

Md Mahi Uddin

SAS programming

Final Exam Report

Question No 1: After importing data set, I replaced missing values and Clean Data. Used array function or do loop to clean data. I did not repeat same code for ten times. Worked on ten given variables.

Replacing missing vale: (10 rows are included here)

Listing of observations after replacing missing value with dot

Obs	State_FIPS_Code	County_FIPS_Code	CHSI_County_Name	CHSI_State_Name	CHSI_State_Abbr	Strata_ID_Number	No_Exercise	CI_Min_No_Exercise
1	1	1	Autauga	Alabama	AL	29	27.8	20.7
2	1	3	Baldwin	Alabama	AL	18	27.2	23.2
3	1	5	Barbour	Alabama	AL	51	.	.
4	1	7	Bibb	Alabama	AL	42	.	.
5	1	9	Blount	Alabama	AL	28	33.5	26.3
6	1	11	Bullock	Alabama	AL	75	.	.
7	1	13	Butler	Alabama	AL	78	24.5	15.5
8	1	15	Calhoun	Alabama	AL	8	29.2	25.1
9	1	17	Chambers	Alabama	AL	50	34.7	25.3
10	1	19	Cherokee	Alabama	AL	64	.	.

CI_Max_No_Exercise	Few_Fruit_Veg	CI_Min_Fruit_Veg	CI_Max_Fruit_Veg	Obesity	CI_Min_Obesity	CI_Max_Obesity	High_Blood_Pres	CI_Min_High_Blood_Pres
34.9	78.6	69.4	87.8	24.5	17.3	31.7	29.1	19.2
31.2	76.2	71.2	81.3	23.6	19.5	27.6	30.5	24.5
.	.	.	.	25.6	16.2	35	.	.
.	86.6	77.8	95.4	.	.	.	.	.
40.6	74.6	66.1	83	24.2	17.2	31.2	.	.
.
33.5	.	.	.	22	13	31	.	.
33.3	81.9	77.2	86.7	27	22.8	31.1	33.2	26.9
44	84.6	75.4	93.7	.	.	.	.	.
.

CI_Max_High_Blood_Pres	Smoker	CI_Min_Smoker	CI_Max_Smoker	Diabetes	CI_Min_Diabetes	CI_Max_Diabetes	Uninsured	Elderly_Medicare	Disabled_Medicare
39	26.6	19.1	34	14.2	9.1	19.3	5690	4762	1209
36.6	24.6	20.3	28.8	7.2	5.2	9.3	19798	22635	3839
.	17.7	10.2	25.1	6.6	2	11.3	5126	3288	1092
.	.	.	.	13.1	4.7	21.5	3315	2390	974
.	23.6	16.7	30.4	8.4	4.4	12.4	8131	5019	1300
.	.	.	.	.	.	.	2295	1433	504
.	27.3	17.6	37	9.5	4.4	14.6	4055	3150	952
39.6	25.5	21.3	29.7	11.2	8.4	13.9	16456	16440	5301
.	11.7	6.2	17.1	17.1	10.2	24.1	5533	5473	1497
.	23.6	14.2	33	13.3	6.8	19.8	3583	3086	854

Prim_Care_Phys_Rate	Dentist_Rate	Community_Health_Center_Ind	HPSA_Ind
45.3	22.6	1	2
67	30.8	1	2
45.8	24.6	1	2
41.8	18.6	1	1
16.2	10.8	2	1
54.3	18.1	1	1
43.3	19.3	1	2
75.8	41.9	1	2
53.6	22.6	1	2
28.5	12.2	2	1

Clean Data: (Keeping 10 selected variables with state name, only first 10 rows included here)

Listing of selected variable										
CHSI_State_Name	No_Exercise	Few_Fruit_Veg	Obesity	High_Blood_Pres	Smoker	Diabetes	Uninsured	Elderly_Medicare	Prim_Care_Phys_Rate	Dentist_Rate
Alabama	27.8	78.6	24.5	29.1	26.6	14.2	5690	4762	45.3	22.6
Alabama	27.2	76.2	23.6	30.5	24.6	7.2	19798	22635	67	30.8
Alabama	.	.	25.6	.	17.7	6.6	5126	3288	45.8	24.6
Alabama	.	86.6	.	.	.	13.1	3315	2390	41.8	18.6
Alabama	33.5	74.6	24.2	.	23.6	8.4	8131	5019	16.2	10.8
Alabama	.	.	.	.	.	.	2295	1433	54.3	18.1
Alabama	24.5	.	22	.	27.3	9.5	4055	3150	43.3	19.3
Alabama	29.2	81.9	27	33.2	25.5	11.2	16456	16440	75.8	41.9
Alabama	34.7	84.6	.	.	11.7	17.1	5533	5473	53.6	22.6
Alabama	.	.	.	.	23.6	13.3	3583	3086	28.5	12.2

Question No 2: Mean of ten variables for each state without repeating mean function ten times

Mean of selected variables			
The MEANS Procedure			
CHSI_State_Name	N Obs	Variable	Mean
Alabama	67	No_Exercise	29.7950000
		Few_Fruit_Veg	80.0800000
		Obesity	26.8975610
		High_Blood_Pres	31.6000000
		Smoker	23.8229167
		Diabetes	9.6515625
		Uninsured	9946.93
		Elderly_Medicare	8486.25
		Prim_Care_Phys_Rate	49.7582090
		Dentist_Rate	23.9776119
Alaska	27	No_Exercise	.
		Few_Fruit_Veg	.
		Obesity	.
		High_Blood_Pres	.
		Smoker	.
		Diabetes	.
		Uninsured	3608.78
		Elderly_Medicare	1694.09
		Prim_Care_Phys_Rate	62.0703704
		Dentist_Rate	40.8777778
—			
Arizona	15	No_Exercise	25.3571429
		Few_Fruit_Veg	73.3642857
		Obesity	22.3785714
		High_Blood_Pres	25.2230769
		Smoker	19.9785714
		Diabetes	7.7000000
		Uninsured	63148.73
		Elderly_Medicare	41848.53
		Prim_Care_Phys_Rate	52.8400000
		Dentist_Rate	26.4133333
Arkansa	75	No_Exercise	31.2640625
		Few_Fruit_Veg	80.2101695
		Obesity	25.7363636
		High_Blood_Pres	28.8031250
		Smoker	26.5746269
		Diabetes	8.1770270
		Uninsured	5683.59
		Elderly_Medicare	4830.21
		Prim_Care_Phys_Rate	52.0680000
		Dentist_Rate	26.5240000
Califor	58	No_Exercise	21.3657895
		Few_Fruit_Veg	72.2068966
		Obesity	20.0921053
		High_Blood_Pres	23.4100000
		Smoker	15.4153846
		Diabetes	6.6422222
		Uninsured	110164.72
		Elderly_Medicare	61300.47
		Prim_Care_Phys_Rate	78.5293103
		Dentist_Rate	47.1413793

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Colorad	64	No_Exercise Few_Fruit_Veg Obesity High_Blood_Pres Smoker Diabetes Uninsured Elderly_Medicare Prim_Care_Phys_Rate Dentist_Rate	17.8774194 77.8730769 15.2567568 18.8884815 19.6333333 4.2833333 10424.29 6947.54 68.3812500 33.8857143
Connect	8	No_Exercise Few_Fruit_Veg Obesity High_Blood_Pres Smoker Diabetes Uninsured Elderly_Medicare Prim_Care_Phys_Rate Dentist_Rate	20.9375000 71.3250000 19.3125000 24.8500000 19.4375000 5.9875000 43486.25 57259.00 97.0750000 57.0000000
Delawar	3	No_Exercise Few_Fruit_Veg Obesity High_Blood_Pres Smoker Diabetes Uninsured Elderly_Medicare Prim_Care_Phys_Rate Dentist_Rate	25.9333333 79.1666667 23.4000000 28.9666667 23.8000000 8.0000000 30153.00 33950.00 70.4666667 31.1000000
Distric	1	No_Exercise Few_Fruit_Veg Obesity High_Blood_Pres Smoker Diabetes Uninsured Elderly_Medicare Prim_Care_Phys_Rate Dentist_Rate	22.2000000 68.1000000 21.3000000 26.7000000 20.4000000 7.8000000 . 63403.00 227.6000000 102.8000000
Florida	67	No_Exercise Few_Fruit_Veg Obesity High_Blood_Pres Smoker Diabetes Uninsured Elderly_Medicare Prim_Care_Phys_Rate Dentist_Rate	26.4169811 76.4340000 22.2228070 28.8282051 23.0905660 8.5453125 37420.84 38174.27 56.1746269 26.1835821
Georgia	159	No_Exercise Few_Fruit_Veg Obesity High_Blood_Pres Smoker Diabetes Uninsured Elderly_Medicare Prim_Care_Phys_Rate Dentist_Rate	28.0476744 80.0448718 25.1233333 25.8883721 23.0212121 8.6613636 8061.11 4938.38 51.1201258 19.6509434

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Hawaii	5	No_Exercise Few_Fruit_Veg Obesity High_Blood_Pres Smoker Diabetes Uninsured Elderly_Medicare Prim_Care_Phys_Rate Dentist_Rate	19.1000000 76.2500000 18.1250000 23.8500000 20.1500000 6.6500000 39445.25 39252.50 80.9600000 46.8400000
Idaho	44	No_Exercise Few_Fruit_Veg Obesity High_Blood_Pres Smoker Diabetes Uninsured Elderly_Medicare Prim_Care_Phys_Rate Dentist_Rate	22.6214286 78.4307892 22.6523810 25.4647059 19.4341463 6.4142857 4876.23 3553.60 44.6795455 32.4386364
Illinois	102	No_Exercise Few_Fruit_Veg Obesity High_Blood_Pres Smoker Diabetes Uninsured Elderly_Medicare Prim_Care_Phys_Rate Dentist_Rate	24.2630435 78.8137931 22.8226415 23.3172414 22.8254902 7.7098765 15915.50 14170.84 51.7843137 33.1382353
Indiana	92	No_Exercise Few_Fruit_Veg Obesity High_Blood_Pres Smoker Diabetes Uninsured Elderly_Medicare Prim_Care_Phys_Rate Dentist_Rate	27.3700000 79.7863636 25.6687500 25.1363636 26.3670732 7.8876404 7552.09 8112.65 55.0467391 30.1858696
Iowa	99	No_Exercise Few_Fruit_Veg Obesity High_Blood_Pres Smoker Diabetes Uninsured Elderly_Medicare Prim_Care_Phys_Rate Dentist_Rate	25.2289157 81.1804938 24.0891566 25.3121951 21.1422222 6.9494949 2539.34 4299.26 44.6535354 38.6808081
Kansas	105	No_Exercise Few_Fruit_Veg Obesity High_Blood_Pres Smoker Diabetes Uninsured Elderly_Medicare Prim_Care_Phys_Rate Dentist_Rate	27.5279412 81.5775510 23.2661972 24.3032258 19.5126582 7.3969388 3024.21 3282.50 51.2047619 31.8019048

Kentuck	120	No_Exercise Few_Fruit_Veg Obesity High_Blood_Pres Smoker Diabetes Uninsured Elderly_Medicare Prim_Care_Phys_Rate Dentist_Rate	35.3870000 81.8388350 26.5313725 30.3884407 31.4134021 8.2410256 4444.01 4158.57 51.5033333 30.7175000
Louisia	64	No_Exercise Few_Fruit_Veg Obesity High_Blood_Pres Smoker Diabetes Uninsured Elderly_Medicare Prim_Care_Phys_Rate Dentist_Rate	35.4836364 84.0905660 27.6894737 29.5769231 24.6379310 8.7000000 11561.03 7870.17 52.9593750 25.9140625
Maine	16	No_Exercise Few_Fruit_Veg Obesity High_Blood_Pres Smoker Diabetes Uninsured Elderly_Medicare Prim_Care_Phys_Rate Dentist_Rate	23.7250000 72.3062500 22.0812500 24.7937500 22.8437500 7.1625000 6873.88 11529.81 89.8625000 38.6000000
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Marylan	24	No_Exercise Few_Fruit_Veg Obesity High_Blood_Pres Smoker Diabetes Uninsured Elderly_Medicare Prim_Care_Phys_Rate Dentist_Rate	24.9416667 72.6772727 23.6041667 27.8208333 21.6291667 7.5833333 27203.04 24542.71 86.2333333 43.6583333
Massach	14	No_Exercise Few_Fruit_Veg Obesity High_Blood_Pres Smoker Diabetes Uninsured Elderly_Medicare Prim_Care_Phys_Rate Dentist_Rate	21.7230769 70.4583333 17.7357143 24.6750000 19.2153846 5.7357143 42256.93 58704.57 119.2642857 58.1928571
Michiga	83	No_Exercise Few_Fruit_Veg Obesity High_Blood_Pres Smoker Diabetes Uninsured Elderly_Medicare Prim_Care_Phys_Rate Dentist_Rate	22.6253968 79.9000000 25.3616667 25.8777778 24.3607143 7.9921053 13408.05 14669.82 55.3036145 38.7963855

