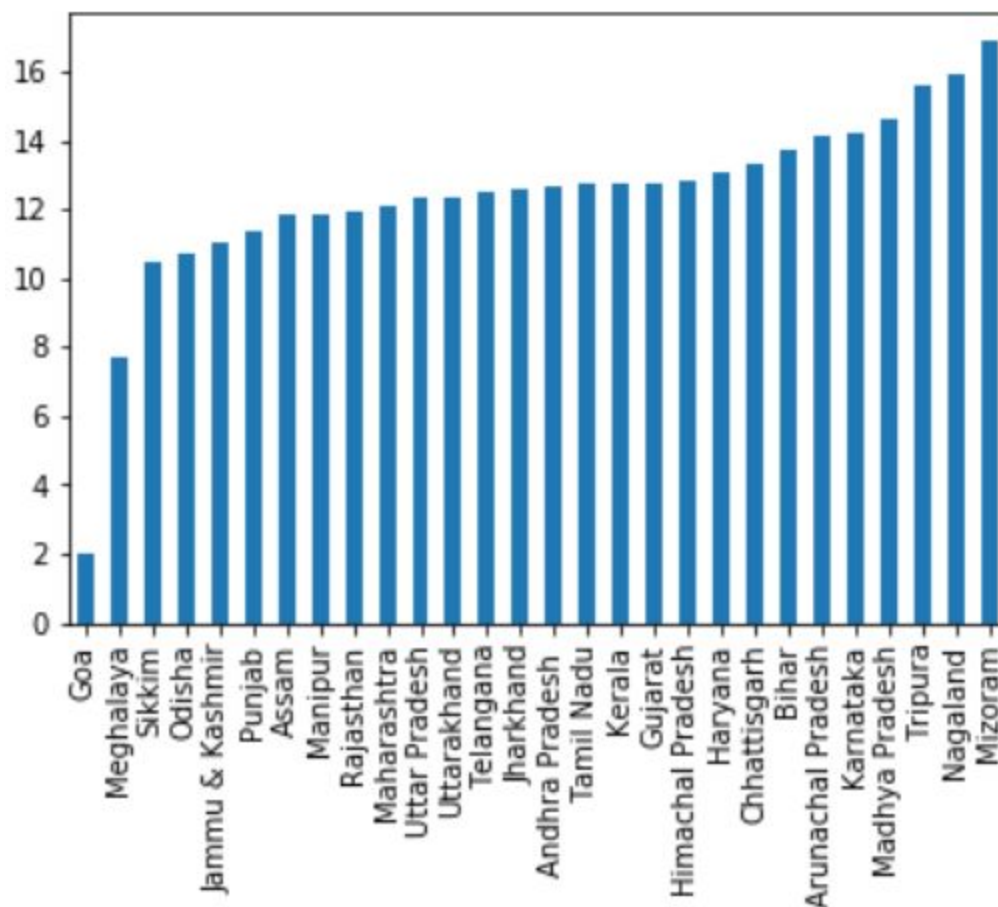


GDP Analysis Assignment

Part 1-A

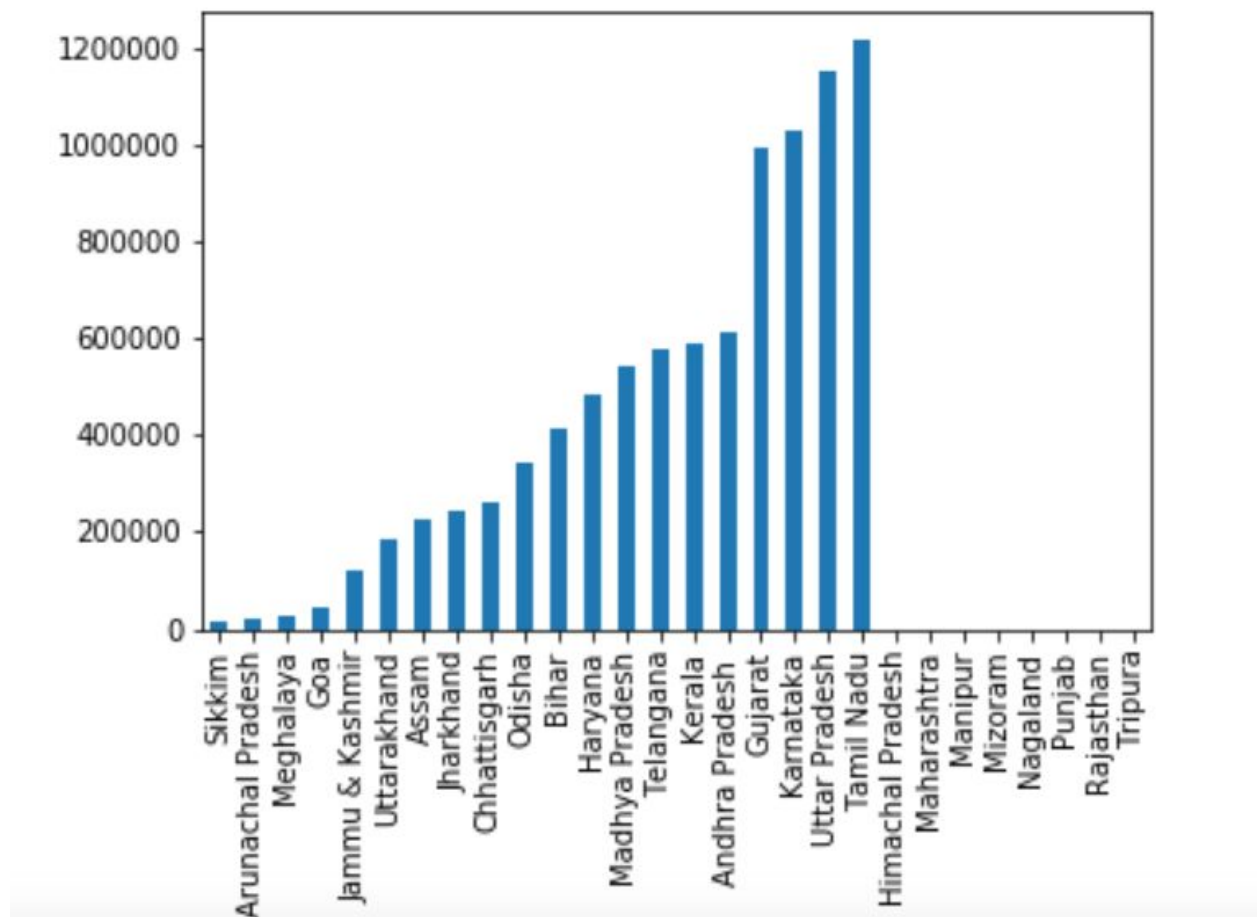
Q) Which state has been growing consistently at fast and which state is struggling?



From the above graph plotted on Jupyter States like Mizoram, Nagaland, Tripura and Madhya Pradesh have been doing well.

However, Goa, Meghalaya, Sikkim & Odisha are struggling over the period of time

**Q) Plot the total GDP of the states for the year 2015-16:
Identify the top-5 and the bottom-5 states based on total GDP**



