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For my EDA assignment, I am looking at GDP per capita per states. There are a total of 60 instances. 50 of those instances represent each state in the union, 1 of those instances is the national GDP per capita and the other 9 are regions of the United States. (ex. Rocky Mountain) The attribute in this data set is quantitative. The data set deals with GDP per capita which is a numerical observation.

Fips	Area	2013	2014	2015	2016	2017
0	United States	48534	49329	50301	50660	51337
1000	Alabama	36674	36473	36818	37158	37508
2000	Alaska	69711	67179	65971	63304	63610
4000	Arizona	38352	38534	38787	38940	39583
5000	Arkansas	35888	36265	36295	36502	36714
6000	California	53838	55571	57637	58974	60359
8000	Colorado	50523	52105	53007	52863	54026
9000	Connecticut	62438	62023	62796	62745	62633
10000	Delaware	60738	63555	64809	63578	63955
11000	District of Columbia	159264	159369	159530	159141	159607
12000	Florida	38018	38466	39334	39608	39842
13000	Georgia	42513	43467	44246	45238	45925
15000	Hawaii	49484	49591	51052	51964	52869
16000	Idaho	34787	35173	35679	36256	36441
17000	Illinois	51919	52984	53709	54308	55102
18000	Indiana	43876	44818	44721	45717	46427
19000	Iowa	48034	49688	51379	52248	52284
20000	Kansas	45468	46235	46792	47548	47435
21000	Kentucky	38259	38336	38419	38736	39277
22000	Louisiana	43721	44475	44751	44440	44372
23000	Maine	37508	38149	38415	39125	39521
24000	Maryland	53751	54108	54661	55786	56375
25000	Massachusetts	61842	62528	64660	65168	66500
26000	Michigan	40992	41544	42594	43330	44201
27000	Minnesota	52023	53109	53257	54295	54805
28000	Mississippi	31952	31635	31714	32334	32447
29000	Missouri	42498	42527	42785	42736	43036
30000	Montana	38567	39319	40148	40041	39833
31000	Nebraska	51597	53109	54048	54660	54654
32000	Nevada	43074	43075	44057	44142	44812
33000	New Hampshire	48873	49623	51020	51827	52509
34000	New Jersey	55659	55563	56196	56428	56776
35000	New Mexico	39659	40769	41457	41334	41619
36000	New York	62320	63174	64286	64522	65220
37000	North Carolina	42909	43400	44180	44194	44706
38000	North Dakota	67755	70876	67618	64257	64911
39000	Ohio	45262	46671	47098	47419	48188
40000	Oklahoma	43317	45418	46370	44418	44535
41000	Oregon	48169	48130	49715	50751	51312
42000	Pennsylvania	48289	49228	50489	50978	51841
44000	Rhode Island	46367	46663	47519	47662	48314
45000	South Carolina	35716	36325	36952	37269	37637
46000	South Dakota	47003	47039	47980	48306	48004
47000	Tennessee	41513	41858	42902	43720	44348
48000	Texas	52007	52879	54200	53104	53737
49000	Utah	42306	43264	44392	44947	45493
50000	Vermont	42989	43222	43605	44354	44831
51000	Virginia	51112	50855	51486	51443	52124
53000	Washington	54197	55338	56617	57796	59333
54000	West Virginia	35772	36017	36233	36155	37353
55000	Wisconsin	45895	46456	47268	48063	48666
56000	Wyoming	60806	60853	61304	59327	61091
91000	New England	56689	57068	58477	58882	59637
92000	Mideast	57659	58353	59364	59756	60421
93000	Great Lakes	46076	47035	47644	48276	49034
94000	Plains	48092	49005	49473	49919	50145
95000	Southeast	40543	40910	41547	41867	42300
96000	Southwest	48205	49119	50214	49320	49902
97000	Rocky Mountain	45634	46727	47610	47653	48398
98000	Far West	53029	54362	56166	57319	58589

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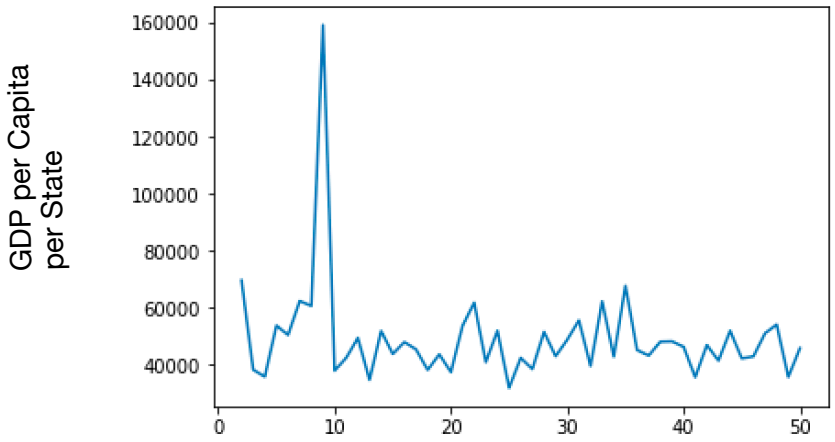
              Fips          2013          2014          2015
count     60.000000     60.000000     60.000000     60.000000
mean   37216.666667  49327.750000  49982.316667  50695.900000
std    27211.719600  16709.083832  16709.138828  16649.753721
min        0.000000  31952.000000  31635.000000  31714.000000
25%    17750.000000  42107.750000  42359.750000  42872.750000
50%    32500.000000  46685.000000  47037.000000  47812.000000
75%    48250.000000  52274.500000  53358.750000  54315.250000
max    98000.000000 159264.000000 159369.000000 159530.000000