Minnesota	87	No_Exercise Few_Fruit_Veg Obesity High_Blood_Pres Smoker Diabetes Uninsured Elderly_Medicare Prim_Care_Phys_Rate Dentist_Rate	17.8833333 78.1214286 22.7923077 23.1881111 20.9315789 6.0621622 5137.30 6834.05 72.5873563 40.3126437
Mississ	82	No_Exercise Few_Fruit_Veg Obesity High_Blood_Pres Smoker Diabetes Uninsured Elderly_Medicare Prim_Care_Phys_Rate Dentist_Rate	32.7705882 83.7573770 28.7507463 31.7718750 24.7253521 9.9637500 5856.51 4091.61 45.2646341 23.5024390
Missour	115	No_Exercise Few_Fruit_Veg Obesity High_Blood_Pres Smoker Diabetes Uninsured Elderly_Medicare Prim_Care_Phys_Rate Dentist_Rate	28.9345238 81.0166667 24.8552941 27.0342857 25.9061728 8.0709091 5762.50 6437.56 36.8339130 27.3889665
Montana	56	No_Exercise Few_Fruit_Veg Obesity High_Blood_Pres Smoker Diabetes Uninsured Elderly_Medicare Prim_Care_Phys_Rate Dentist_Rate	24.2604651 77.1071429 21.3976744 24.5612903 20.4042553 6.6021277 2550.82 2226.55 58.1428571 31.6517857
Nebrask	93	No_Exercise Few_Fruit_Veg Obesity High_Blood_Pres Smoker Diabetes Uninsured Elderly_Medicare Prim_Care_Phys_Rate Dentist_Rate	25.6507692 81.0981132 24.5015385 22.8800000 19.4442857 6.8848101 2107.30 2687.07 51.6903226 40.5956989
Nevada	17	No_Exercise Few_Fruit_Veg Obesity High_Blood_Pres Smoker Diabetes Uninsured Elderly_Medicare Prim_Care_Phys_Rate Dentist_Rate	22.4500000 80.5250000 22.9928571 26.1111111 25.0384615 6.7357143 19031.47 13906.06 49.1705882 20.3470588

New Ham	10	No_Exercise Few_Fruit_Veg Obesity High_Blood_Pres Smoker Diabetes Uninsured Elderly_Medicare Prim_Care_Phys_Rate Dentist_Rate	20.8700000 71.5100000 20.5000000 24.6000000 22.6800000 6.2800000 10079.10 15196.70 101.8200000 44.6200000
New Jer	21	No_Exercise Few_Fruit_Veg Obesity High_Blood_Pres Smoker Diabetes Uninsured Elderly_Medicare Prim_Care_Phys_Rate Dentist_Rate	26.4095238 73.1809524 21.1571429 26.3904762 20.1952381 7.1523810 49022.62 51087.10 92.4523810 57.2571429
New Mex	33	No_Exercise Few_Fruit_Veg Obesity High_Blood_Pres Smoker Diabetes Uninsured Elderly_Medicare Prim_Care_Phys_Rate Dentist_Rate	25.7733333 79.1500000 21.5870968 22.4458333 22.7103448 7.4451613 12929.42 6393.27 57.0030303 25.1242424

New Yor	62	No_Exercise Few_Fruit_Veg Obesity High_Blood_Pres Smoker Diabetes Uninsured Elderly_Medicare Prim_Care_Phys_Rate Dentist_Rate	24.6203704 74.8477273 22.4310345 25.9666667 23.8696429 7.3393443 42848.76 38072.92 81.4129032 45.6709677
North C	100	No_Exercise Few_Fruit_Veg Obesity High_Blood_Pres Smoker Diabetes Uninsured Elderly_Medicare Prim_Care_Phys_Rate Dentist_Rate	28.1855422 78.7128571 24.9137500 28.3274510 25.3975000 8.9144330 11275.03 9802.08 65.0480000 24.6780000
North D	53	No_Exercise Few_Fruit_Veg Obesity High_Blood_Pres Smoker Diabetes Uninsured Elderly_Medicare Prim_Care_Phys_Rate Dentist_Rate	26.4162791 78.3000000 24.1333333 25.1088966 19.7666667 6.9702128 1136.23 1829.58 67.4981132 37.8792453

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Ohio	88	No_Exercise Few_Fruit_Veg Obesity High_Blood_Pres Smoker Diabetes Uninsured Elderly_Medicare Prim_Care_Phys_Rate Dentist_Rate	24.3743590 78.4487179 22.9050000 23.0466667 23.6111111 7.4794118 12971.23 16886.84 56.4034091 31.5250000
Oklahom	77	No_Exercise Few_Fruit_Veg Obesity High_Blood_Pres Smoker Diabetes Uninsured Elderly_Medicare Prim_Care_Phys_Rate Dentist_Rate	32.7153846 84.3844828 25.5984615 30.9653846 26.8890625 8.6600000 7529.96 5742.19 38.8818182 28.5324675
Oregon	36	No_Exercise Few_Fruit_Veg Obesity High_Blood_Pres Smoker Diabetes Uninsured Elderly_Medicare Prim_Care_Phys_Rate Dentist_Rate	20.3900000 74.8653846 22.9133333 26.2800000 20.2181818 6.8909091 12791.53 12372.50 70.0833333 43.6638889

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Pennsylv	67	No_Exercise Few_Fruit_Veg Obesity High_Blood_Pres Smoker Diabetes Uninsured Elderly_Medicare Prim_Care_Phys_Rate Dentist_Rate	24.2918033 77.5703704 24.6655738 26.7707317 23.9790323 7.9546875 17807.15 27541.96 70.2298507 42.6402985
Rhode I	5	No_Exercise Few_Fruit_Veg Obesity High_Blood_Pres Smoker Diabetes Uninsured Elderly_Medicare Prim_Care_Phys_Rate Dentist_Rate	22.0800000 70.8400000 17.9400000 27.8200000 20.7600000 6.2400000 21163.80 29135.40 117.1800000 52.7000000
South C	46	No_Exercise Few_Fruit_Veg Obesity High_Blood_Pres Smoker Diabetes Uninsured Elderly_Medicare Prim_Care_Phys_Rate Dentist_Rate	27.7386364 79.0975610 28.0522727 31.0114286 25.0688889 9.9866667 12690.15 10557.80 61.7456522 27.3913043

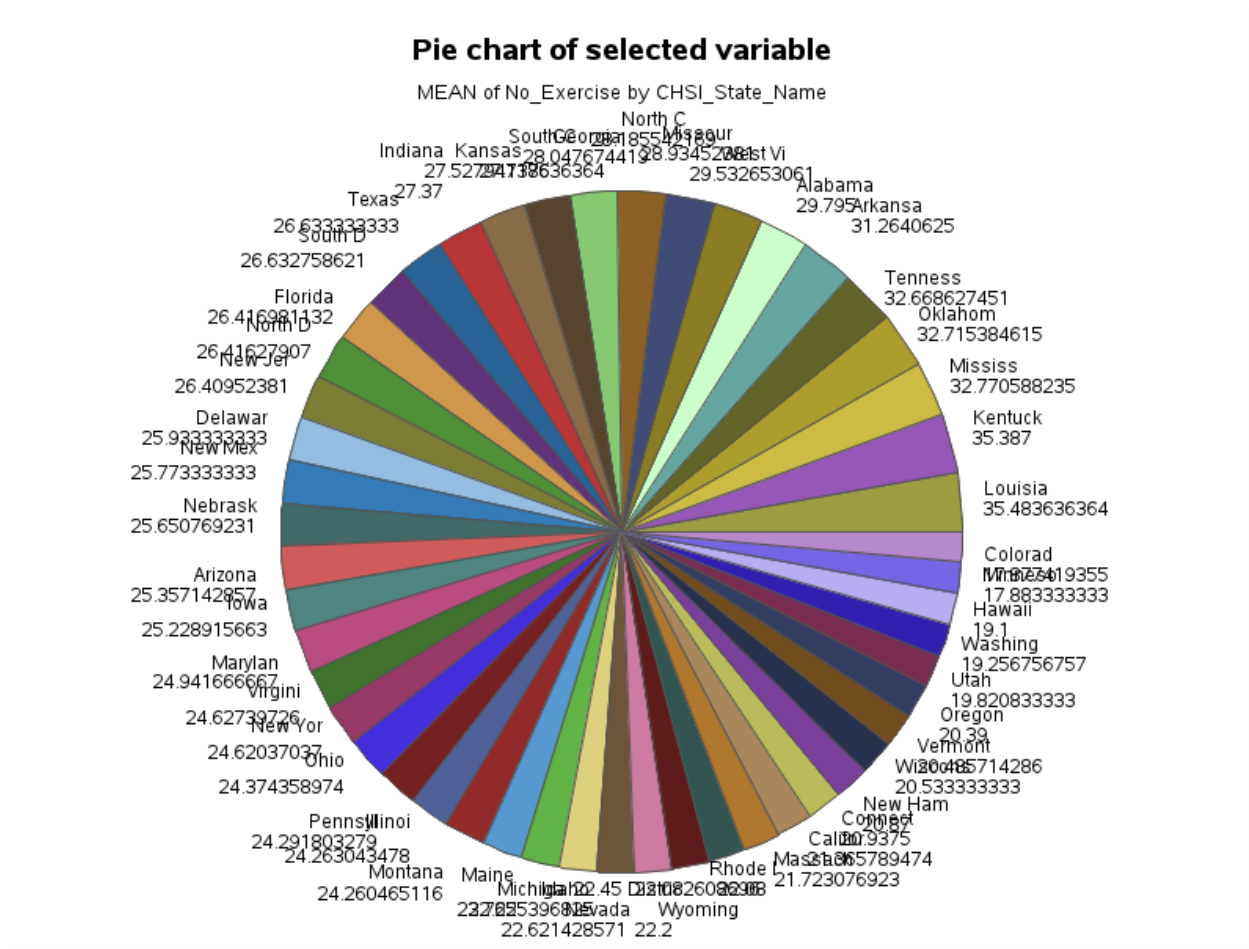
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South D	66	No_Exercise Few_Fruit_Veg Obesity High_Blood_Pres Smoker Diabetes Uninsured Elderly_Medicare Prim_Care_Phys_Rate Dentist_Rate	26.6327586 79.4928571 24.8672414 27.0905660 20.8796610 7.5830508 1344.18 1627.41 52.9803030 30.9696970
Tenness	95	No_Exercise Few_Fruit_Veg Obesity High_Blood_Pres Smoker Diabetes Uninsured Elderly_Medicare Prim_Care_Phys_Rate Dentist_Rate	32.6686275 71.6500000 24.9081633 30.0750000 27.0192308 8.9407407 7569.87 7395.54 52.8484211 25.0915789
Texas	254	No_Exercise Few_Fruit_Veg Obesity High_Blood_Pres Smoker Diabetes Uninsured Elderly_Medicare Prim_Care_Phys_Rate Dentist_Rate	26.6333333 78.8183673 24.6484375 23.9393939 21.3422535 8.1414414 15496.61 8374.75 40.9062992 22.5807087

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Utah	29	No_Exercise Few_Fruit_Veg Obesity High_Blood_Pres Smoker Diabetes Uninsured Elderly_Medicare Prim_Care_Phys_Rate Dentist_Rate	19.8208333 80.8380952 20.1041667 22.4950000 13.4680000 5.2153846 11119.14 6887.04 49.0896552 35.1379310
Vermont	14	No_Exercise Few_Fruit_Veg Obesity High_Blood_Pres Smoker Diabetes Uninsured Elderly_Medicare Prim_Care_Phys_Rate Dentist_Rate	20.4857143 70.2214286 20.0785714 23.5142857 20.6642857 5.8357143 3922.00 5573.71 108.2857143 44.0000000
Virgini	134	No_Exercise Few_Fruit_Veg Obesity High_Blood_Pres Smoker Diabetes Uninsured Elderly_Medicare Prim_Care_Phys_Rate Dentist_Rate	24.6273973 76.1340426 23.5876712 25.7180328 22.0388889 8.0936937 6376.72 5926.78 83.6641791 40.9791045

