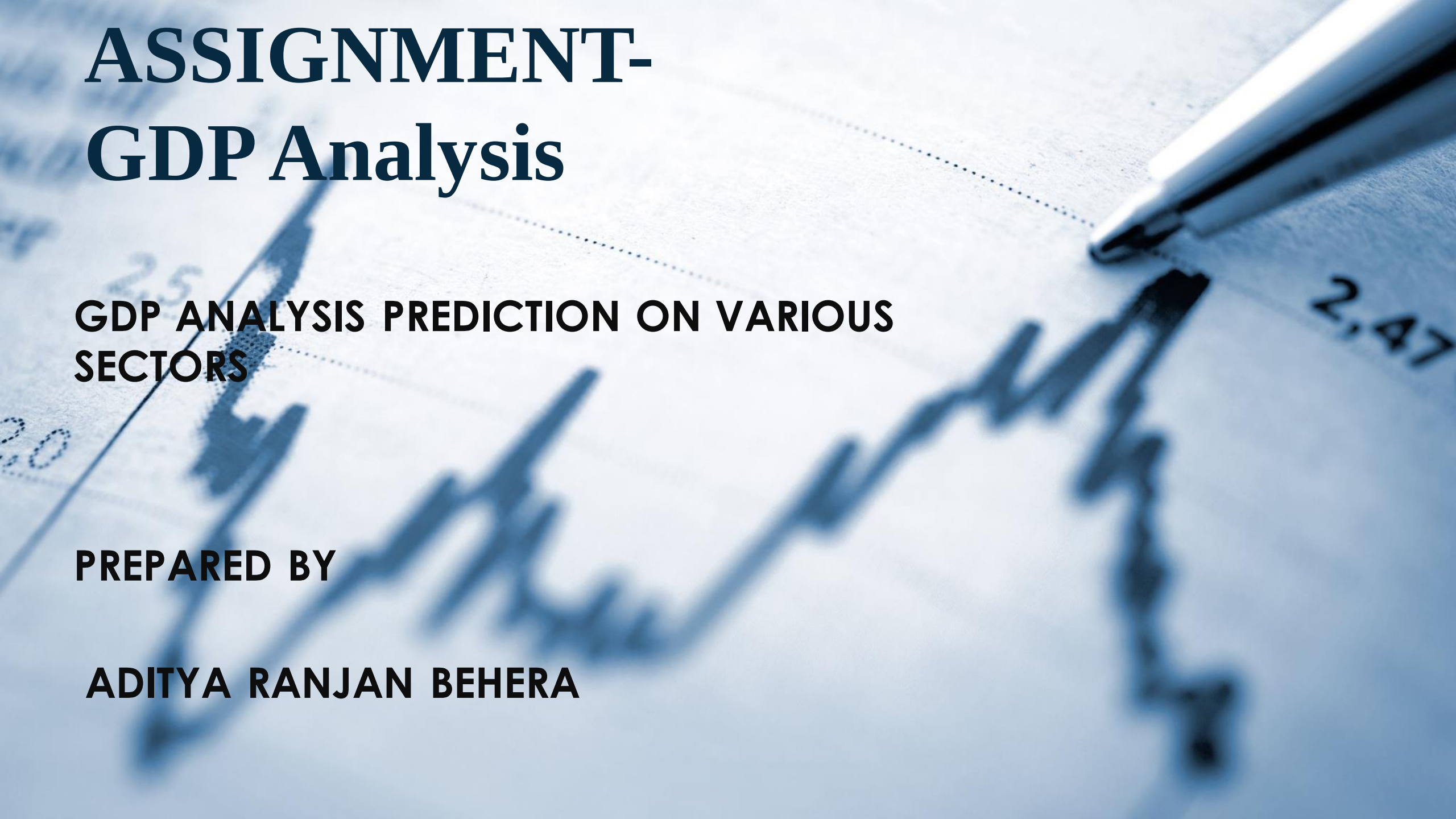
ASSIGNMENT-
GDP Analysis



GDP ANALYSIS PREDICTION ON VARIOUS SECTORS

PREPARED BY

ADITYA RANJAN BEHERA

INDEX

Objective:

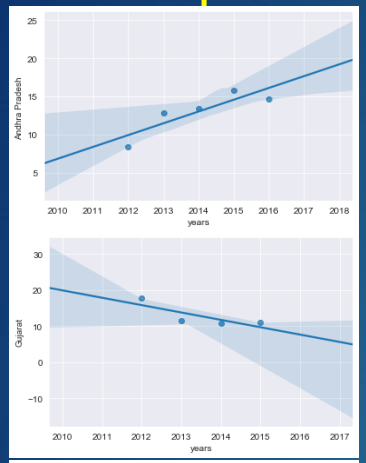
- GDP Analysis of the Indian States
  - Growth analysis of states for the states
  - Total GDP of the states for the year 2015-16
  - GDP per capita for all the states
  - Contribution of the primary, secondary and tertiary sectors the total GDP
  - Contribution of sub-sectors the total GDP
- GDP and Education Dropout Rates.

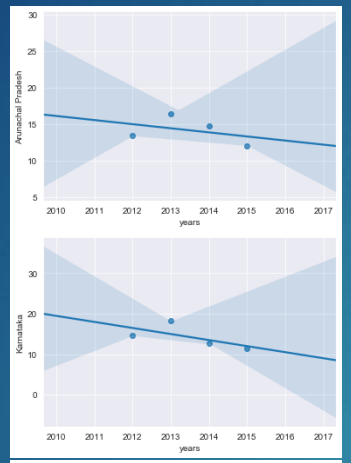
Objective

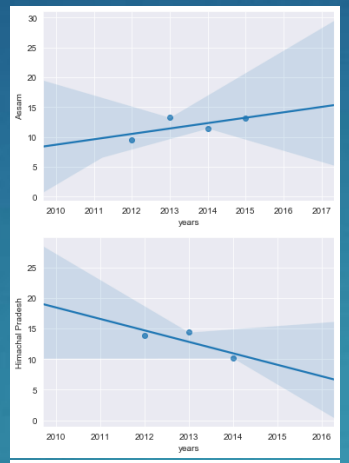
- To help the CMs focus on areas that facilitate economic development of their states. Since GDP is common measure of economic development, therefore GDP has been analysed in the assignment and ways to improve GDP has been suggested.

