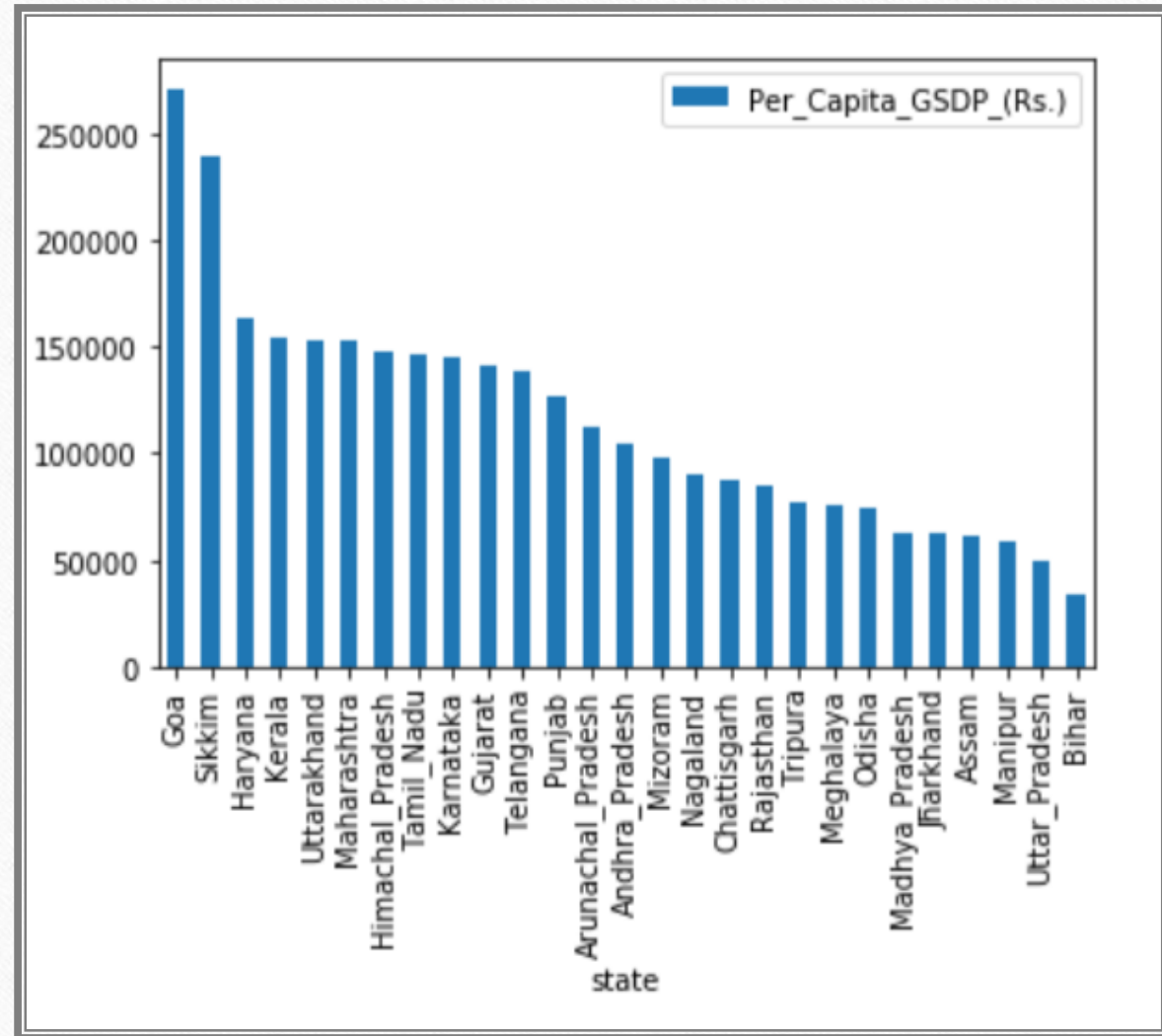
State wise aggregate GDP for year 2015-16

- Highest and Lowest GDP states being Tamil Nadu and Sikkim respectively, it is obvious from the graph that the difference among low and high GDP states is very high and not just a marginal one.