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Washing	39	No_Exercise Few_Fruit_Veg Obesity High_Blood_Pres Smoker Diabetes Uninsured Elderly_Medicare Prim_Care_Phys_Rate Dentist_Rate	19.2567568 76.7636364 22.9081081 26.0264706 20.2486486 6.9447368 20828.90 17095.54 67.8205128 36.6230769
West Vi	55	No_Exercise Few_Fruit_Veg Obesity High_Blood_Pres Smoker Diabetes Uninsured Elderly_Medicare Prim_Care_Phys_Rate Dentist_Rate	29.5326531 80.4697674 27.8061224 32.5406250 27.2038462 10.0345455 4234.47 4930.18 54.8127273 31.9690909
Wiscons	72	No_Exercise Few_Fruit_Veg Obesity High_Blood_Pres Smoker Diabetes Uninsured Elderly_Medicare Prim_Care_Phys_Rate Dentist_Rate	20.5333333 79.4529412 23.3067797 23.4552632 21.8786885 6.2838235 6928.99 9757.38 71.6569444 39.6263889
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Wyoming	23	No_Exercise Few_Fruit_Veg Obesity High_Blood_Pres Smoker Diabetes Uninsured Elderly_Medicare Prim_Care_Phys_Rate Dentist_Rate	22.0826087 78.1173913 21.1956522 24.6565217 21.3521739 5.7869565 3271.96 2585.13 68.9217391 41.5130435

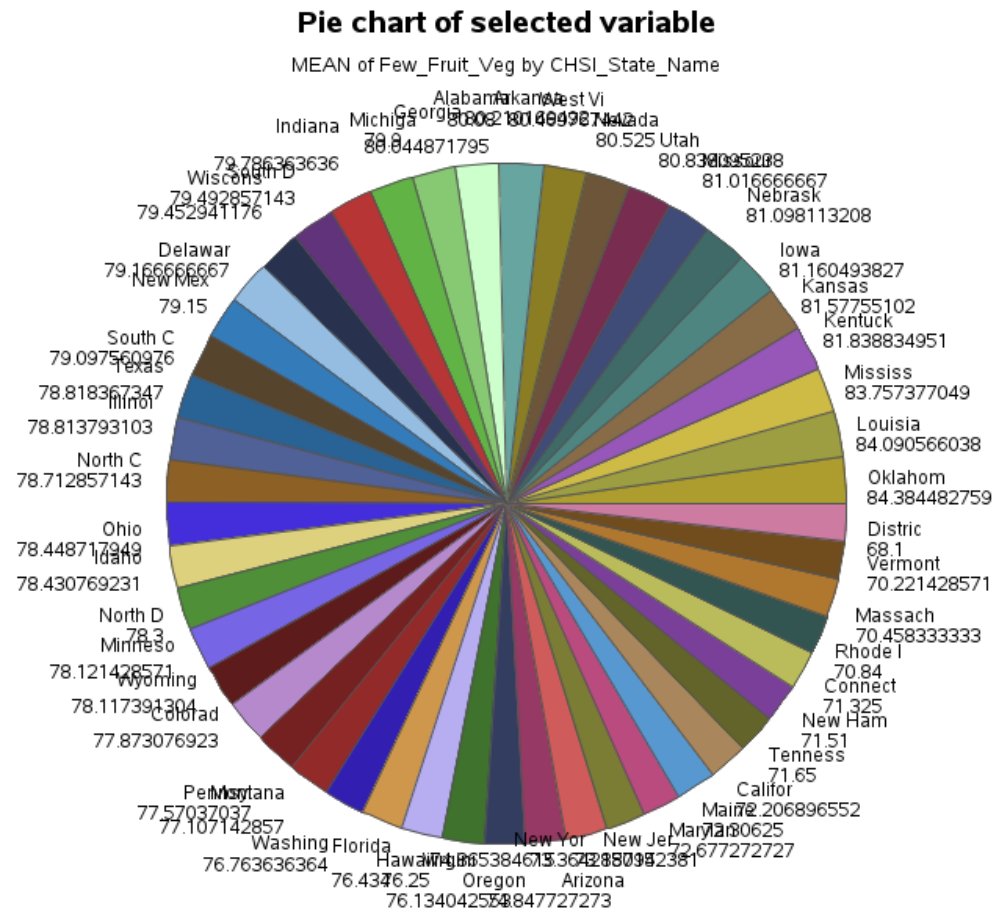
Ten Pie-Charts of the selected variables: I calculate all digit after decimal value.

1. No of exercise



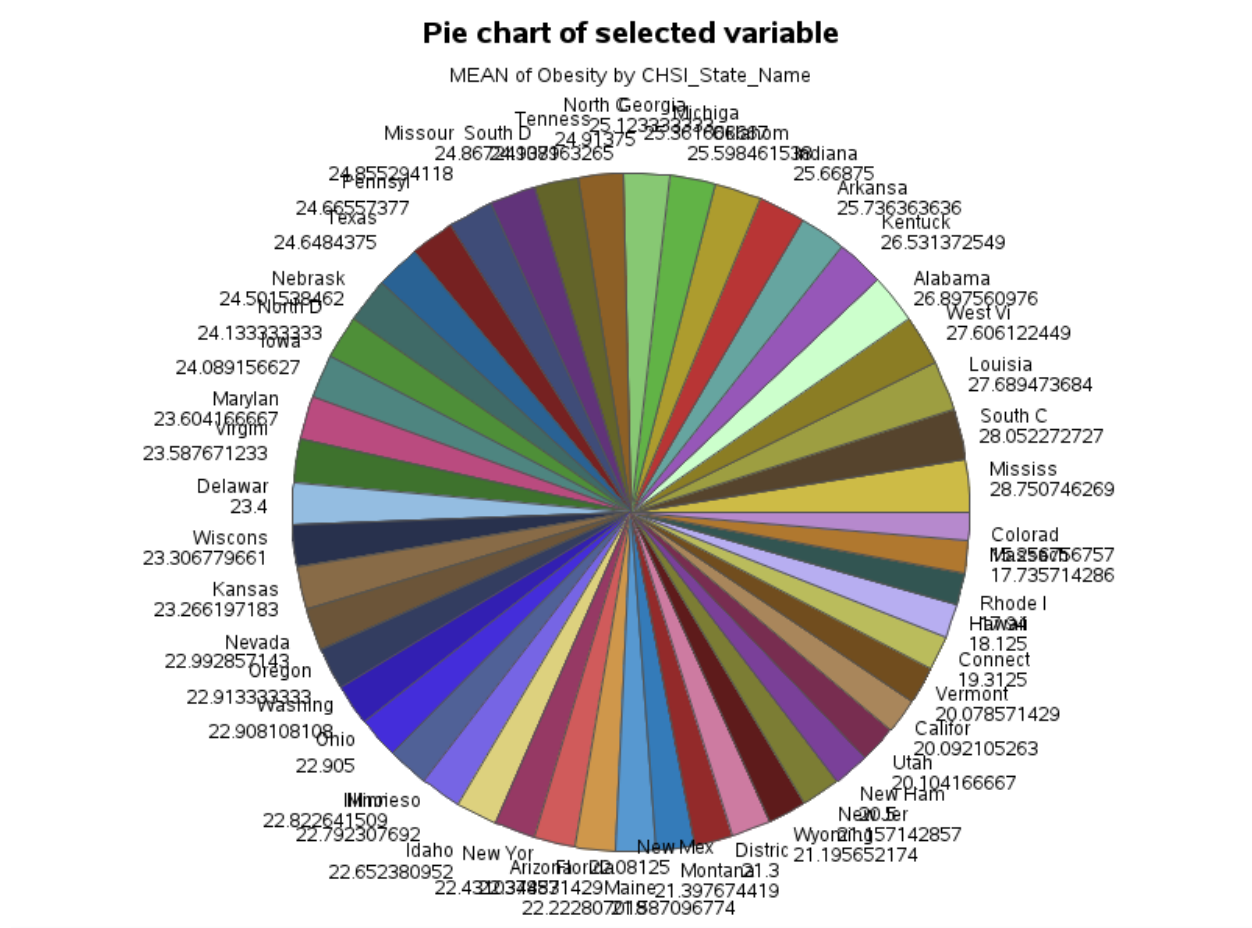
According to produced pie chart on Number of Exercise for all state in USA, Louisiana has the highest number while Colorado has the lowest position,

2. Few Fruit Vegetables



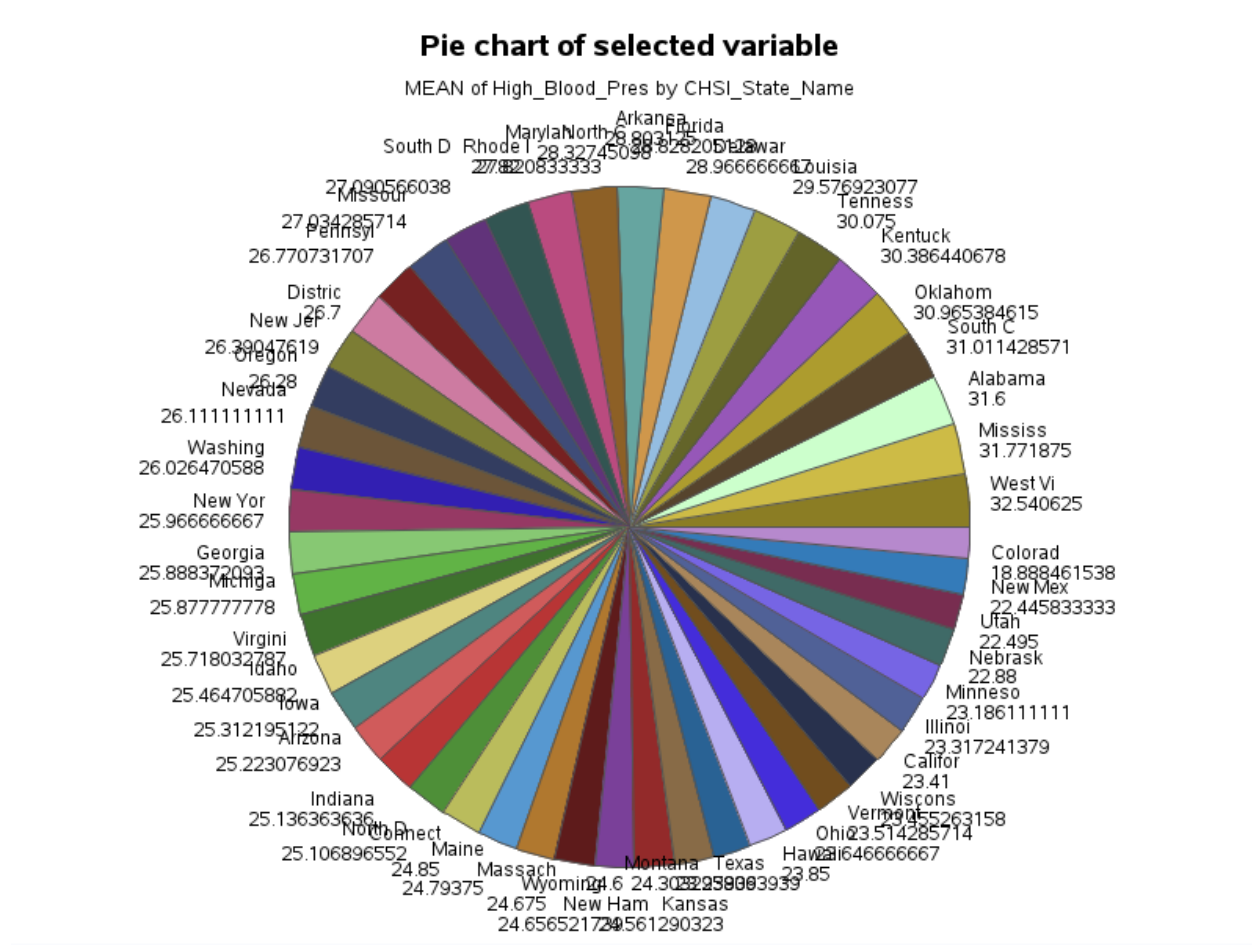
According to produced pie chart on few fruits or vegetables for all state in USA, the mean of Oklahoma is the highest number and District has the lowest mean compare with other state.