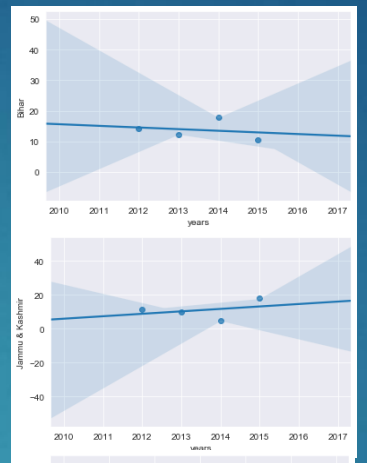
Part-I: GDP Analysis of the Indian States

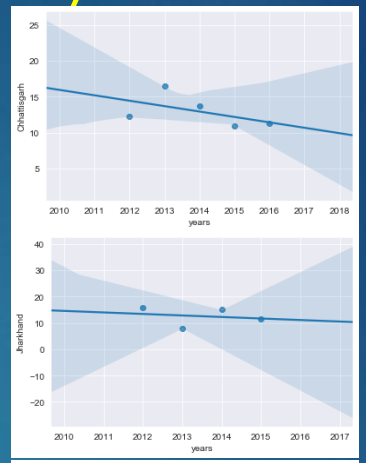
Graph shows the Growth of states over years