- It is also a critical fact that even the aggregate of bottom six states can't match the highest GDP of Tamil Nadu

- There Is a major difference in the fourth highest GDP state i.e Gujrat and Fifth highest GDP state i.e Andhra Pradesh.
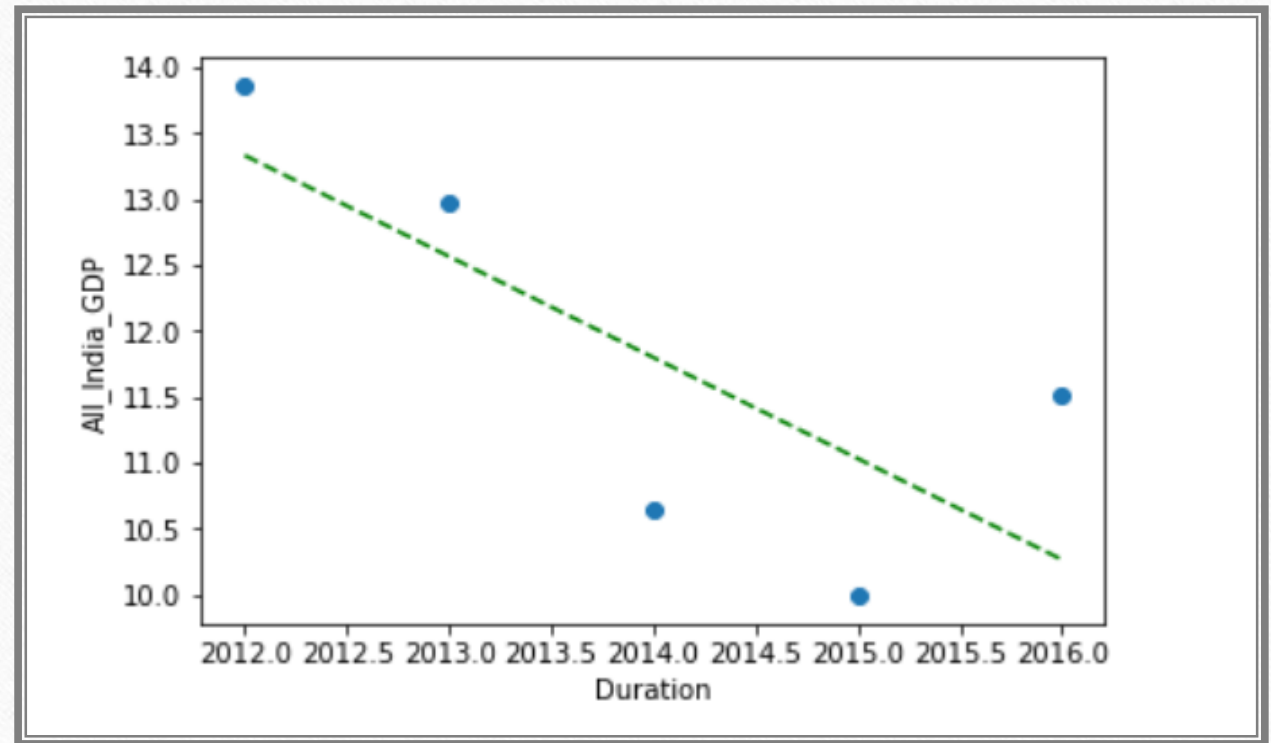
State wise Per-Capita GDP for year 2015-16

- Since the aggregate GDP graph was mostly influenced by population of different states, its clear picture wasn't ascertainable. Now we can clearly see that Goa is the highest grossing state in terms of GDP per capita which is probably because of its high tourism rate.

- Also, it is inevitable that Bihar, which is a state with low literacy and employment rates is the poorest performing state in per capita GDP index.