3. Obesity



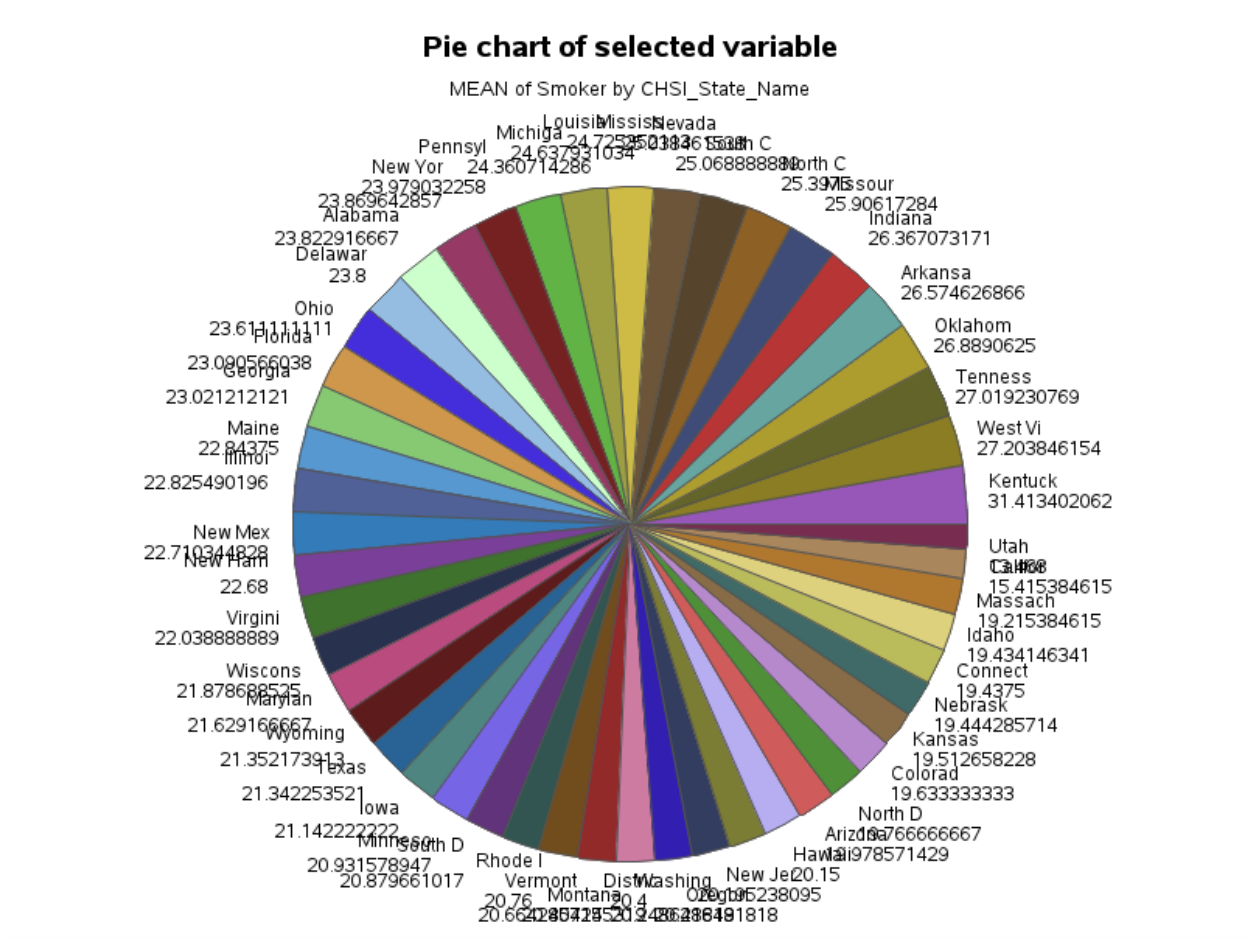
According to produced pie chart on mean obesity data for all state in USA, the average of obesity is highest in Mississippi and lowest in Colorado.

4. High blood pressure



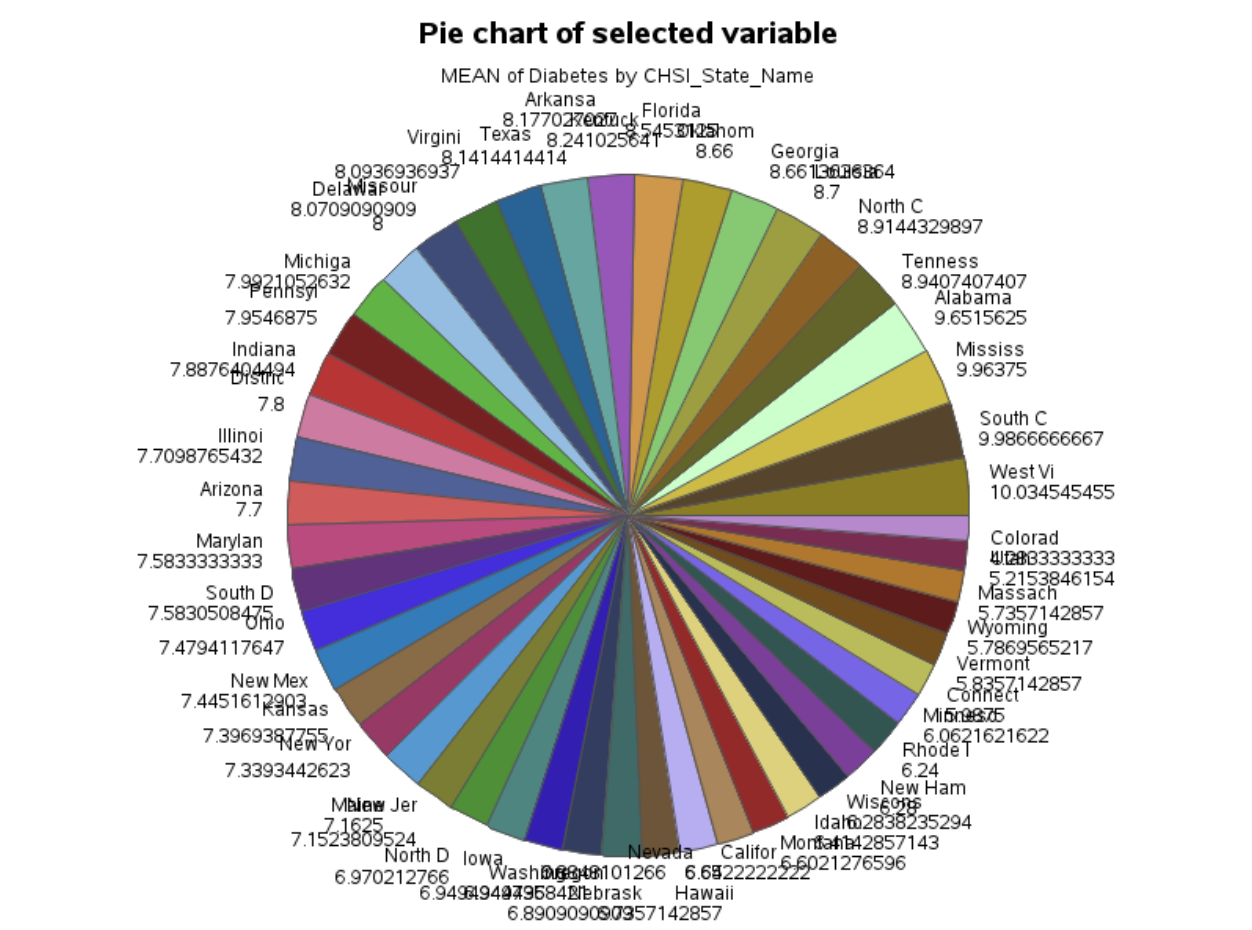
According to produced pie chart on high blood pressure data for all state in USA, the mean of blood pressure(individuals) is highest in west Virginia and lowest average is in Colorado.

5. Smoker



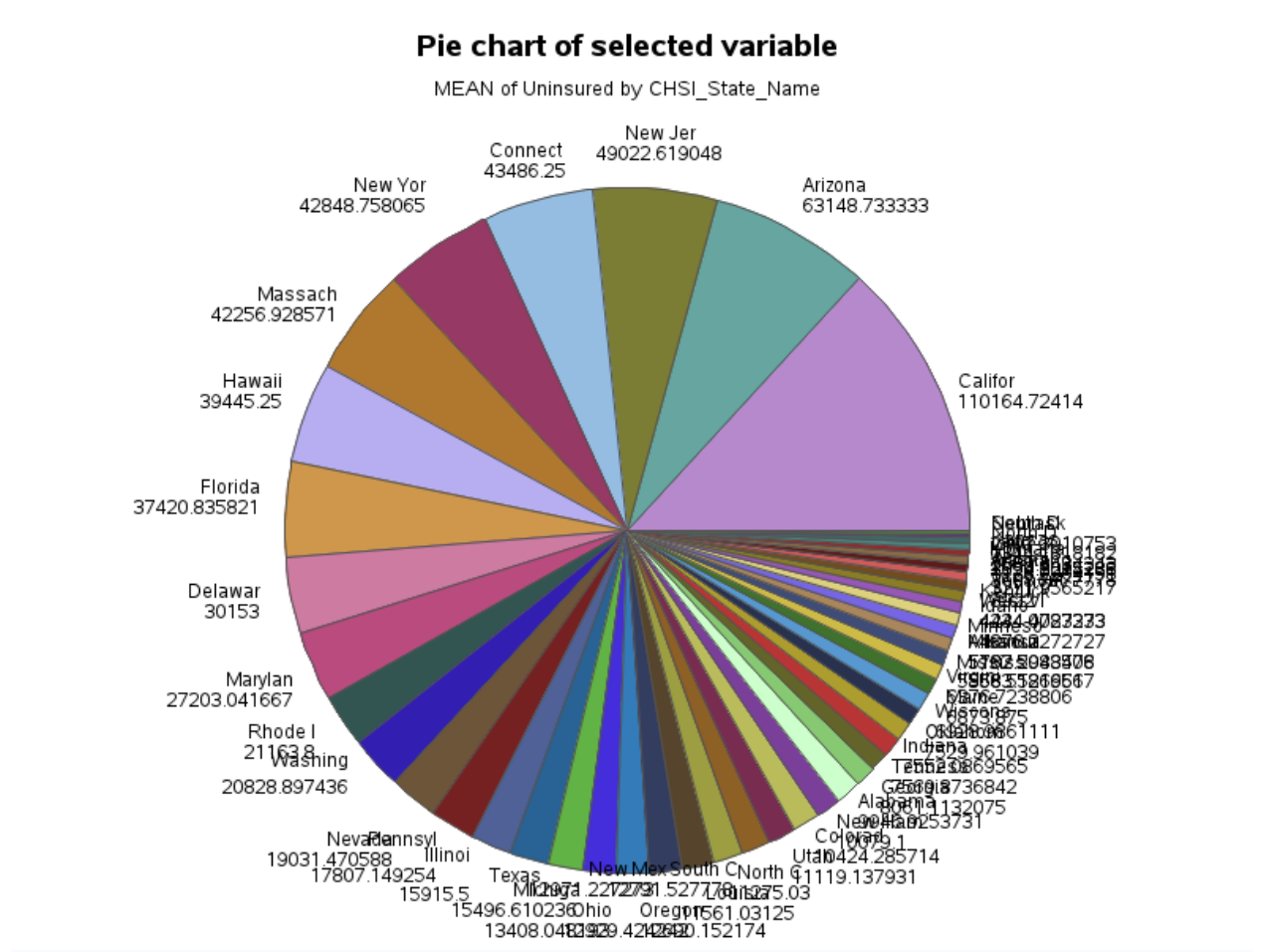
According to produced pie chart on smoker data for all state in USA, the highest mean of the number of adult smoker is in Kentucky and lowest mean of the number of smoker is in Utah.