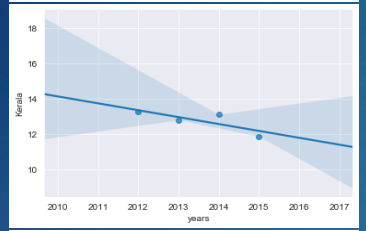


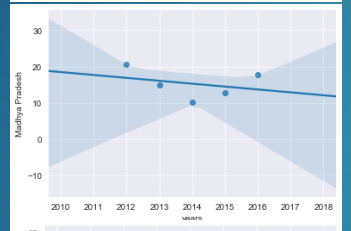


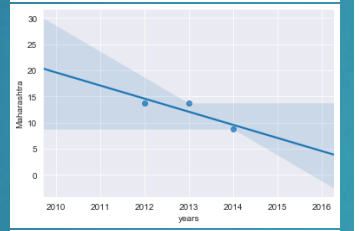


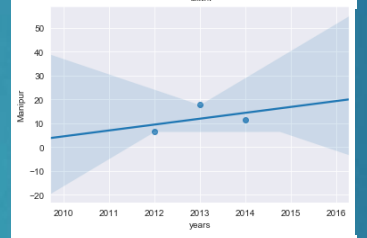


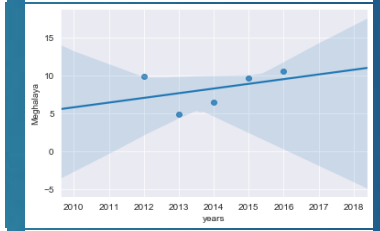


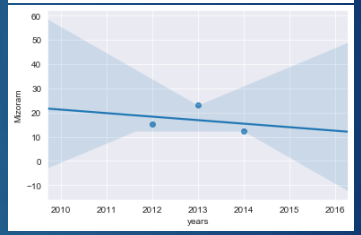


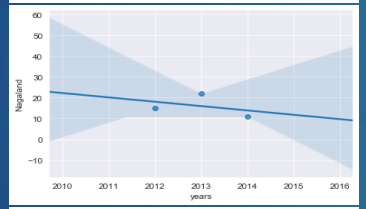


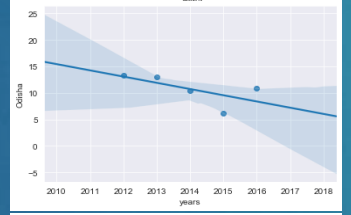


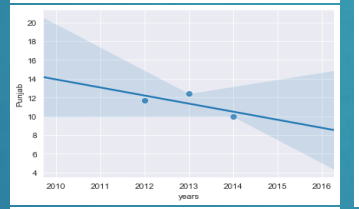


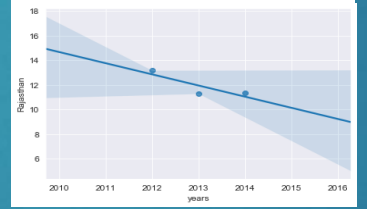


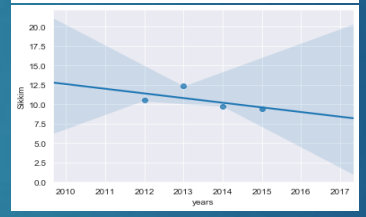


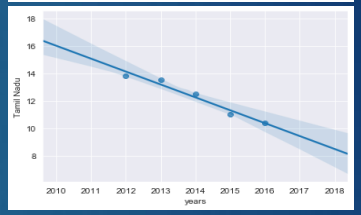


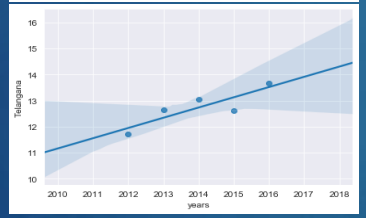


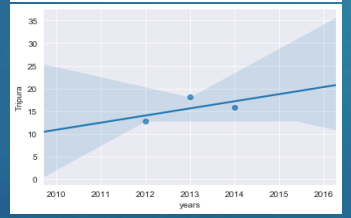


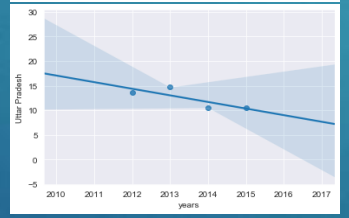


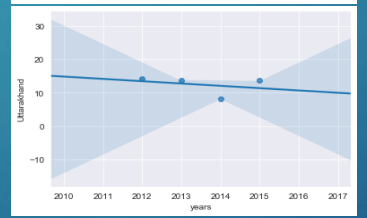




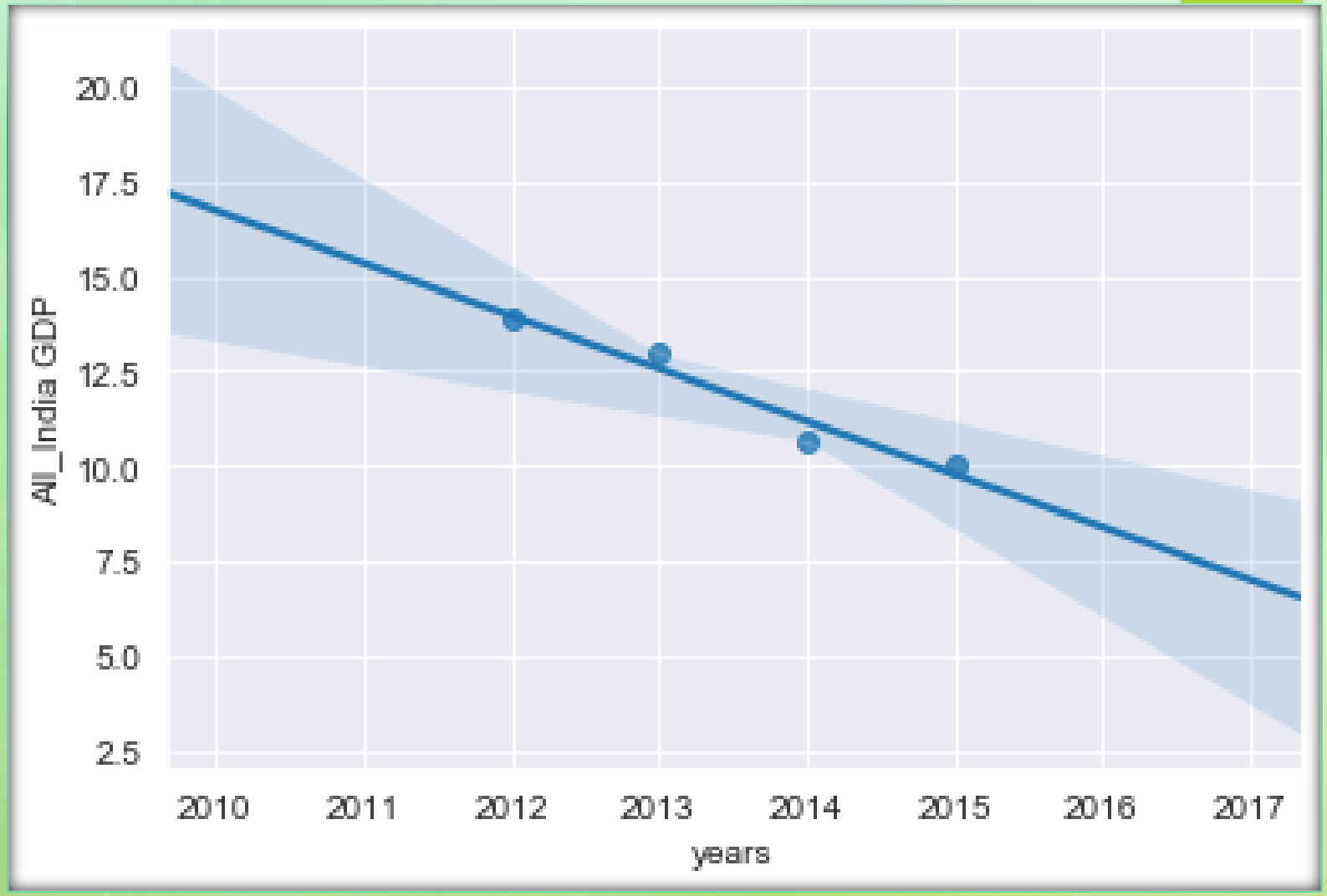