The top 5 states for the year 2015-16: are listed below

1. Tamil Nadu
2. Uttar Pradesh

3. Karnataka
4. Gujrat
5. Andhra Pradesh

The bottom 5 states for the year 2015-16: are listed below

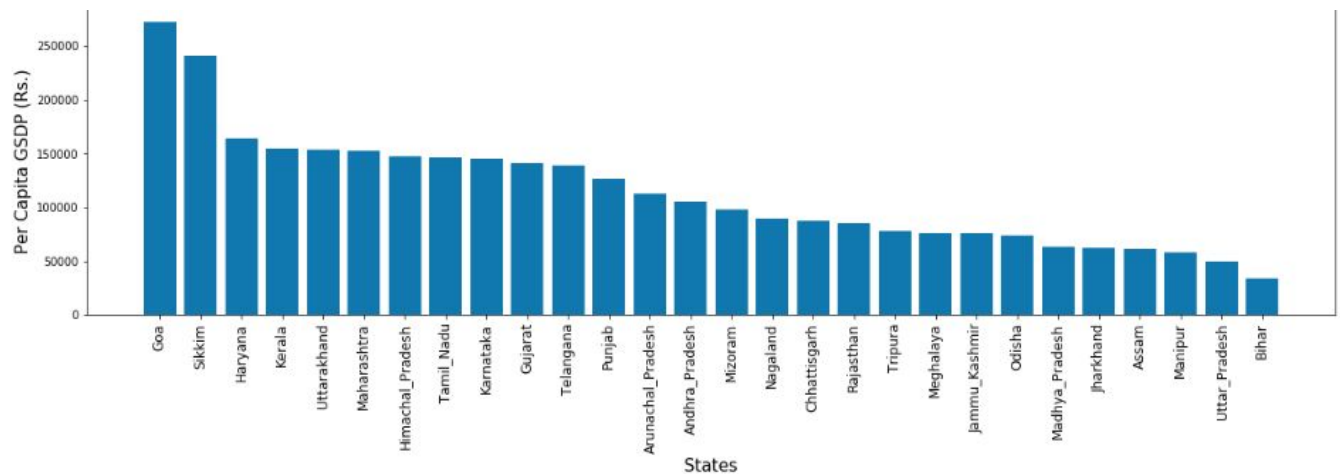
1. Sikkim
2. Arunachal Pradesh
3. Meghalaya
4. Goa
5. Jammu & Kashmir

However, there was no Data for the states of Himachal Pradesh, Maharashtra, Manipur, Mizoram, Nagaland, Punjab, Rajasthan, Tripura hence couldn't get the graph for these states.

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Part 1B

Q) Plot the GDP per capita for all the states.



From the above graph top-5 states based GDP per capita are as follows

1. Goa
2. Sikkim
3. Haryana

4. Kerala
5. Uttarakhand

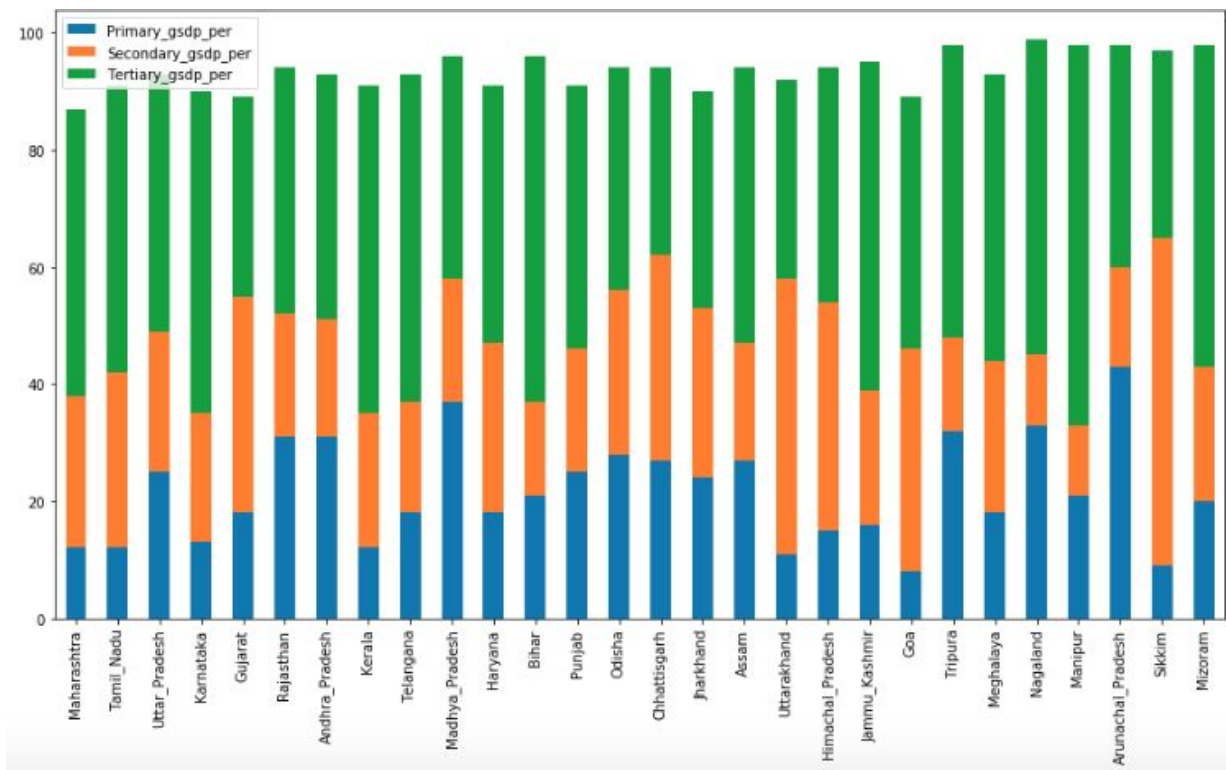
And bottom 5 states based on GDP per capita are as follows