6. Diabetes



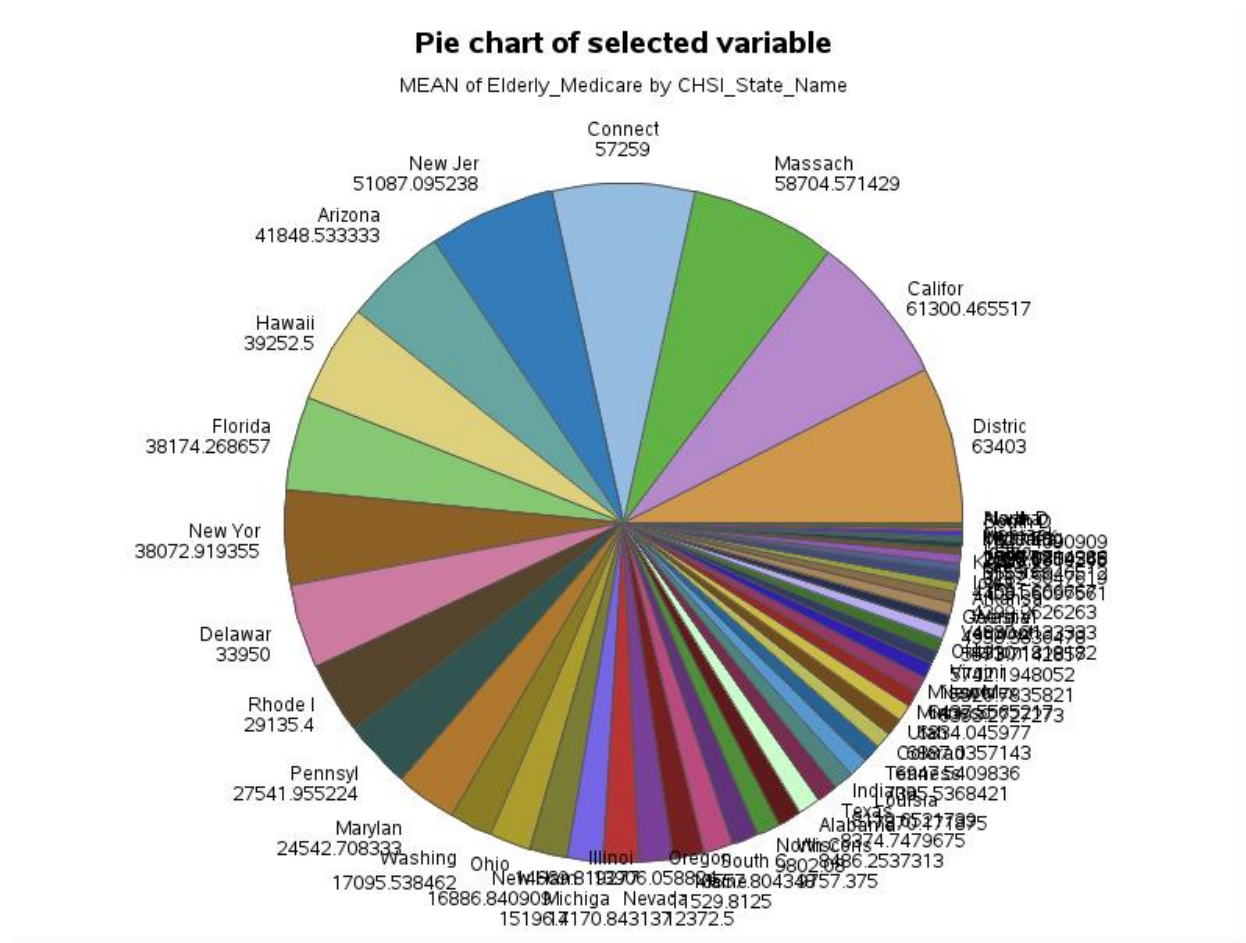
According to produced pie chart on diabetes data for all state in USA, it is observed that the highest mean contains by West Virginia and lowest mean hold by the Colorado.

7. Uninsured



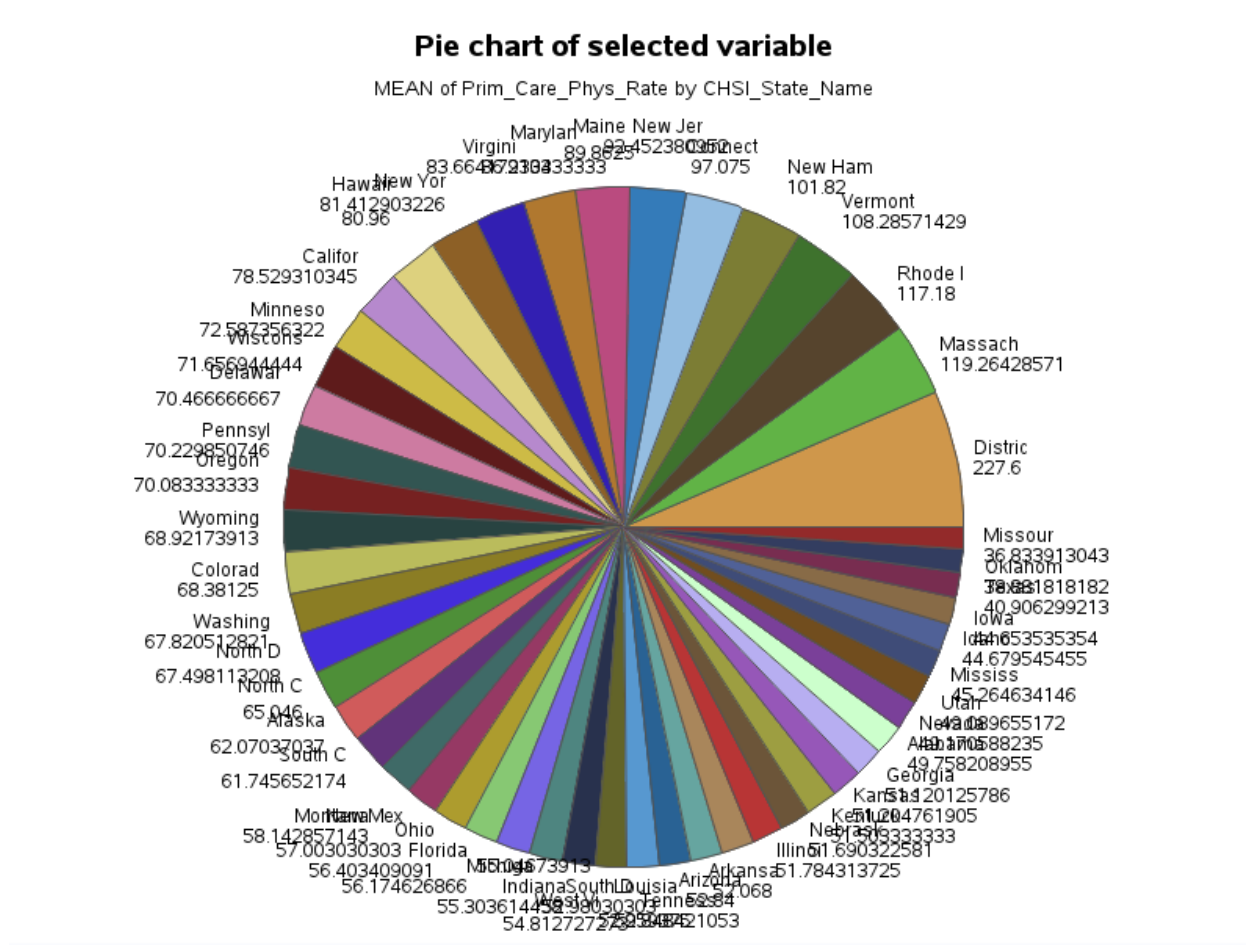
According to produced pie chart on mean of uninsured data for all state in USA, California has highest average of Uninsured while Arizona has the second highest mean. The lowest mean is in some other states which values are not too much remarkable compare with highest mean.

8. Elderly Medicine



According to produced pie chart on average of elderly medicare data for all state in USA, the highest mean of elderly medicare is in District and second highest mean is in California. Lowest mean is hold by several states and it is negligible compare with highest mean.

9. Primary care physicians rate



According to produced pie chart on primary care physicians rate data for all state in USA, the District has the highest primary care physicians rate while Missouri has the lowest primary care physician rate. Highest mean is too large compare with other any state.

Pie chart of selected variable

MEAN of Dentist_Rate by CHSI_State_Name

State	Mean Dentist Rate
Connecticut	57.25
New Jersey	57.25
Massachusetts	58.19
District of Columbia	102.8
Georgia	19.65
Nevada	43.39
Texas	70.58
Mississippi	22.58
Alabama	39.02
North Carolina	23.97
New Mexico	25.91
West Virginia	25.14
Louisiana	25.14
Florida	26.18
Arizona	27.38
Arkansas	27.38
Missouri	27.38
South Carolina	27.38
Illinois	31.1
Ohio	31.1
Montana	31.1
Delaware	31.1
Kentucky	31.1
South Dakota	30.96
North Dakota	37.87
Washington	36.62
Utah	35.13
Colorado	33.88
Idaho	33.13
Wyoming	41.51
Alaska	40.87
Nebraska	40.59
Minnesota	40.31
Wisconsin	39.62
Michigan	38.79
Iowa	38.68
Maine	38.6
Pennsylvania	42.64
Maryland	43.65
Virginia	40.97
Oregon	43.66
Vermont	44.62
New Hampshire	44.62
New York	46.84
California	47.14

According to produced pie chart on dentist rate data for all state in USA, the District has highest average of dentist rate and it is significantly greater than the second highest average of Massach. The lowest average of dentist rate is containing by Georgia.

Question No 3: Calculate the first quartile (Q1), the median, and the third quartile (Q3) of USA for each of the ten variables. Use a single table to present the three quartiles.

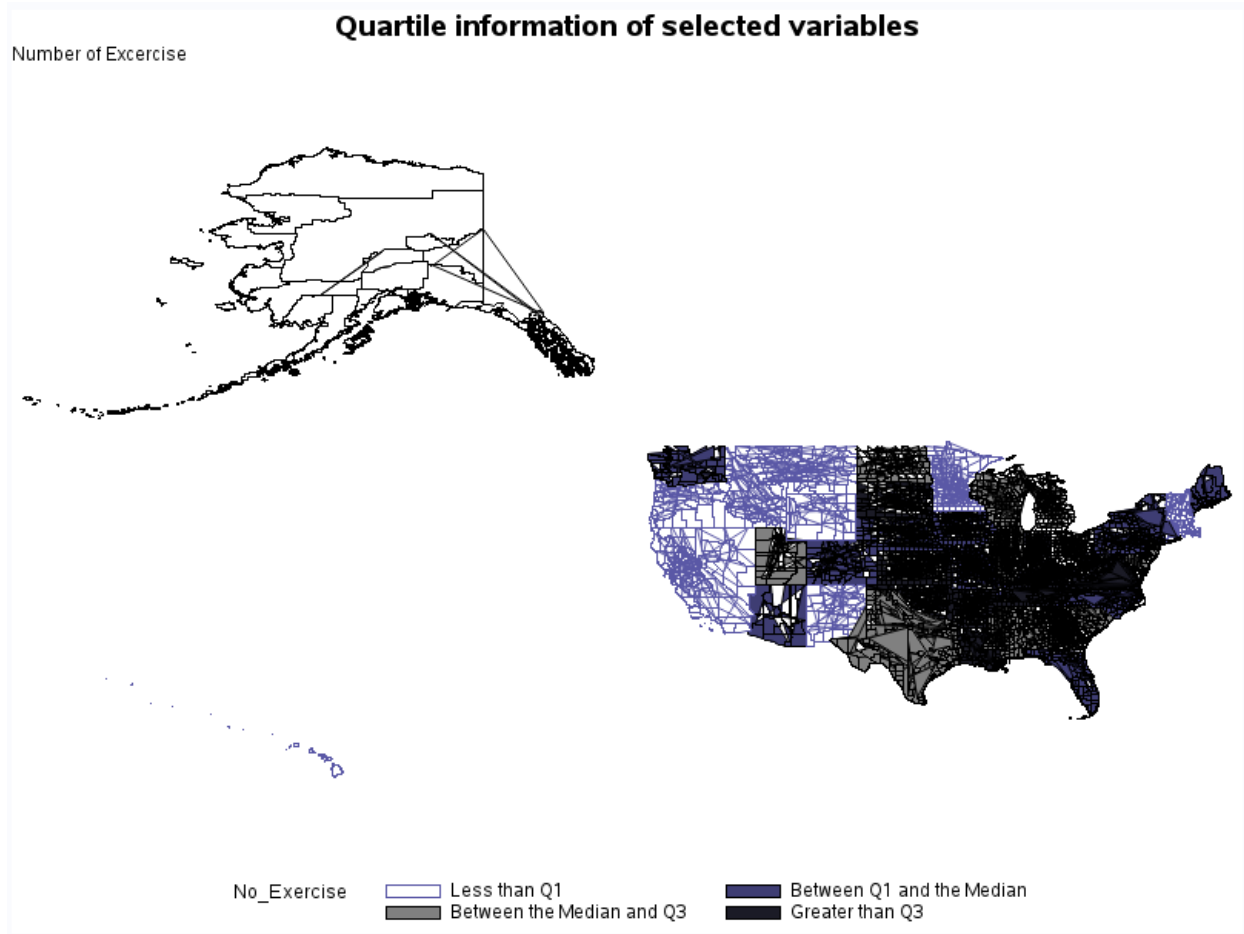
Obs	Variable	Q1	Median	Q3
1	No_Exercise	21.900000	26.000000	30.800000
2	Few_Fruit_Veg	75.500000	79.000000	82.400000
3	Obesity	21.100000	24.300000	27.200000
4	High_Blood_Pres	22.800000	26.200000	29.900000
5	Smoker	19.400000	23.000000	26.700000
6	Diabetes	5.900000	7.500000	9.500000
7	Uninsured	1551.000000	3430.000000	8118.000000
8	Elderly_Medicare	1649.000000	3495.000000	8138.000000
9	Prim_Care_Phys_Rate	30.500000	50.600000	74.700000
10	Dentist_Rate	18.700000	30.000000	43.300000

Question No 4: 90% Confidence interval of ten variables from South Dakota with adding given label and table title.