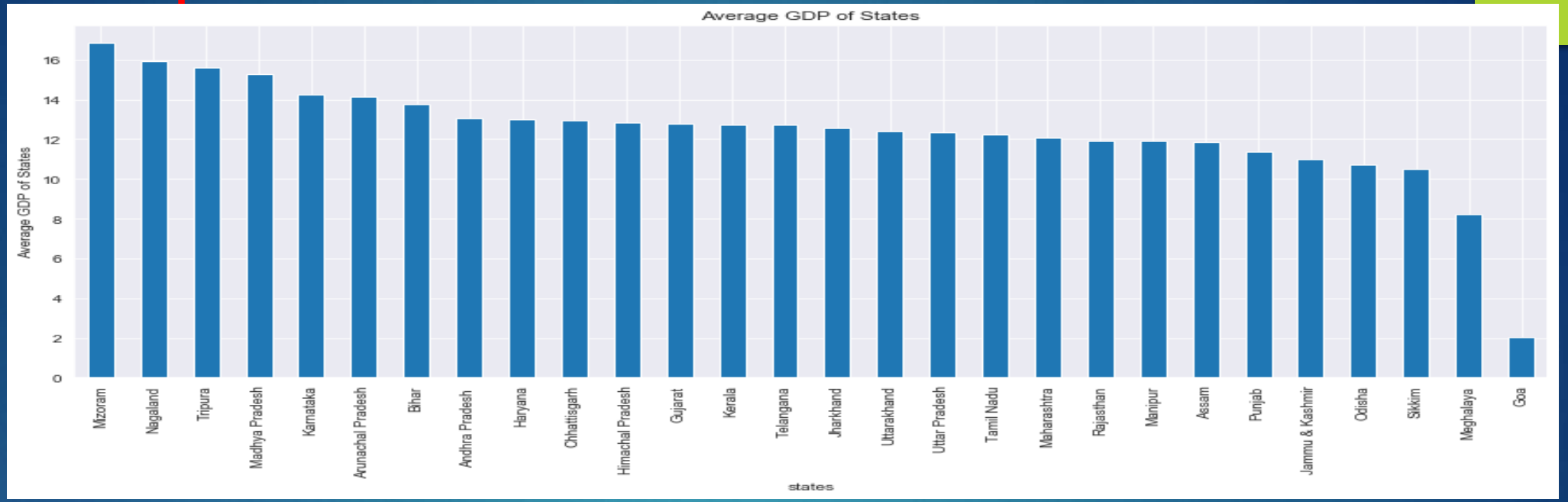




Graph Shows Nation's Growth Over Years



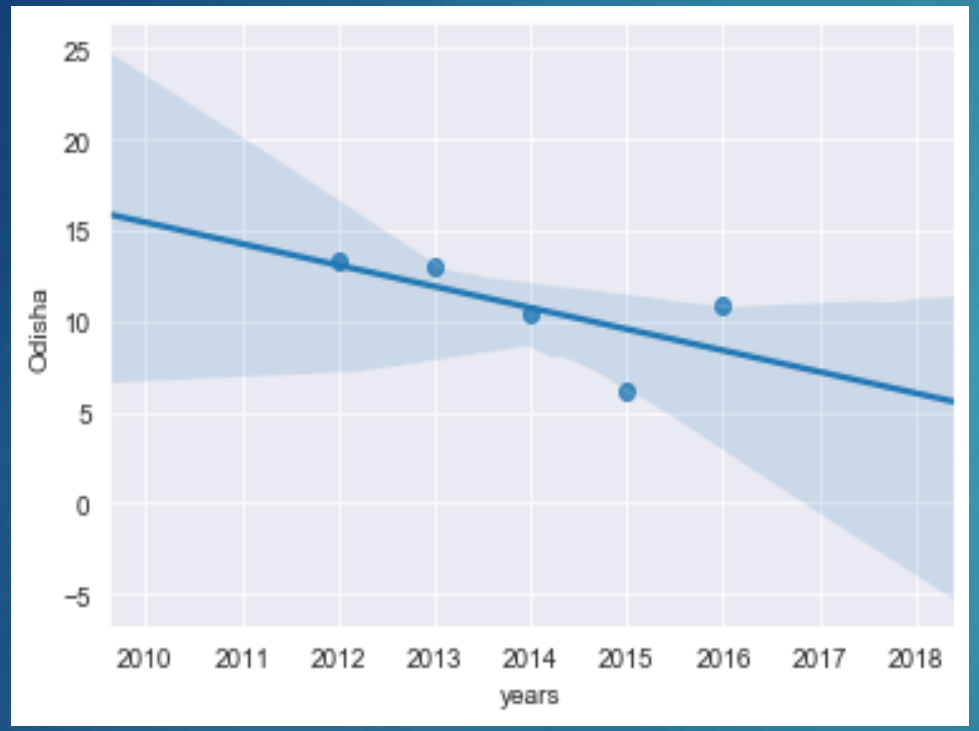
Graph Showing The Average Growth Rate For Comparision

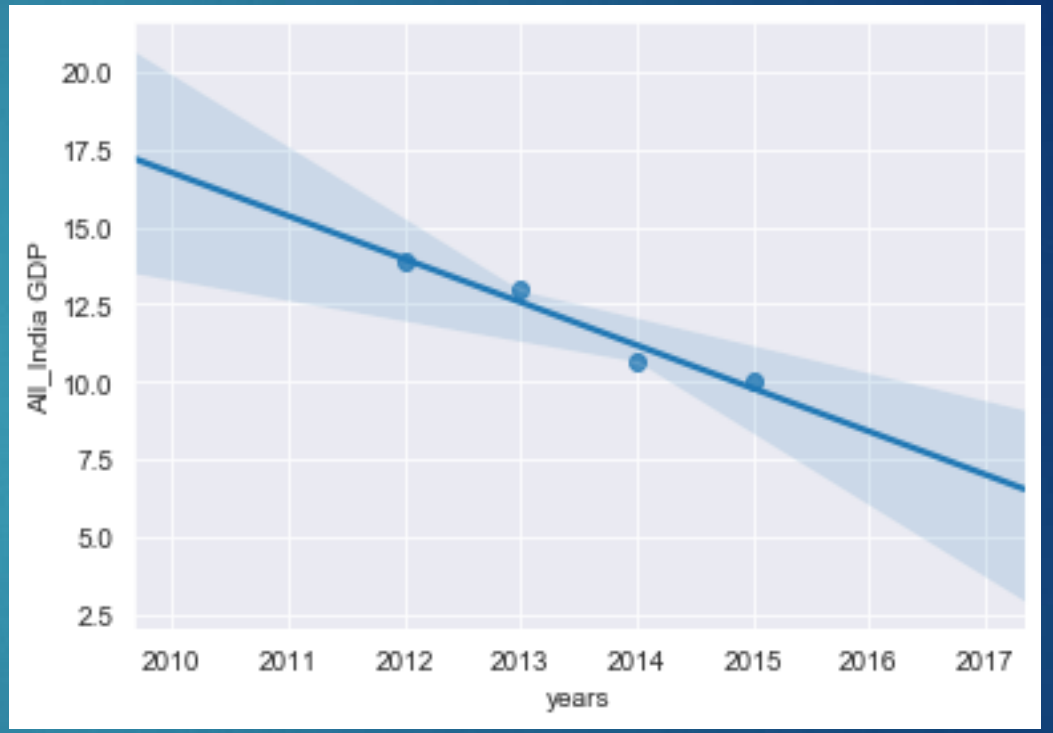


- We can compare the growth rate of any two states from the above bar chart because states having high average growth rate have higher growth rate and state having low average growth rate have low growth rate.
- From the above bar chart we can clearly observe that Mizoram, Nagaland, Tripura are growing consistently growing fast, and Goa has beenstruggling.
- Top 3 Fastest Growing States- .Mizoram .Nagaland .Tripura
- Top 3 Slowest Growing States- .Goa .Meghalaya .Sikkim

