

GDP Analysis - Assignment

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Data I-A: This dataset contains the GSDP (Gross State Domestic Product) data for the states and union territories.

The Details



Materials

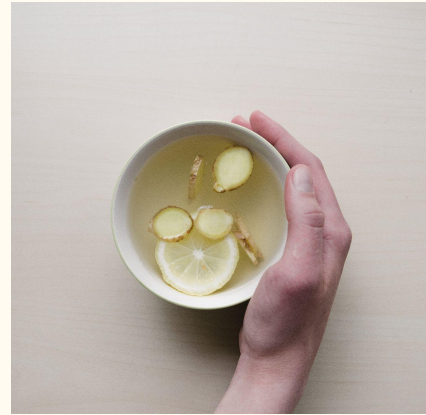
Used

- Python3.7
- Anaconda
- Python
- Python libarries



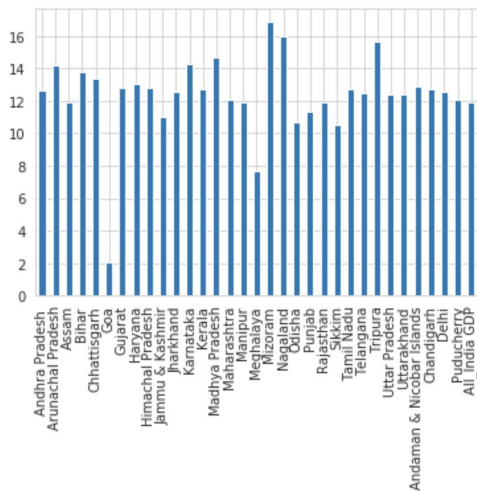
Procedure

1. For the analysis below, use the **Data I-A**.
2. Remove the rows: '(% Growth over the previous year)' and 'GSDP - CURRENT PRICES (` in Crore)' for the year 2016-17.
3. Calculate the average growth of states over the duration 2013-14, 2014-15 and 2015-16 by taking the mean of the row '(% Growth over previous year)'. Compare the calculated value and plot it for the states. Make appropriate transformations if necessary to plot the data. Report the average growth rates of the various states:
 - a. Which states have been growing consistently fast, and which ones have been struggling?
 - b. Curiosity exercise - what has been the average growth rate of your home state, and how does it compare to the national average over this duration?
4. Plot the total GDP of the states for the year 2015-16:
 - a. Identify the top-5 and the bottom-5 states based on total GDP

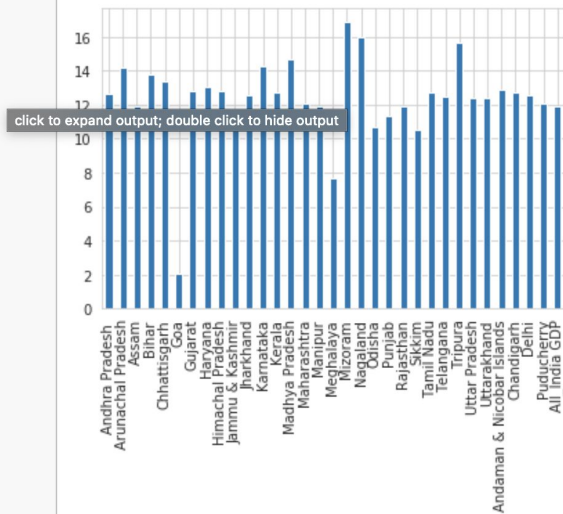


Growth 2012 - 2013

```
In [106]: #growth 2012-2013
growth.mean(axis=1).plot.bar(x="2012-2013" )
plt.show()
```

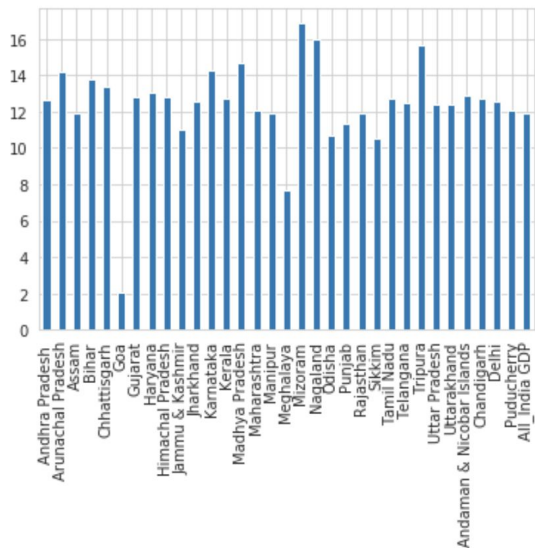


```
In [107]: #growth 2013-2014
growth.mean(axis=1).plot.bar(x="2013-2014" )
plt.show()
```