- Using this chart, government can take corrective decisions for states which breach the minimum desired threshold for per capita income, and can work out education and employment generation plans for future.
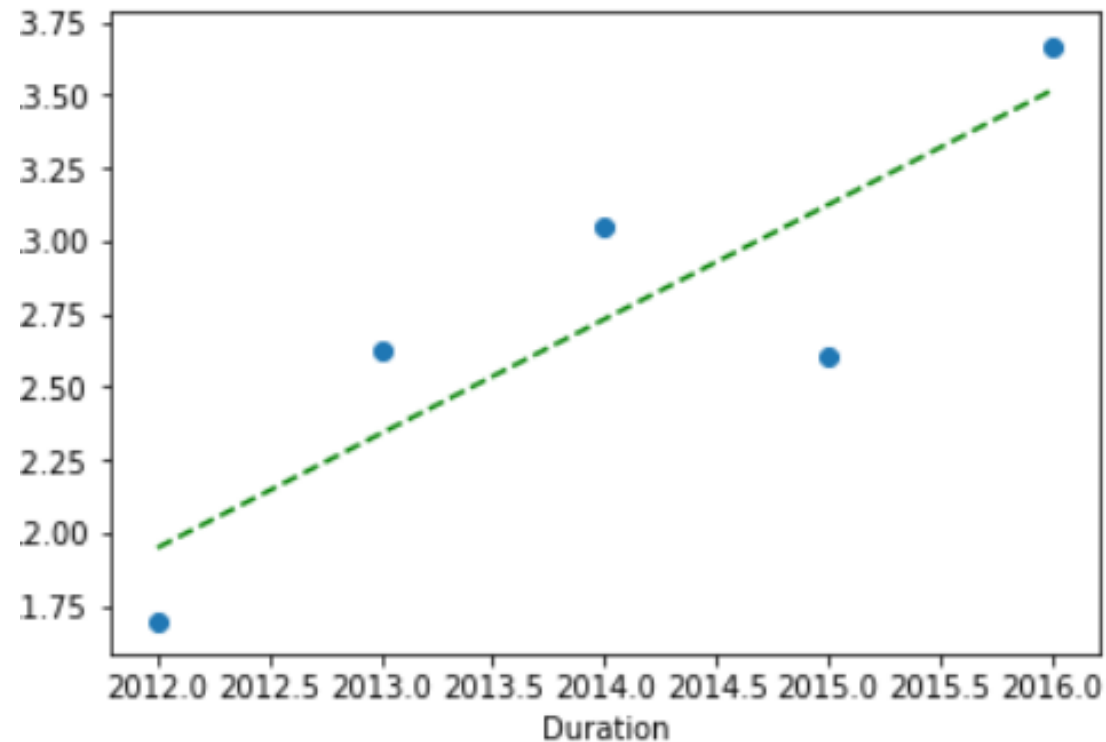
Aggregate of All India GDP for years 2012-2016

- This graph represents the overall trend in the GDP growth of India from 2012-16. The economy seems to be moving in a downward trend with only exception of 2016 as a better performing year than the previous one in terms of growth.

- Year 2015 was the lowest GDP growth year whereas, the growth rate was highest in year 2012

- The steepest fall in growth rate is observed from year 2013 to 2014 where GDP growth rate percentage has declined from 13.2% to 10.7%