Graph Showing Comparison Between Home State And National Growth Rate

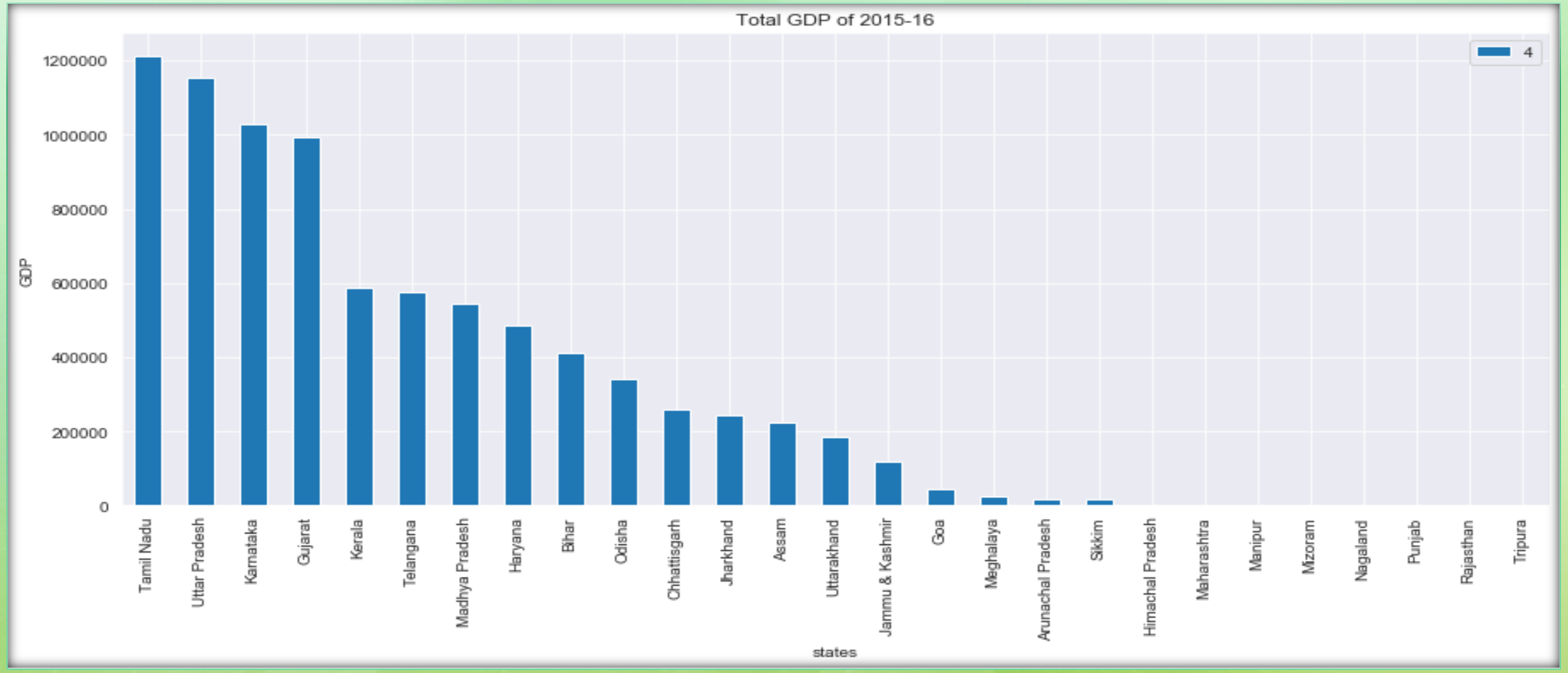
- My home state is Odisha





- `home_state_growth_rate = Odisha` `10.74`
- `nation_growth_rate = All_India GDP` `11.798`

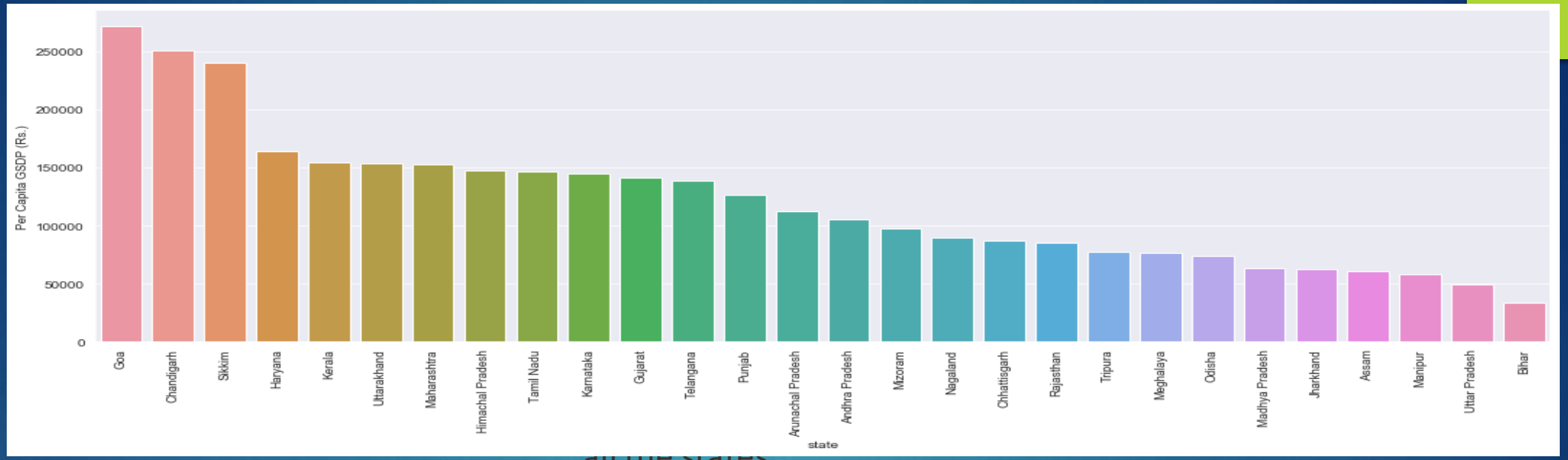
Total GDP Of The States For The Year 2015-16:



Top 5 and the bottom 5 states based on **total** GDP. form previous graph

- Top 5 States are: .Tamil Nadu .Uttar Pradesh .Karnataka .Gujurat .Kerala
- Bottom 5 States are: .Sikkim .Arunachal Pradesh .Meghalaya .Goa Jammu & Kashmir
- What insights can you draw from this graph?
- From this graph we can conclude the GDP of each state, which states are growing fastly and states are performing very poor. By deviding this data by the population of the state we can calculate the per capita, then we can analyse the demand of country made products.
- What states are performing poorly
- In year 2015 Sikkim, Arunachal Pradesh, Meghalaya, Goa states are performing poorly

Graph For GDP per capita for all the states.



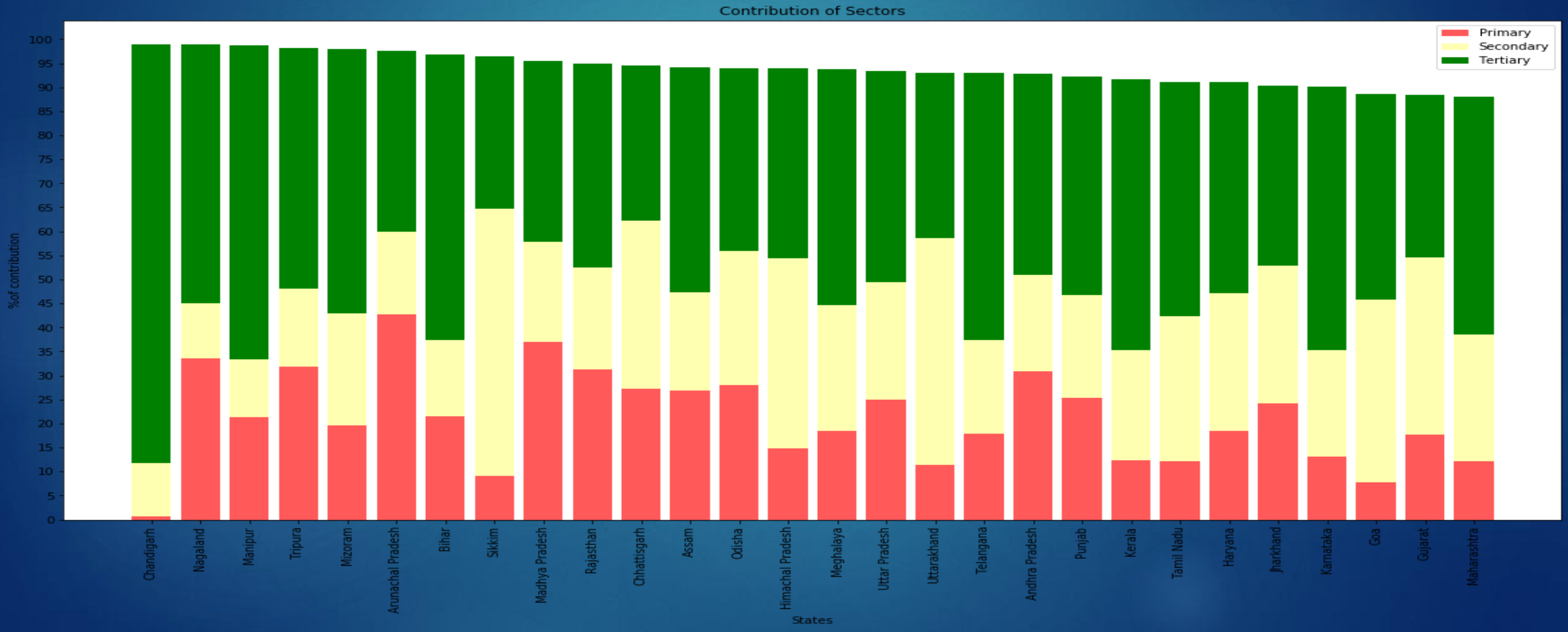
all the states.