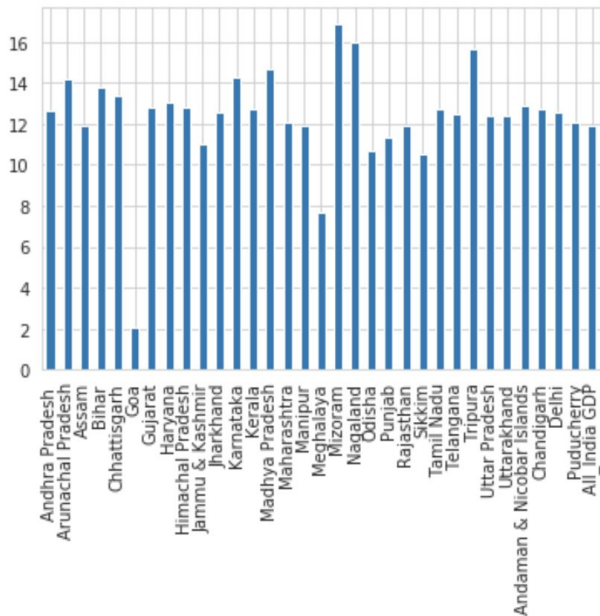


2015 and 2016

```
In [108]: #growth 2014-2015
growth.mean(axis=1).plot.bar(x="2014-2015" )
plt.show()
```



```
] : #growth 2015-2016
growth.mean(axis=1).plot.bar(x="2015-2016" )
plt.show()
```



Top Performers

	2012-2013	2013-2014	2014-2015	2015-2016
Madhya Pradesh	20.71	14.91	10.11	12.86
Gujarat	17.69	11.47	10.82	11.09
Haryana	16.63	15.45	9.18	10.91
Jharkhand	15.77	7.92	15.14	11.44
Mizoram	15.20	23.10	12.30	NaN
Chandigarh	15.14	14.71	12.33	8.84
Nagaland	15.03	21.98	10.85	NaN
Karnataka	14.56	18.24	12.70	11.42
Bihar	14.25	12.30	17.92	10.59
Uttarakhand	14.12	13.64	8.12	13.65