              2016          2017
count     60.000000     60.000000
mean   50880.183333  51441.066667
std    16454.119857  16520.084703
min    32334.000000  32447.000000
25%    43622.500000  44311.250000
50%    48291.000000  48850.000000
75%    54941.500000  55420.250000
max   159141.000000 159607.000000
```

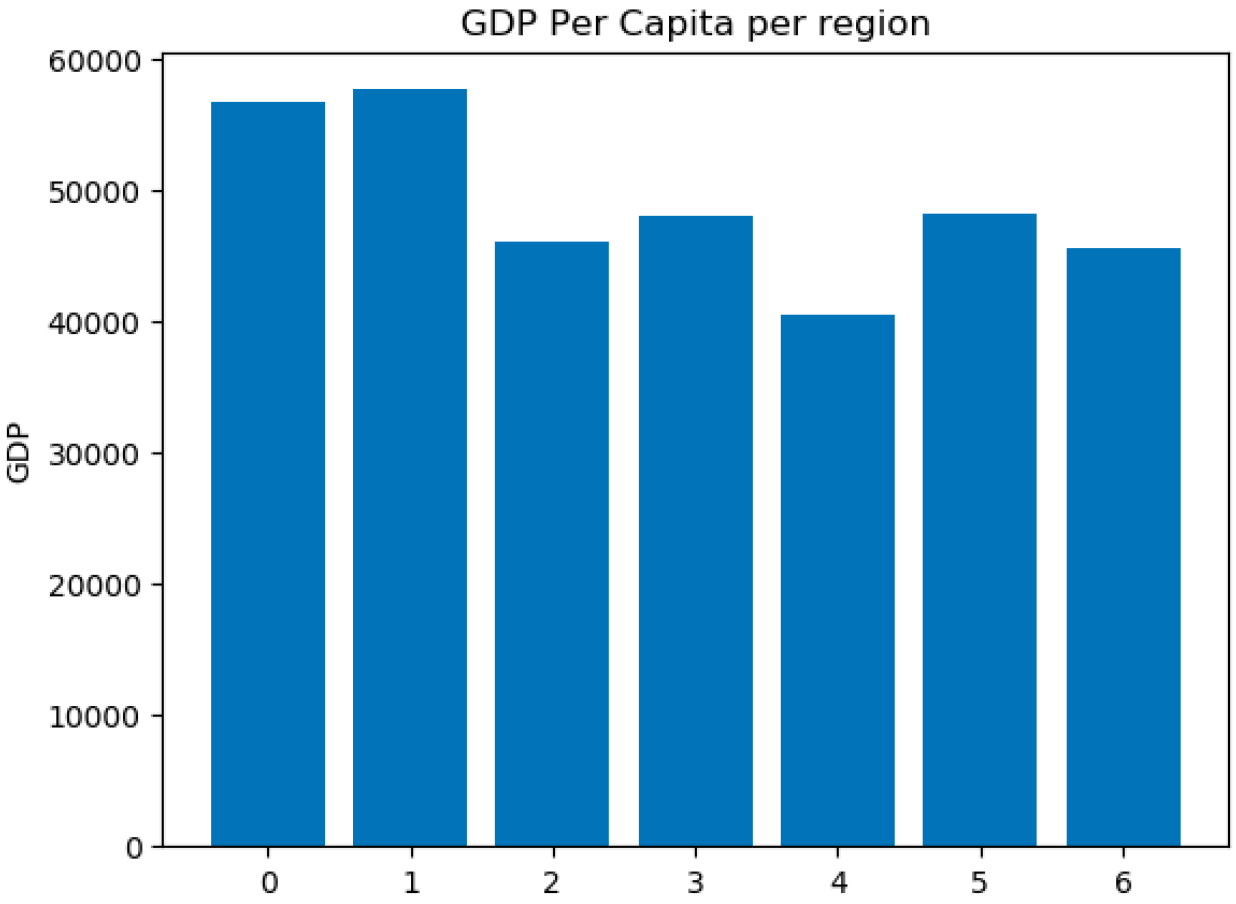
GDP Per Capita Per State (2013)



States by order of number, on the left side.

Simply looking at the spread of the data you can see that most states hover somewhere between high 30,000 to mid 70,000 range. This falls roughly within the summary data, which tells us that the mean is 50,000 plus or minus 1 and 2 thousand. (This isn't the the perfect ideal of measurement but due to complications with python it would not produce a good histogram that made categorizations in bins.)

There is one outlier to make note of in the data and that is Washington DC.(Or rather District of Colombia.) The reason for this could be many, Washington DC has become a very wealthy city over the past 20 years as it has seen improvements in both infrastructure and opportunities. Washington DC also receives and astounding amount of federal funds as it is the nations capital.



Key
0 = New England
1 = Mideast
2 = Great Lakes
3 = Plains
4 = Southeast
5 = Southwest
6 = Rocky Mountain

It is evidently clear that regions in New England and the Mideast have higher GDP's per capita. New York, Illinois, Massachusetts, and Ohio all have very stable economies and in the cases of some of the smaller states like Delaware and Rhode Island, they have smaller populations. Smaller populations and a high state GDP will result in a higher GDP per capita. The Southeast obviously has some of the

Sources

Data : https://www.kaggle.com/solorzano/gdp-per-capita-in-us-states/version/1#

Bar Graph: https://pythonspot.com/matplotlib-bar-chart/

Line Graph: https://medium.com/python-pandemonium/data-visualization-in-python-line-graph-in-matplotlib-9dfd0016d180