From above graph We can clearly observe that
Top5 states are: Goa, Sikkim, Haryana, Kerala, Uttarakhand
Bottom5 states are: Bihar, UttarPradesh, Manipur, Assam, Jharakhand

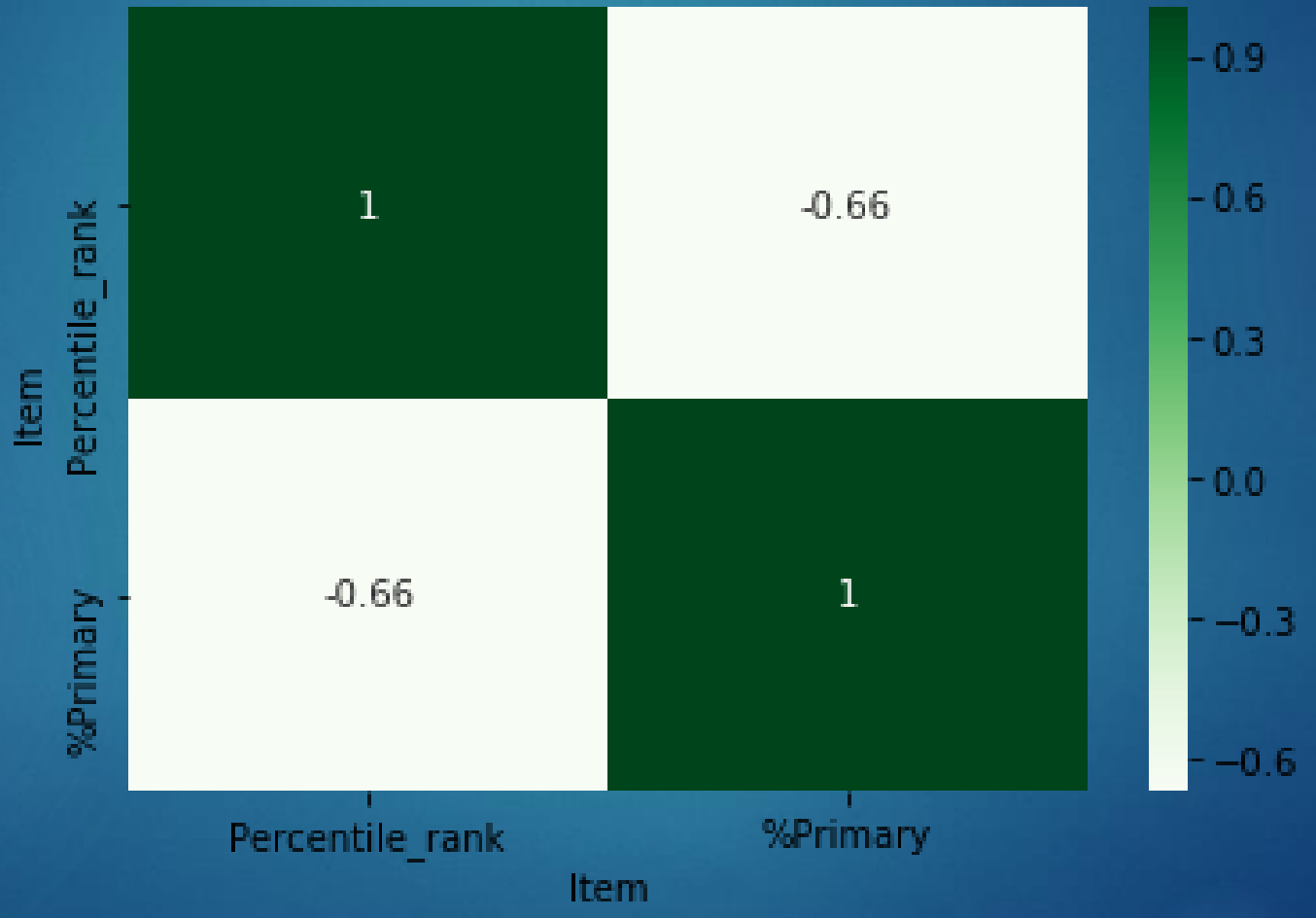
Ratio Between The Top Most State And The Bottom State
Goa(per capita(Rs)) = 271793.0
Bihar(per capita(Rs)) = 33954.0