Bottom States

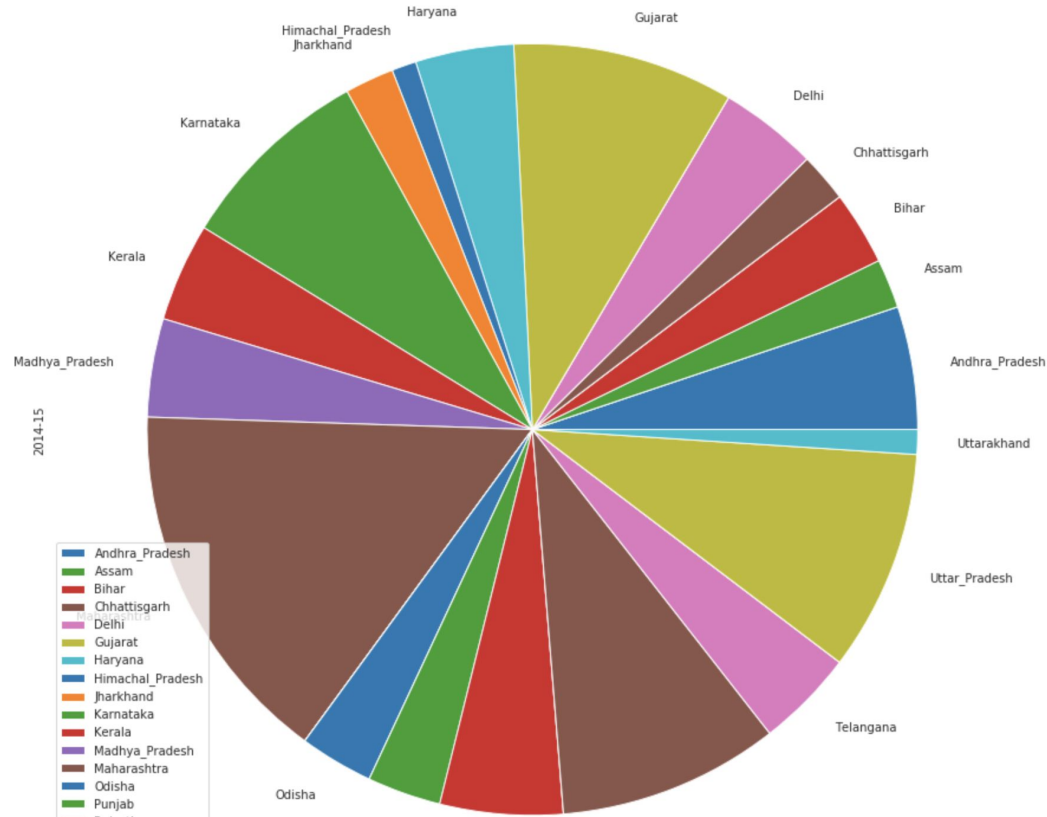
Jammu & Kashmir	11.31	10.09	4.70	17.91
Andaman & Nicobar Islands	11.13	16.68	10.89	NaN
Sikkim	10.51	12.35	9.72	9.39
Meghalaya	9.81	4.87	6.41	9.58
Assam	9.56	13.31	11.45	13.19
Andhra Pradesh	8.43	12.85	13.40	15.85
Manipur	6.45	17.83	11.39	NaN
Goa	-10.02	-5.77	13.12	10.75

Part1 B

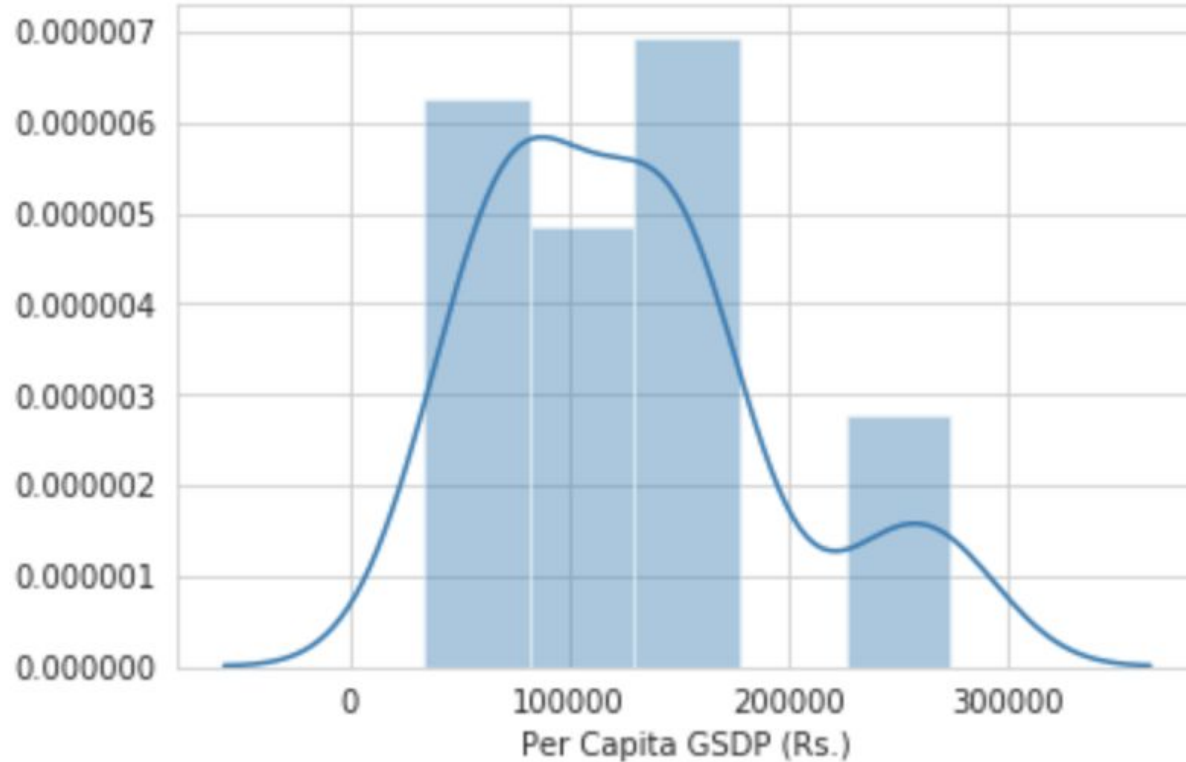
top 5 sectors that are Trade & Repair service,
Agriculture Forestry and Fishing,
Manufacturing
#real estate, Taxes on Products