Table 2 Confidence Interval			
The MEANS Procedure			
Variable	Label	Lower 90% CL for Mean	Upper 90% CL for Mean
No_Exercise	NumExercise	25.5207940	27.7447232
Few_Fruit_Veg	FewFruitVeg	78.7323193	80.2533949
Obesity		23.8871733	25.8473094
High_Blood_Pres		25.9700595	28.2110726
Smoker		19.4701554	22.2891666
Diabetes		7.0369971	8.1291046
Uninsured		928.7210785	1759.64
Elderly_Medicare		1100.69	2154.13
Prim_Care_Phys_Rate		43.3458378	62.6147683
Dentist_Rate		26.8046514	35.1347425

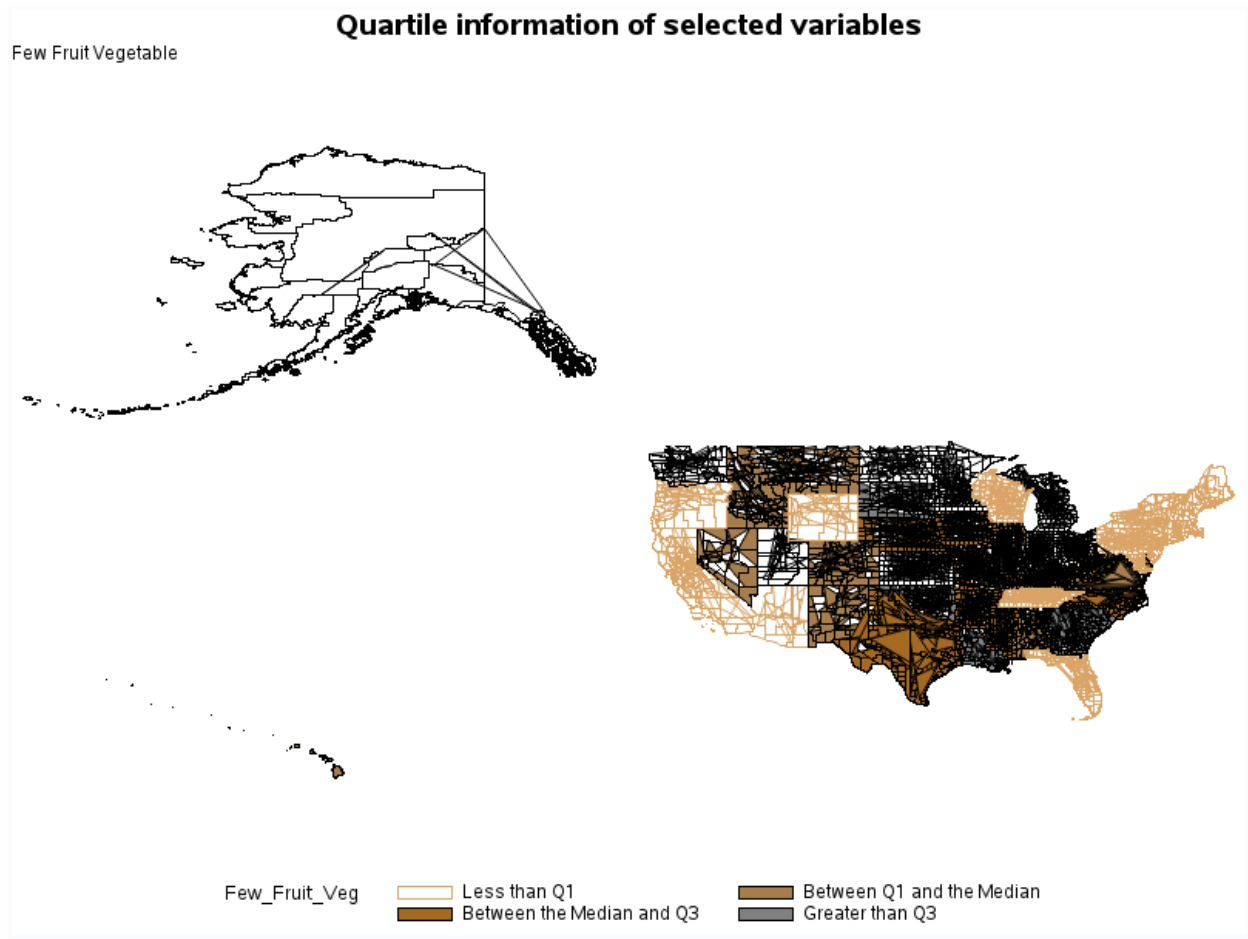
Question No 5: Map of USA with given instructed state wise color light to dark. I use different colors for different variables. Data brought from question no 3.

1. Number of Exercise



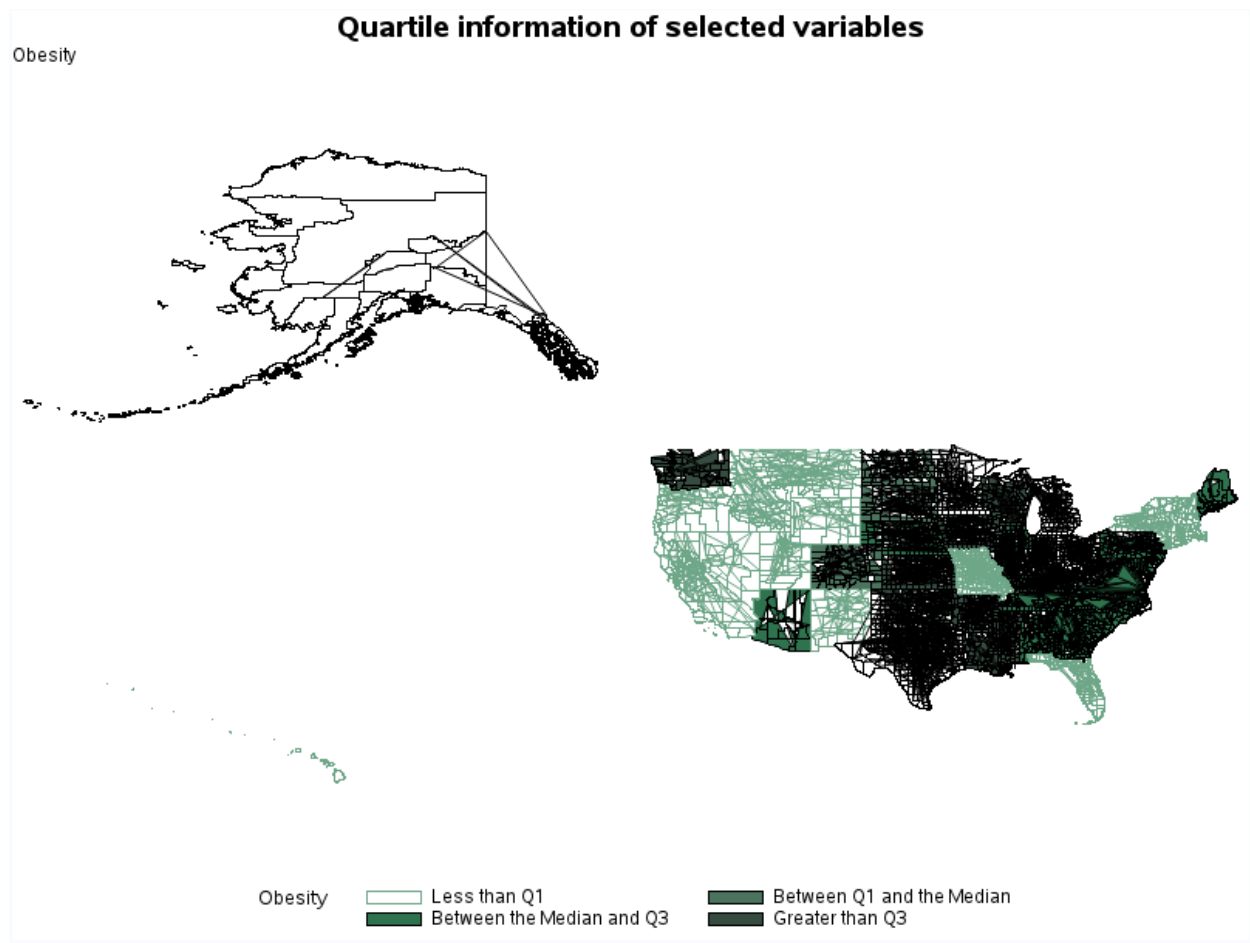
The quartile information on number of exercise it can be said that the lower quartile is in Alaska area, between first quartile and the median is in available in west side of USA, between the median and third quartile value is in south side of middle USA and the greater than the third quartile is in east side of USA and this area is larger than the others.

2. Few Fruit Vegetable



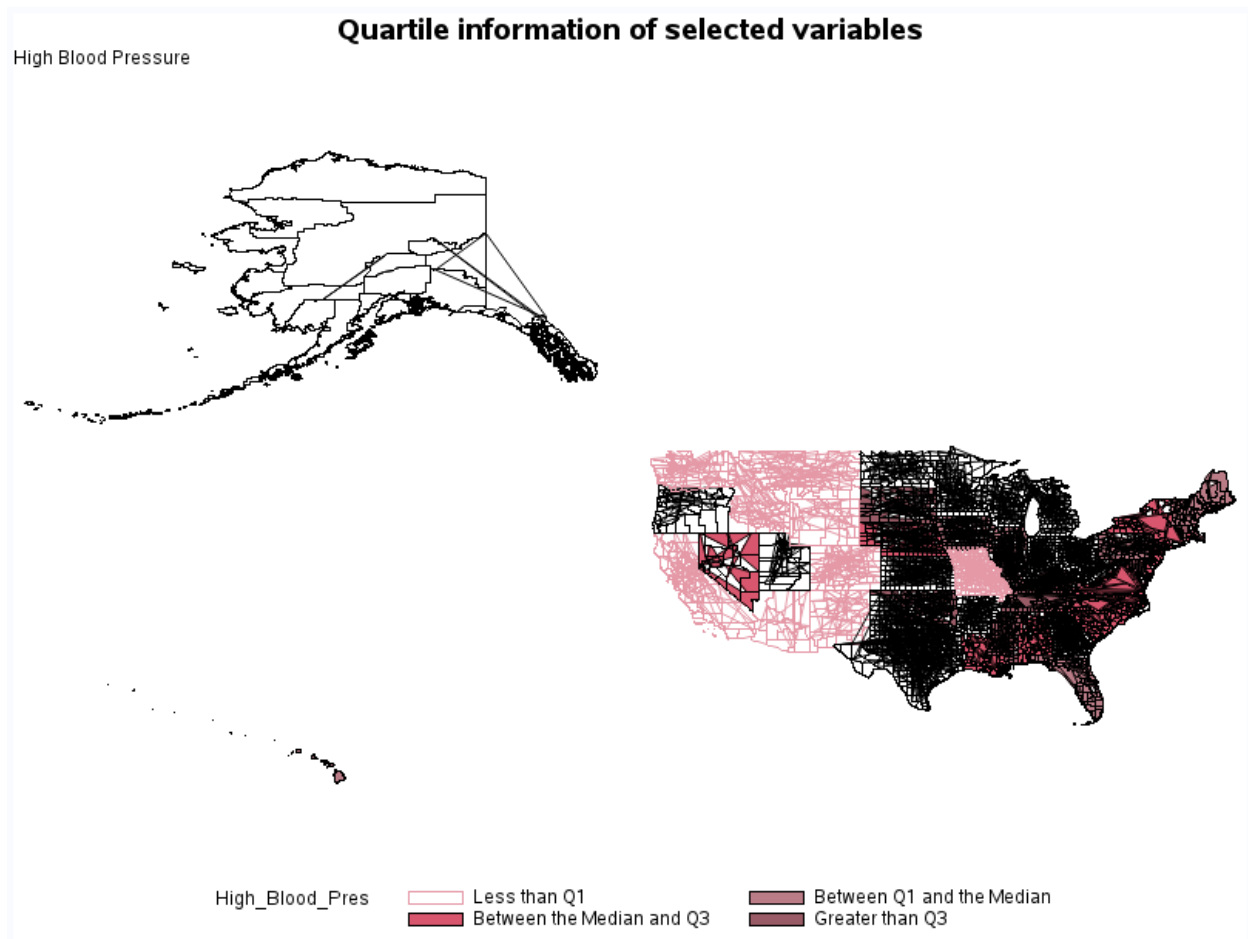
According to quartile information on few fruit vegetable, less than quartile data is in Alaska. The lower quartile to median value is in the east side and west side of USA. The Texas area and upper side of this state have the value between the median and third quartile. The value greater than third quartile value is in the east part of the country except the extreme east north part.