The Ratio Is = (271793.0 /33954.0) = 8.0047

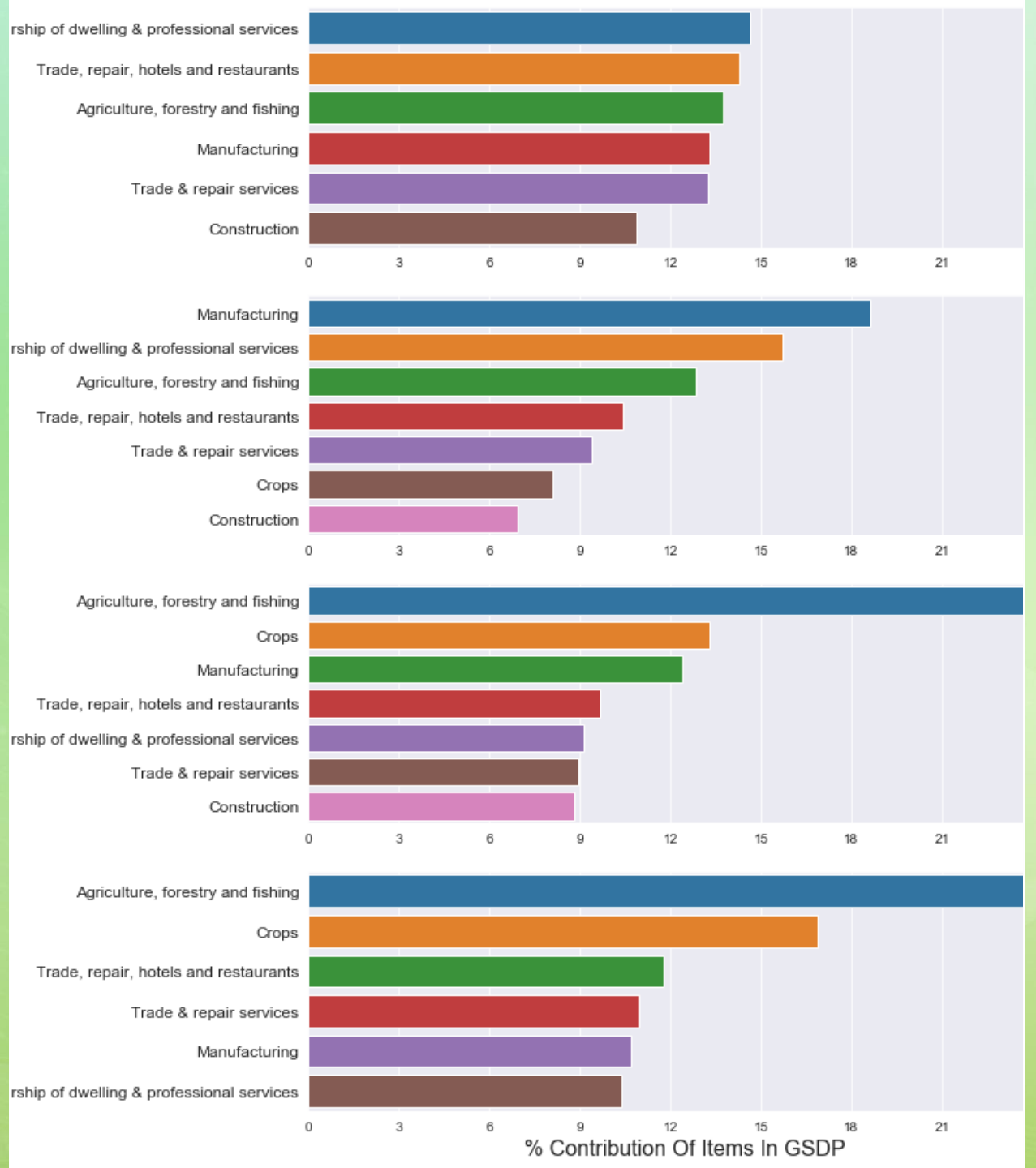
percentage contribution of the primary, secondary and tertiary sectors as a percentage of the total GDP for all the states.



correlation of percentile of the state (% of states with lower per capita GDP) and %contribution of Primary sector to total GDP.



Plot the contribution of the sub-sectors as a percentage of the GSDP of each category.



Summarised The Data In The Form Of The Above Plots, Tables

- From the above graph we can clearly see that the "Construction" sub sector is contributing less to every category of States.
- Also, we can see that Agriculture, Trade and Manufacturing are the sub sectors which are contributing average to the GSDP for every state

- We can see that all the subsectors of the states in category 1 are not contributing to GDP vary drastically as comparing of the states of other categories i.e. 2, 3 and 4.
- The sub sectors which are highly correlated to the GDP is real estate because as the GDP is going down for each category
- We can see that for category-4 states construction is not a highly contributing sector it contributes very less to GSDP
- contribution of this sub sector is also going down consistently with rare exceptions.

- We can clearly observe that for category1,2 states agriculture and crops are contributing averagely to the GSDP, but for catgory3,4 states agriculture and crop sectors have a very high contribution

Analysis Of Categories:

A) Category 1:
1. Trading... and Transport... sub sectors should collaborate and enhance each others growth by helping each other out as both these sub sectors can simultaneously use each other's resources.

2. Real estate sub sector should help with the other services sub sector as the professional services part of it can help in other services growth by delegating work.

3. Manufacturing can support other sectors to grow firstly

B) Category 2

1. Taxation rules should be changed to help the growth of financial services for category 2 states.

2. Same as point 1 for Category 1

3. Government should have to give more attention to crops and agriculture as they are comparatively giving lower contribution.

4. Construction sector can collaborate with Real estate ownership and Trade repair services.

Analysis Of Categories:

C) Category 3

1. Construction and Trade& repair service have to work together that they can grow.

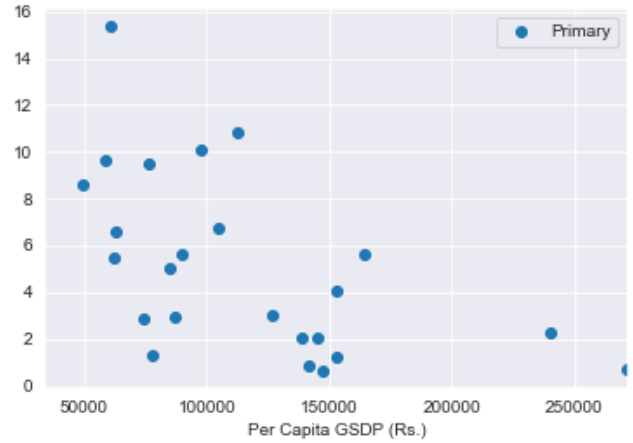
2. Overally all sectors are giving well contribution to GSDP as comparing to other categories