1. Jharkhand
2. Assam
3. Manipur
4. Uttar_Pradesh
5. Bihar

Q) Find the ratio of highest per capita GDP to the lowest per capita GDP.

8.004741709371503

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



Q)Categorise the states into four categories based on GDP per capita (C1, C2, C3, C4 - C1 would have the highest per capita GDP, C4 the lowest). The quantile values are (0.20,0.5, 0.85, 1), i.e. the states lying between the 85th and the 100th percentile are in C1, those between 50th and 85th percentile are in C2 and so on.

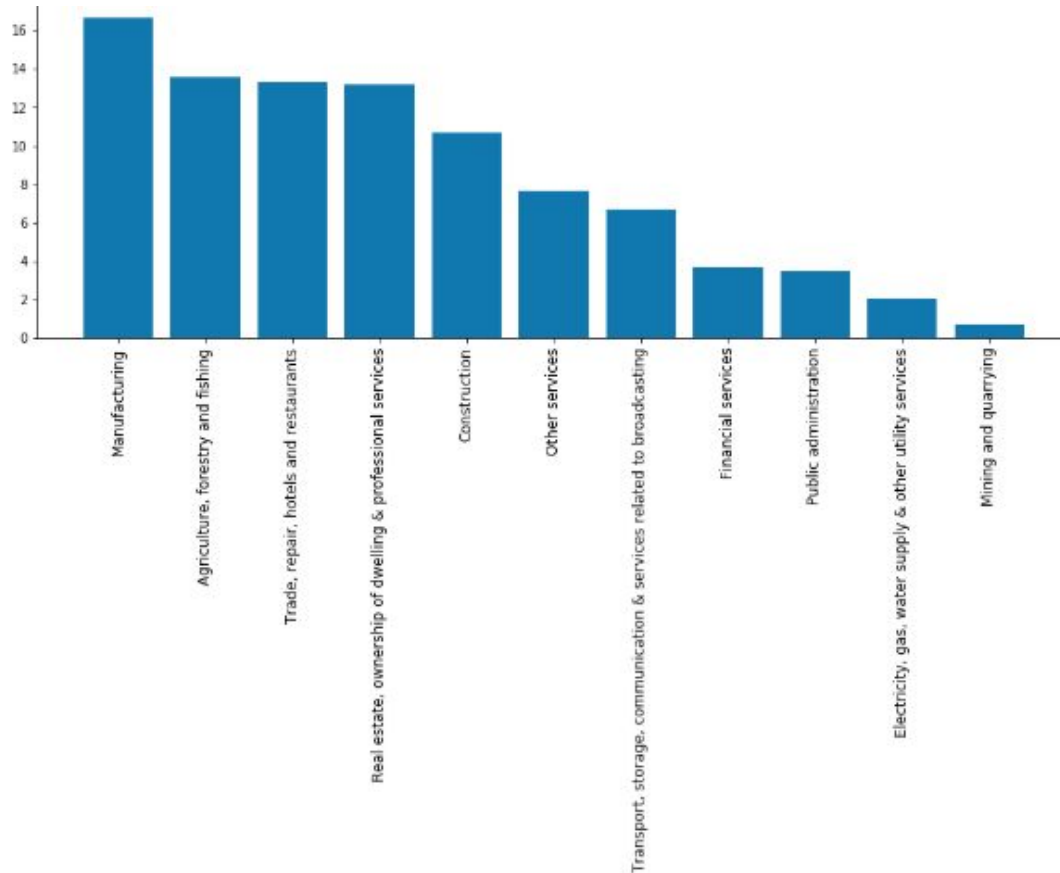
This has been shown in the Jupyter file GDP_ASS_AZHAR_1B