3. Obesity



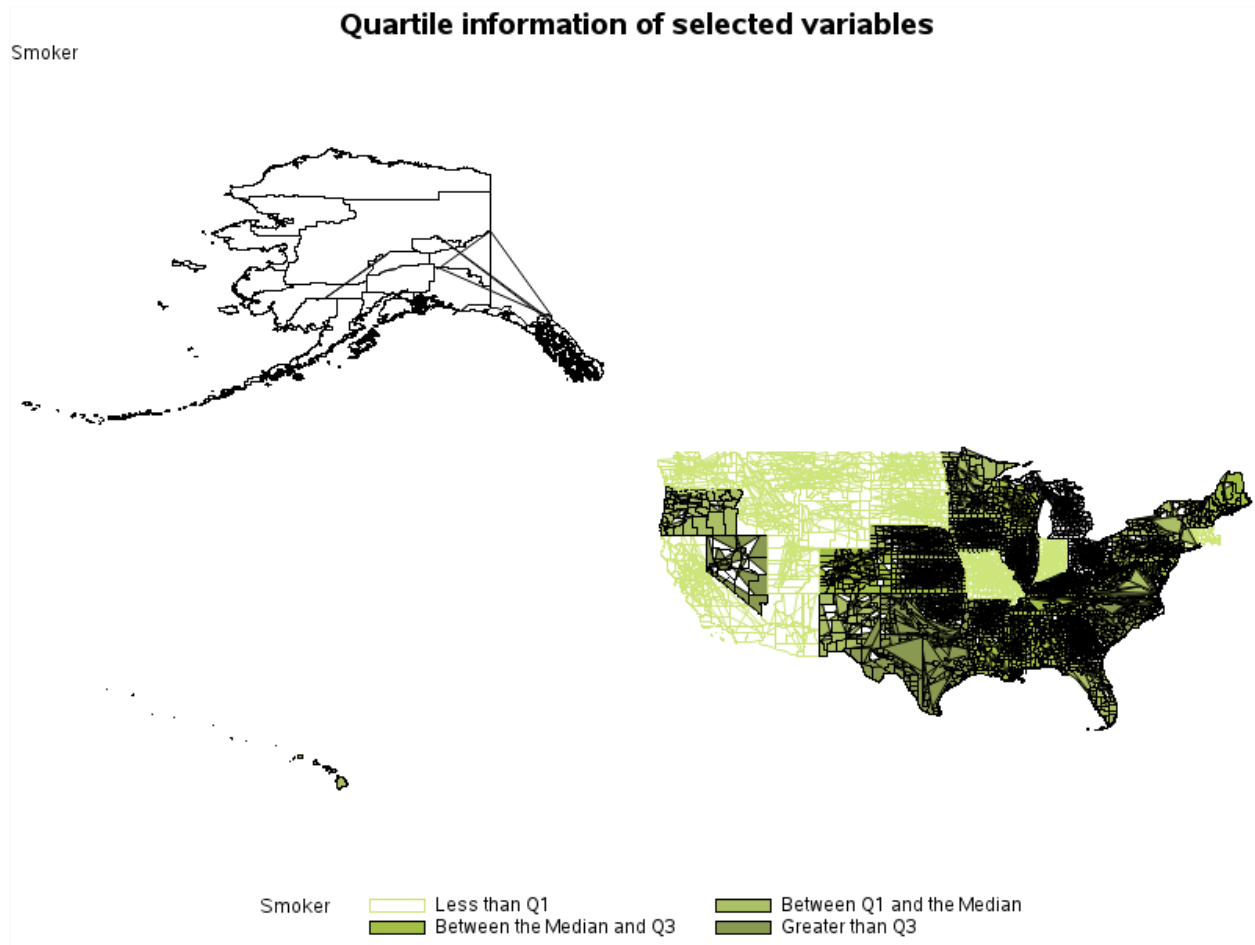
According to data produce by SAS, less than quartile values prevail in Alaska. Second quartile value is in west part of USA except Washington. Third quartile value is in scattered and a few states hold this value. Most of the eastern side of USA except few exception contain the fourth quartile value.

4. High Blood Pressure



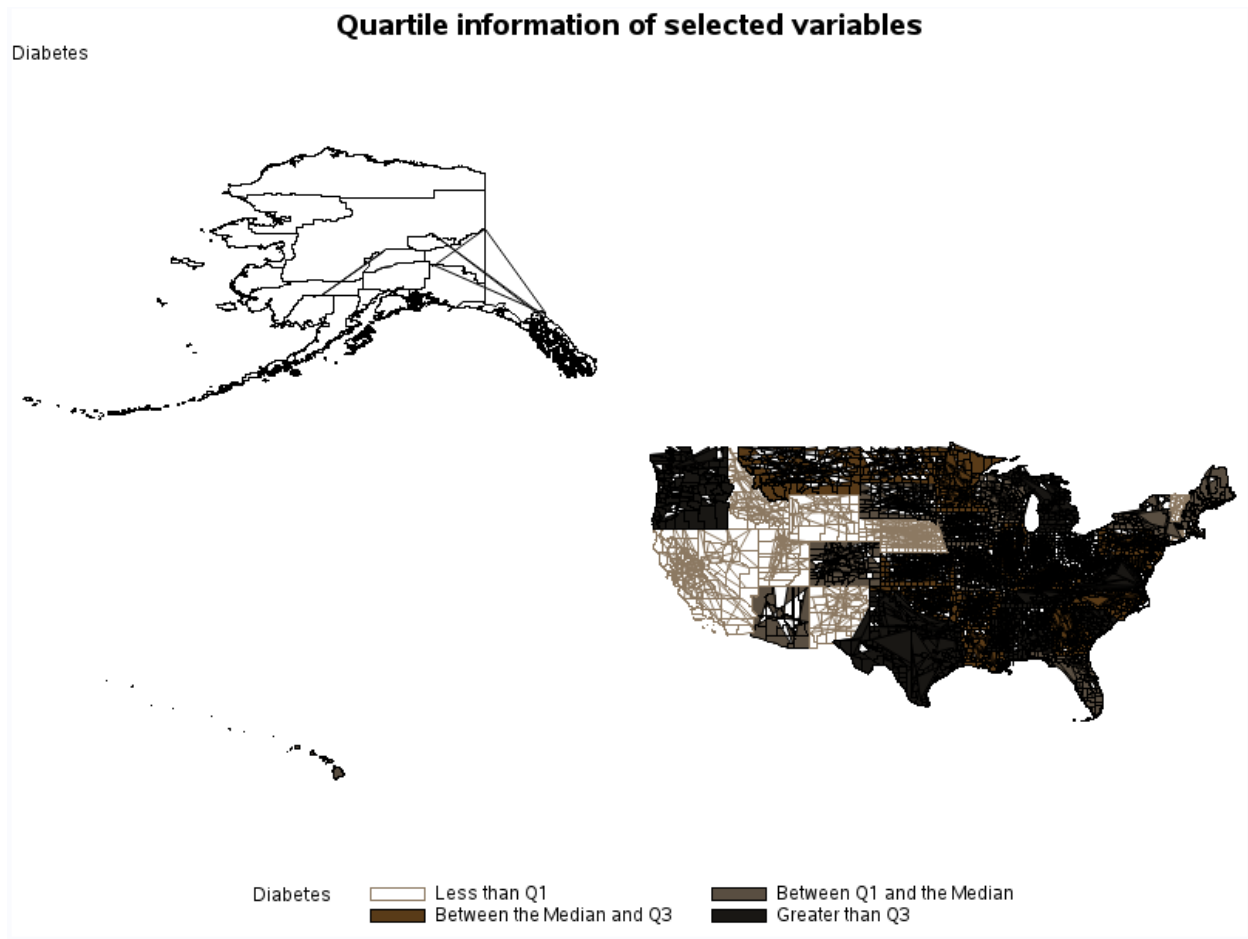
According to the quartile information, Lower quartile value is in Alaska. West part of USA is middle of the first quartile and the median except three states. Between the median and third quartile hold by only a few areas. Eastern part of the USA without some area hold the value greater than third quartile.

5. Smoker



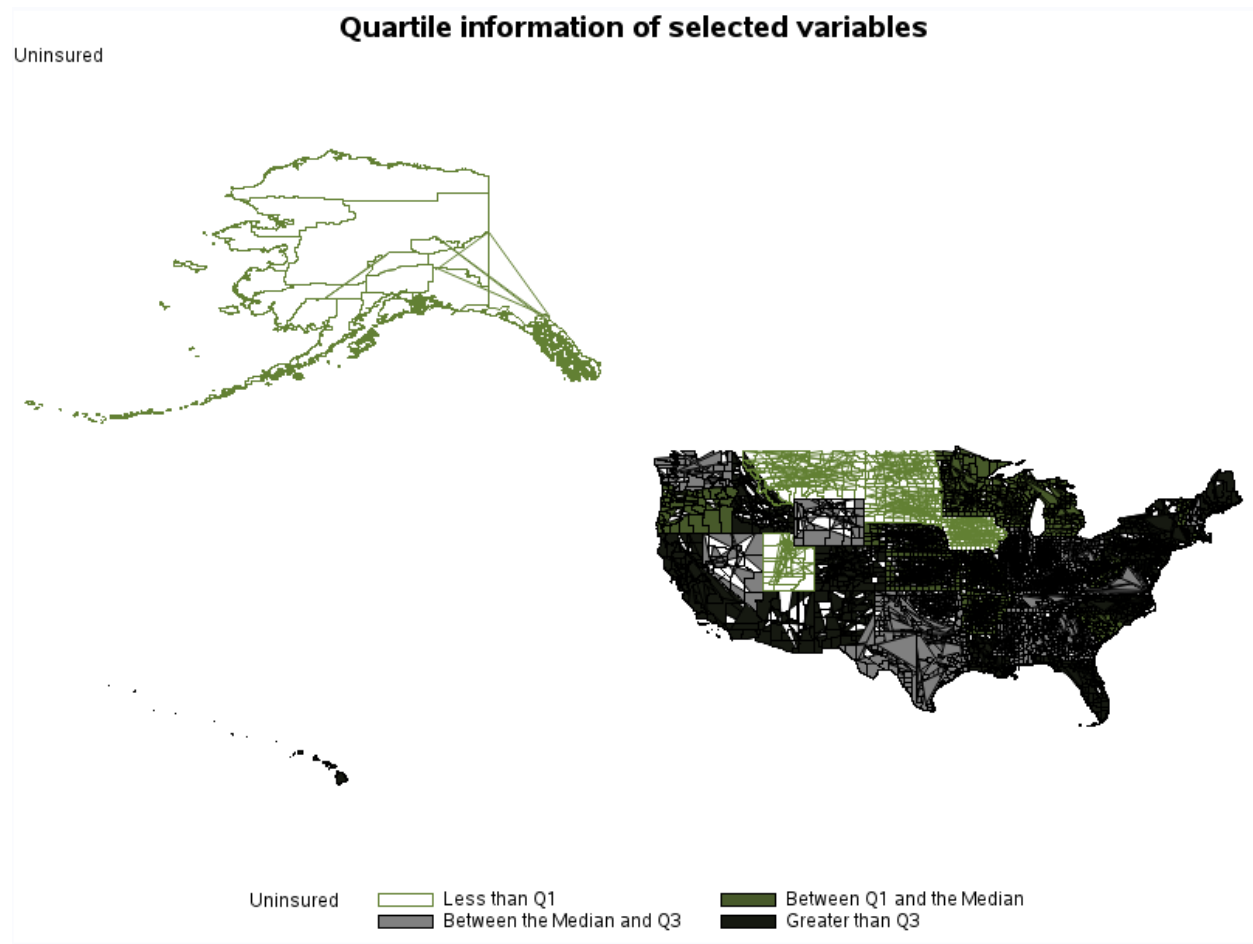
The information from all state related to smoker, the first quartile value of smoker in Alaska area. Between first quartile and the median value of smoker is in west part of USA except Oregon and Nevada. The value from the median to third quartile is the area of Oregon, Nevada and Texas. Rest of the area mainly in eastern part of USA and other some place is more than the third quartile.