- We can also observe that the rise in GDP growth rate from 2015 to 2016 has no effect on trend line since the overall trend of growth rate in all previous years has been negative.
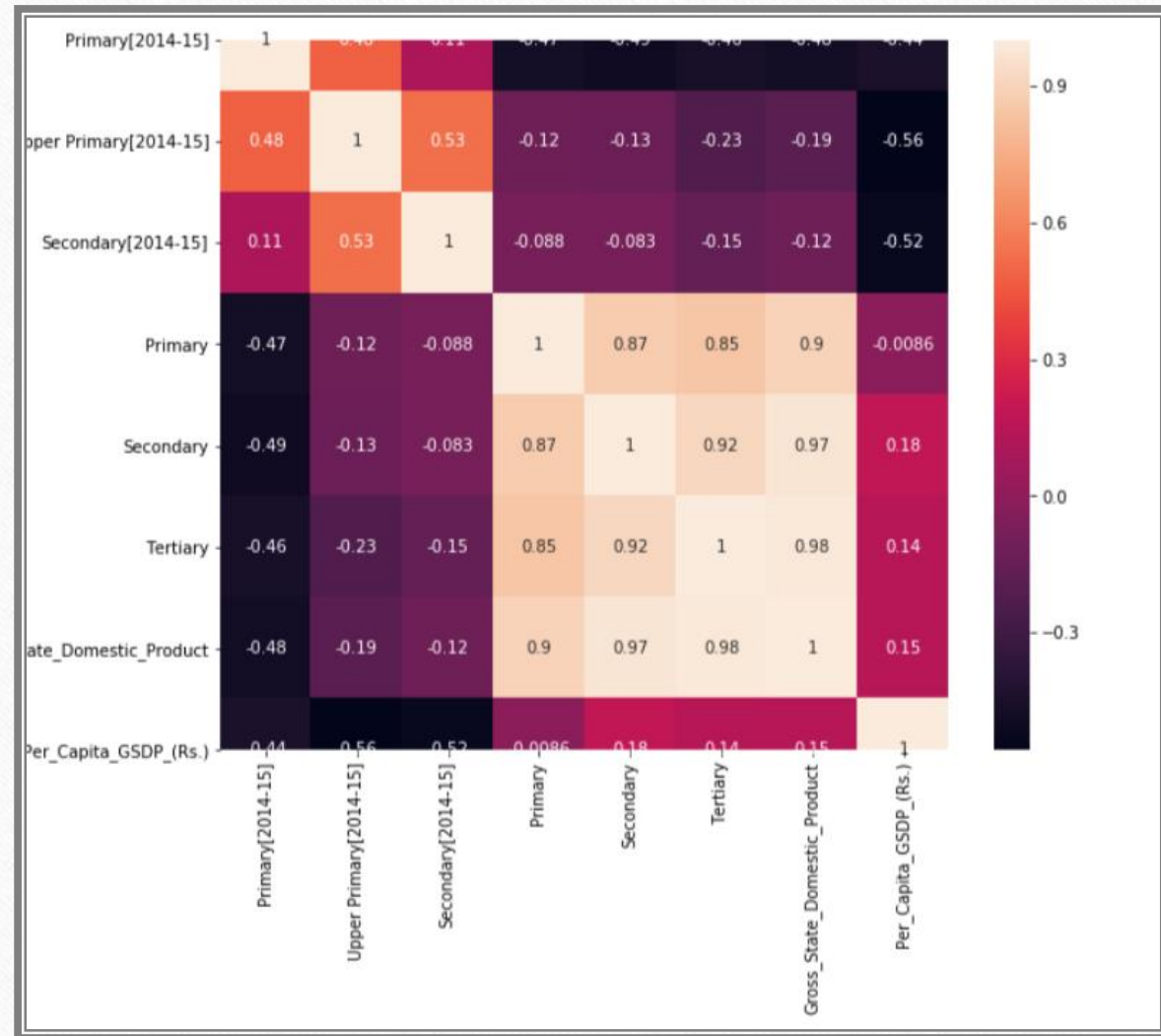
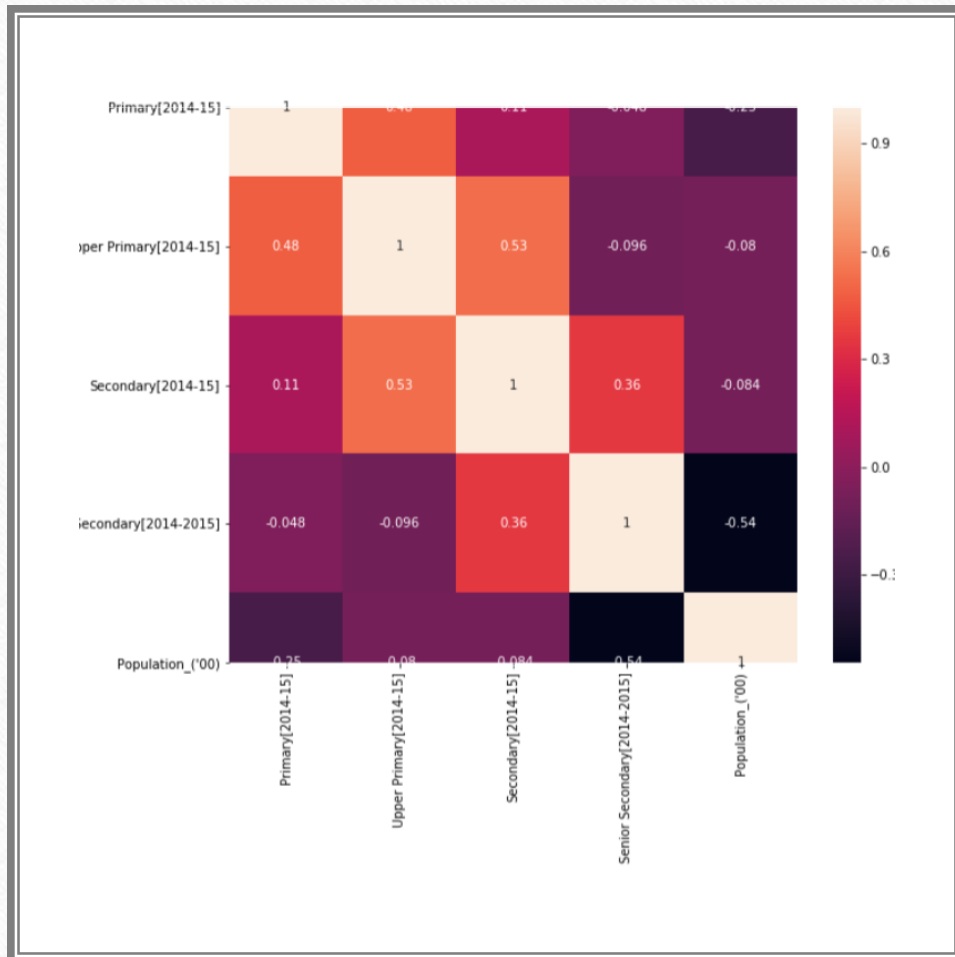# Aggregate of Telangana State GDP for years 2012-2016