Q)For each category C1, C2, C3, C4:

Find the top 3/4/5 sub-sectors (such as agriculture, forestry and fishing, crops, manufacturing

From the the dataframe we can say that Andhra Pradesh tops in agriculture, forestry and fishing, crops, manufacturing.

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



Manufacturing sector is performing the best among all which contributes to 16.61

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Part -2

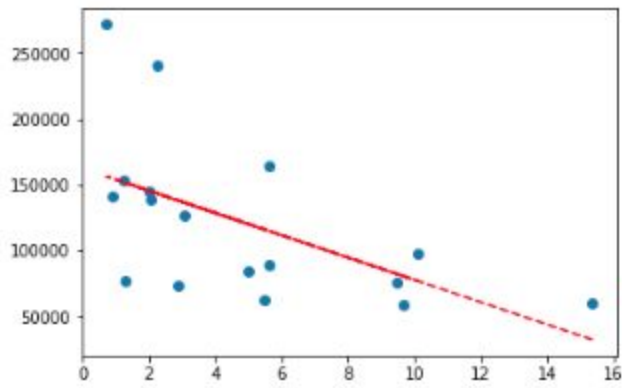
In this part of the analysis, you will investigate whether there is any relationship between per capita GDP with drop-out rates in education.

Merge this data with the data from part-1-b. Take care of the common spelling mistakes.

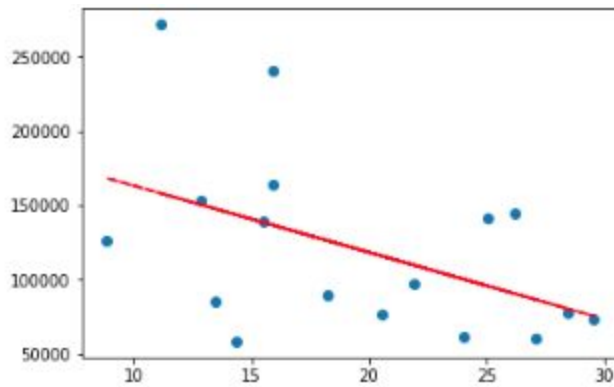
Take 'Per Capita GSDP (Rs.)', 'Primary/ UpperPrimary/ Secondary - 2014-2015' column for analysis.

Form at least one reasonable hypothesis for the observations from the data

1. Any correlation between Primary and Per capita gsdp



2. Correlation between Secondary & Per capita gsdp



3. Any correlation between Upper Primary and Per capita gsdp