6. Diabetes



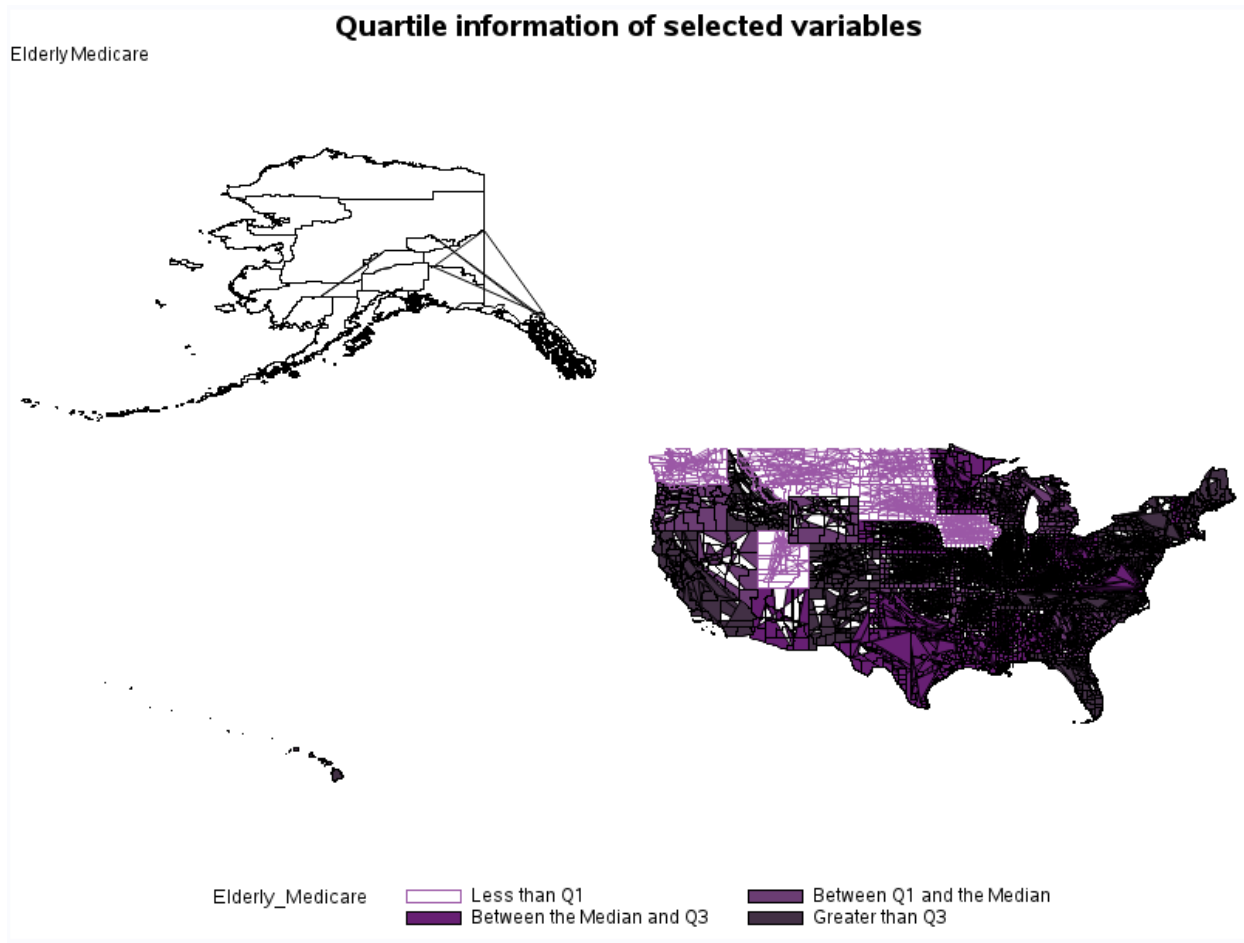
The data provided by diabetes for all state of USA, we can say that the less than first quartile data covered the Alaska. The information between first quartile and the median mainly covered area of south western corner area of USA and the median to third quartile data covered eastern part of USA while greater than third quartile data contain only Texas and Washington area with some other area.

7. Uninsured



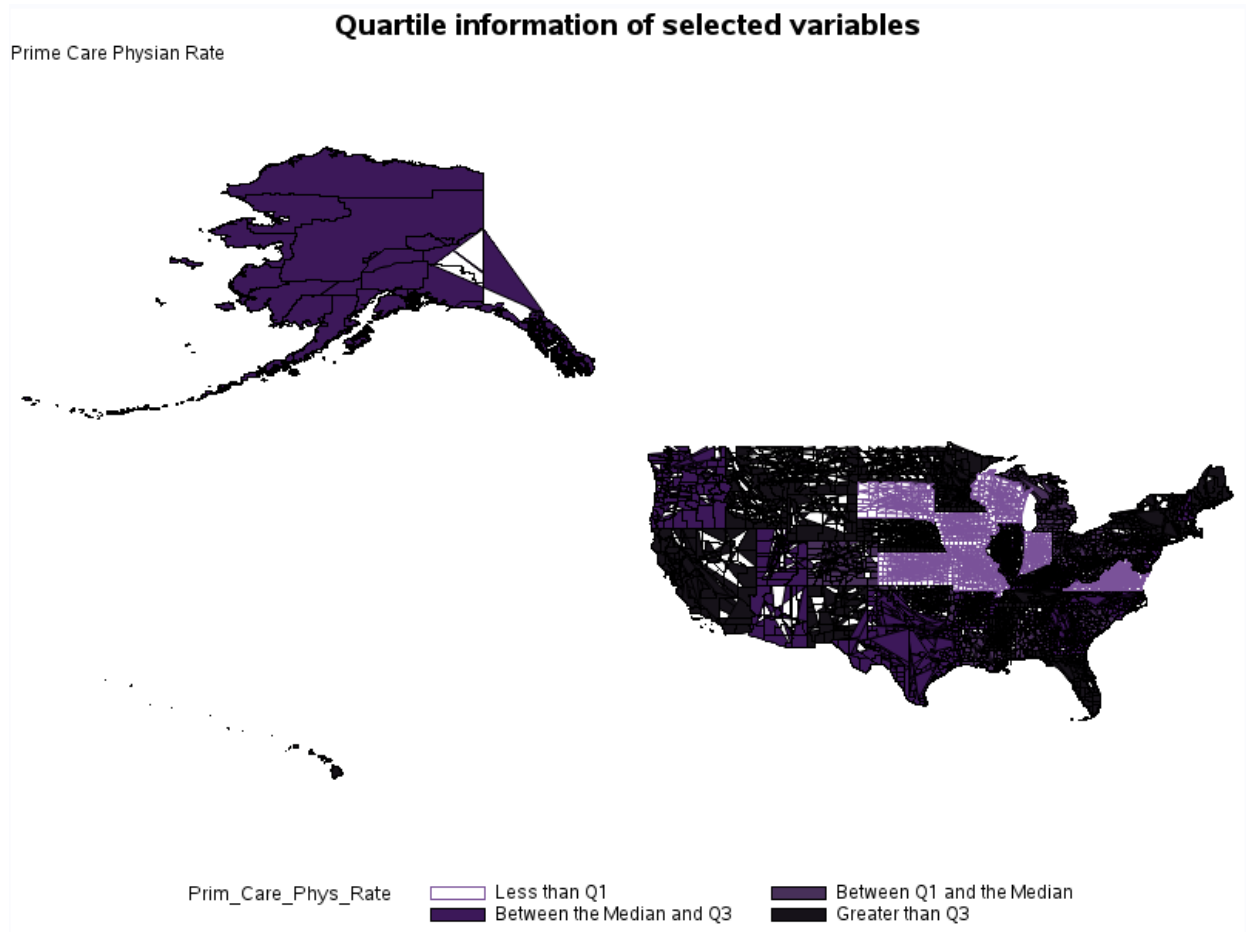
Less than the first quartile data about uninsured comes from Alaska. Greater than third quartile data comes from west and southern part with some middle area of USA. Middle of northern area of USA data mainly contain data from first quartile to the median.

8. Elderly Medicare



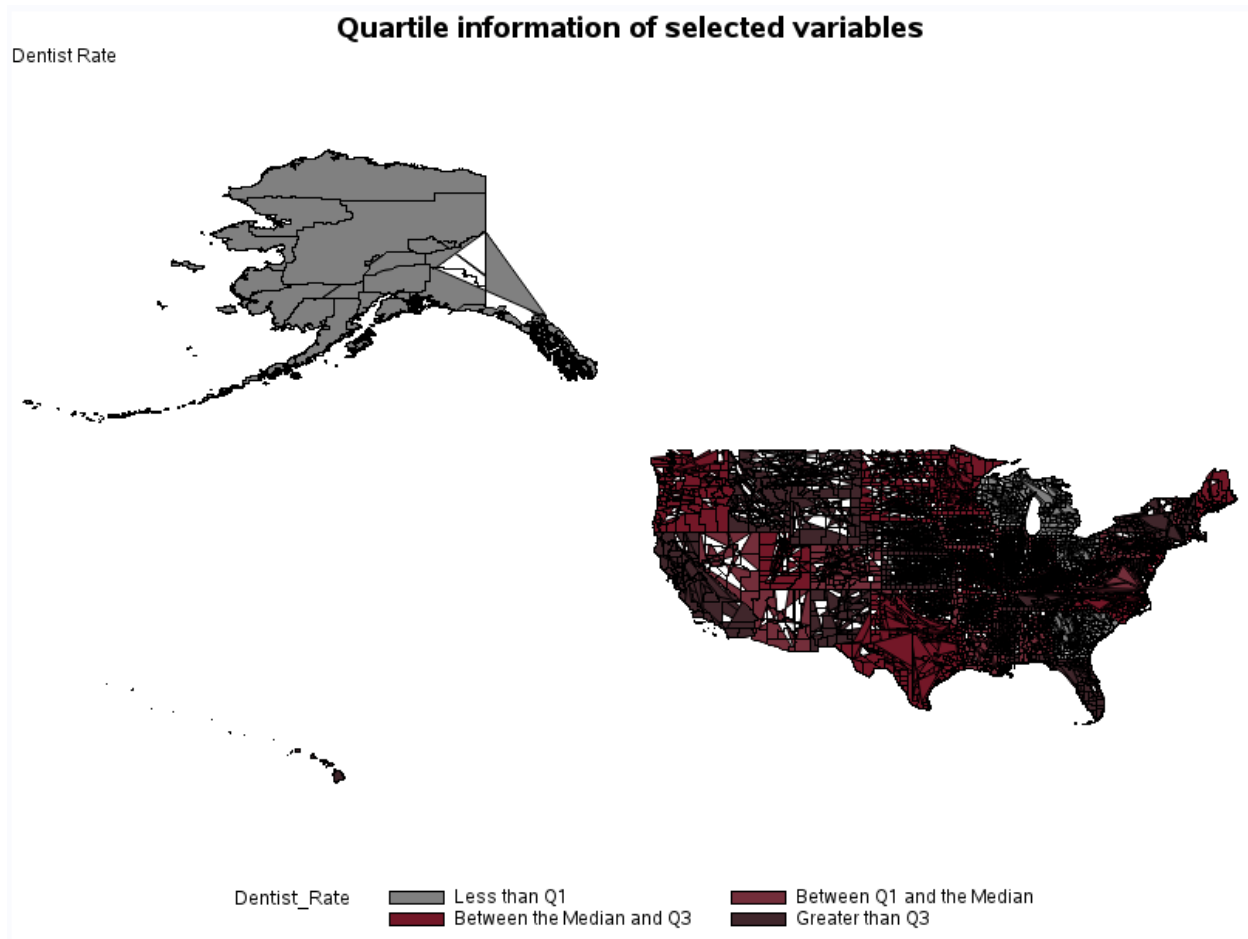
According to given data set, less than the first quartile data comes from Alaska area. Between first quartile and the median information comes from northern part of the USA while the between the median and third quartile comes from southern part and some other part of USA. Greater than third quartile data cover the eastern part of the USA.

9. Primary/Prime Care Physician Rate



The information on prime/primary care physician rate, some states from north east of USA is hold the lower quartile value. Between the median and third quartile values are in Alaska and some other places. Greater than third quartile data comes from south west part and mid northern area of USA.

10. Dentist Rate



From data given on dentist rate, the lower values are in Alaska. The higher than third quartile value is in only a few areas of west side of USA and east side of USA. Between first quartile and the median data is in Texas area and Washington area and nearby area. The middle values from between the median and third quartile is not too much significant as it has only few areas.

Summary: I used given map data set and according to question I used state data to make combination. The given data set contains county data, but I used state as per given instruction. So, the map I produce showed data with more perfection. Color and pattern are done according to given instruction.