- This graph represents the overall trend in the GDP growth of Telangana state from 2012-2016. The economy seems to be raising with only exception of 2015 as a low performing year than the previous one in terms of growth.

- Year 2015 was the lowest GDP growth year whereas, the growth rate was highest in year 2016

- The steepest fall in growth rate is observed from year 2014 to 2015 where GDP growth rate percentage has declined from 3.1% to 2.6%

- We can also observe that the rise in GDP growth rate from 2015 to 2016 has no effect on trend line since the overall trend of growth rate in all previous years has been positive.

Correlation of GDP for 2014-15 specific to the sectors of Primary, Secondary, Tertiary and Upper Primary Sectors with respect to Percapita GDP.

- We can see negative correlation between percapita GDP and Drop out from various level , if percapita GDP increases then Dropout rate decrease vice versa.

- Government should take care of decreasing percapita income , Low percapita means people has low income so they won't spend on education of their child so children from various stages of education have to drop their schools and colleges to support their family for basics.

- Based on the Data Analyzed for GDP and Per Capita GDP, it is clearly visible that the Sectors having highest contribution to the Percapita GDP has comparatively low population density in the states and hence they have good contributions to the overall GDP.

Correlation of GDP of 2014-15 specific to the sectors of Primary, Secondary, Upper Primary and Senior Secondary Sectors with respect to Population

- Graph clearly shows that we need to focus more on senior secondary education as primary and upper primary has less effect due to population, if population increases then there is unemployment which leads to most of children dropout during secondary education to support family for basic needs.

- To improvise the negative sectors Government can plan suitable improvisations like enhancing plans for Education services, providing subsidies to states etc.

Reference links

- Data set reference:
  - www.gov.in
- Quick commands help:
  - www.hackerrank.com
  - www.geeksforgeeks.org
  - https:/pandas.pydata.org/pandas-docs
  - https:/stackoverflow.com/