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States with most contribution



GDP Per Capita



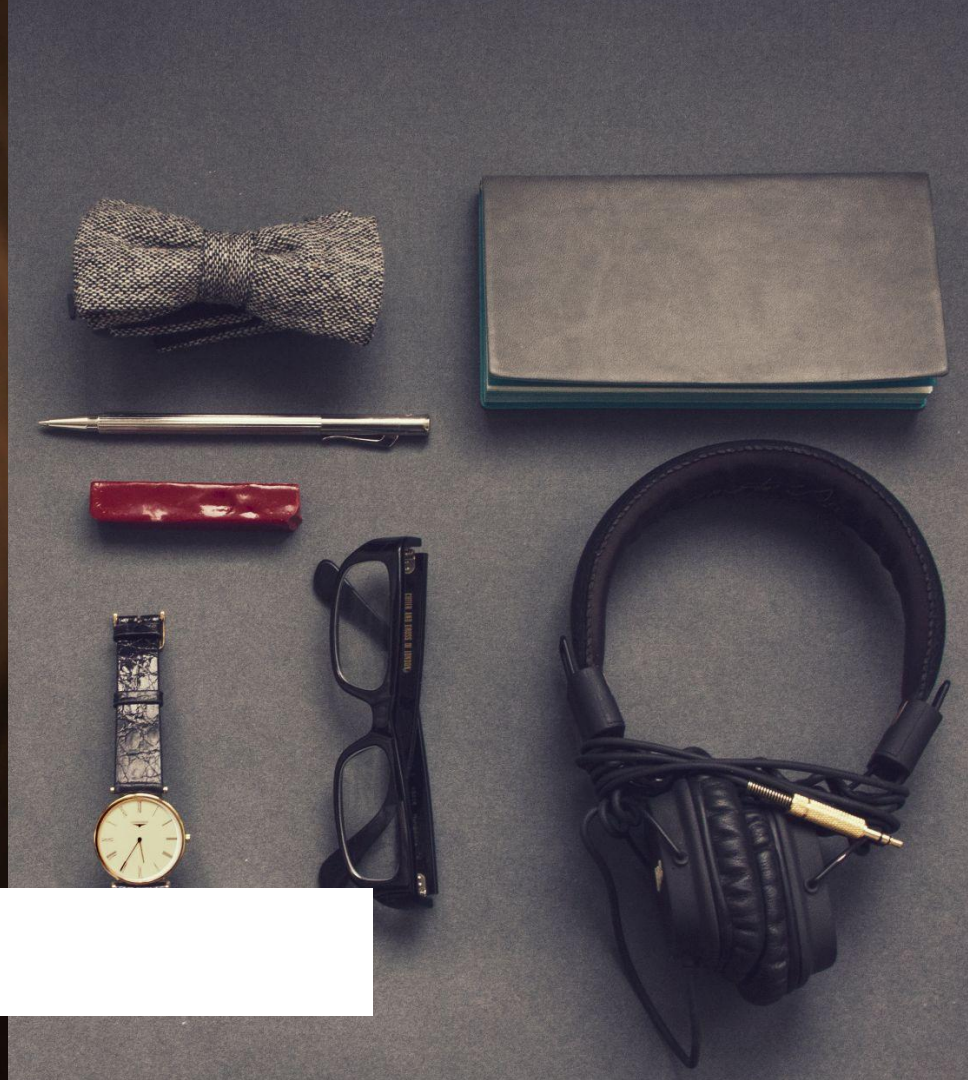
Part 2

Sector Co-Relations





The GDP Analysis - Thank you



Conclusion

It was a great learning experience working on this project. Learnt a Lot. Will get better at this next project