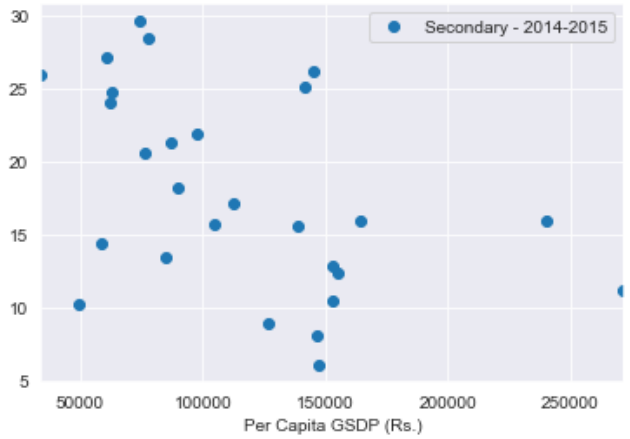
D) Category 4

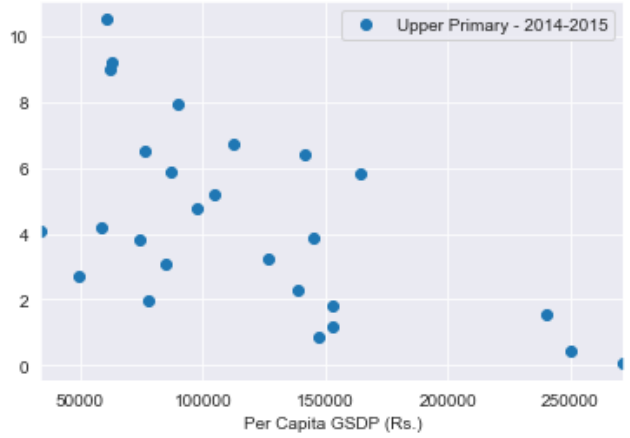
1. Same as point 1 for Category 3

2. Same as point 2 for Category 2

Part-II: GDP and Education

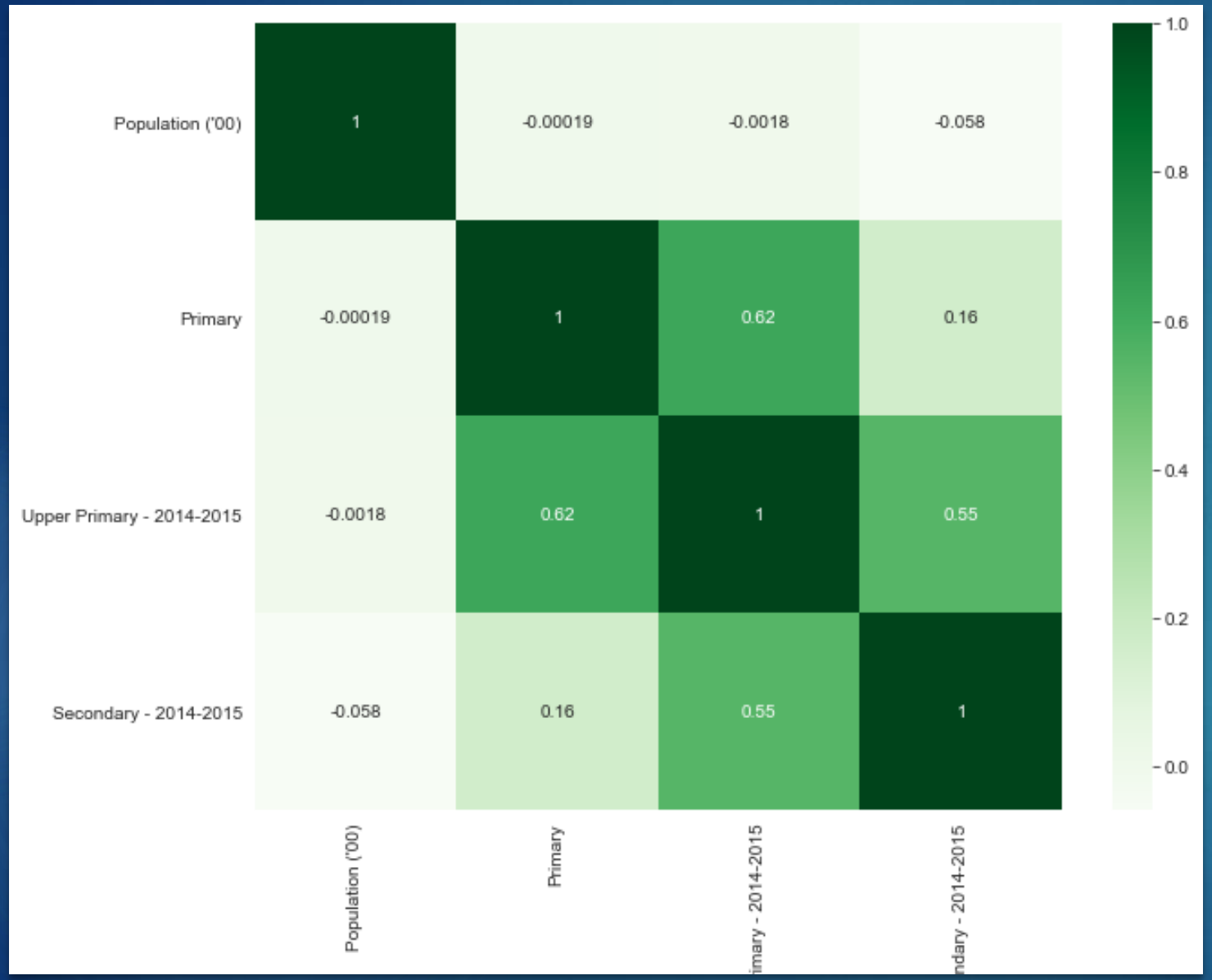






correlation of GDP per capita with dropout rates in education (primary, upper primary and secondary) for the year 2014-2015

correlation between dropout rate and %contribution of each sector (Primary, Secondary and Tertiary) to the total GDP



The correlation between dropout rates and population

Correlation Between Population and Primary
-0.05837733563783173 4

Correlation Between Population and Upper Primary - 2014-2015
-0.0018473472313924643

Correlation Between Population and Secondary - 2014-2015
-0.05837733563783173 4

We can clearly observe that all drop out categories have negative correlation with population of states.

Key Insights From Above Analysis

1. For the analysis of dropout sectors on per capita
   We can clearly observe that increase in per capita decrease in dropout rate for all the three sectors

2. Analysis of Dropout rates of various per capita percentile categories
   Dropout rate have a positive correlation with per capita percentile category %primary
   Dropout rate have a negative correlation with per capita percentile category %secondary
   Dropout rate primary and Secondary-2014-15 have a positive correlation with per capita percentile category %Tertiary
   and Upper primary have negative correlation.

3. We can observe that Population and Dropout rates have negative correlation

Hypothesis based on above graphs

There is a high drop rate of Secondary category according to analysis students are dropping study between class 5-8 so it seems to be due to their financial problems they are dropping their study. If Government give more attention to the education and some concise in rules and regulation and facilities then dropping rate will be reduced.

~ THANK YOU~