README
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The main concern of my work is that, I ran the program successfully on my python 3.5, but I cannot access other machines with python 2.7, and failed to install dual-version on my laptop.

However, I checked the main difference of these two version, and there should not be problem.

One other small issue is that the execution command should be *python PROGRAM_NAME.py 'FILENAME.py'* instead of *python PROGRAM_NAME.py FILENAME.py*

If there's problem on executing, please inform me.
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Just in case, I'm copying my execution result, together with the 3 figures:

➜ Prob python a1_109929662.py '2015 CHR Analytic Data.csv'
(1) COLUMN HEADERS:
Premature death Value
Poor or fair health Value
Poor physical health days Value
Poor mental health days Value
Low birthweight Value
Adult smoking Value
Adult obesity Value
Food environment index Value
Physical inactivity Value
Access to exercise opportunities Value
Excessive drinking Value
Alcohol-impaired driving deaths Value
Sexually transmitted infections Value
Teen births Value
Uninsured Value
Primary care physicians Value
Dentists Value
Mental health providers Value
Preventable hospital stays Value
Diabetic screening Value

Mammography screening Value
High school graduation Value
Some college Value
Unemployment Value
Children in poverty Value
Income inequality Value
Children in single-parent households Value
Social associations Value
Violent crime Value
Injury deaths Value
Air pollution - particulate matter Value
Drinking water violations Value
Severe housing problems Value
Driving alone to work Value
Long commute - driving alone Value
2011 population estimate Value
Population that is not proficient in English Value
Population living in a rural area Value
Diabetes Value
HIV prevalence rate Value
Premature age-adjusted mortality Value
Infant mortality Value
Child mortality Value
Food insecurity Value
Limited access to healthy foods Value
Motor vehicle crash deaths Value
Drug poisoning deaths Value
Uninsured adults Value
Uninsured children Value
Health care costs Value
Could not see doctor due to cost Value
Other primary care providers Value
Median household income Value
Children eligible for free lunch Value
Homicide rate Value

(2) TOTAL COUNTIES IN FILE:3141

(3) TOTAL RANKED COUNTIES:3062

(4) HISTOGRAM OF POPULATION: wrote a1_4_histpop.png

(5) HISTOGRAM OF LOG POPULATION: wrote a1_5_histlog.png

(6) KERNEL DENSITY ESTIMATES: wrote a1_6_KDE.png

(7) PROBABILITY RANKED GIVEN POP: the samples at population less than 5000 are
too few, and KDE from previous step shows 0 at these population point. I do not think
there is a precise way to measure it.

(8) LIST MEAN AND STD_DEV PER COLUMN:
Premature death Value: mean = 8002.26219512   std = 2422.96247967
Poor or fair health Value: mean = 0.172786350148   std = 0.0613115582312
Poor physical health days Value: mean = 3.82714440825   std = 1.14724238908
Poor mental health days Value: mean = 3.56652259332   std = 1.03285663053
Low birthweight Value: mean = 0.0820748412964   std = 0.0211971733702
Adult smoking Value: mean = 0.212956472795   std = 0.0632686726165
Adult obesity Value: mean = 0.306894890039   std = 0.0434228764178
Food environment index Value: mean = 7.07161812298   std = 1.24859803702
Physical inactivity Value: mean = 0.27010316947   std = 0.0532016657113
Access to exercise opportunities Value: mean = 0.624839401821   std =
0.228972037538
Excessive drinking Value: mean = 0.165   std = 0.051722238267
Alcohol-impaired driving deaths Value: mean = 0.329447690217   std =
0.149059130219
Sexually transmitted infections Value: mean = 367.50405359   std = 269.959288845
Teen births Value: mean = 43.4344919786   std = 19.6582088182
Uninsured Value: mean = 0.175954383695   std = 0.0538720537753
Primary care physicians Value: mean = 56.7210672211   std = 33.8286746779
Dentists Value: mean = 43.5664116829   std = 25.8652380776
Mental health providers Value: mean = 125.728264824   std = 130.940982618
Preventable hospital stays Value: mean = 69.9498742352   std = 27.7740725767
Diabetic screening Value: mean = 0.842454814328   std = 0.0650335804887
Mammography screening Value: mean = 0.60704   std = 0.0818651639384
High school graduation Value: mean = 0.83071347032   std = 0.0938814897133
Some college Value: mean = 0.557468952135   std = 0.116289599828
Unemployment Value: mean = 0.0725037204788   std = 0.0264807891228
Children in poverty Value: mean = 0.246067292138   std = 0.0953303778747
Income inequality Value: mean = 4.48640329884   std = 0.713428001248
Children in single-parent households Value: mean = 0.32154807381   std =
0.103402013538
Social associations Value: mean = 14.0100218455   std = 7.02496080243
Violent crime Value: mean = 250.876529838   std = 195.766172714
Injury deaths Value: mean = 77.2620457604   std = 24.993565247
Air pollution - particulate matter Value: mean = 11.6242352941   std = 1.52679635019
Drinking water violations Value: mean = 0.148119339371   std = 0.197350909809
Severe housing problems Value: mean = 0.143417664186   std = 0.0483777991558
Driving alone to work Value: mean = 0.786374838292   std = 0.0773192391037

Long commute - driving alone Value: mean = 0.298388870916   std = 0.120257419057

2011 population estimate Value: mean = 100720.438228   std = 324181.251766

Population that is not proficient in English Value: mean = 0.0194275362319   std = 0.0302311390397

Population living in a rural area Value: mean = 0.59398624304   std = 0.310084066358

Diabetes Value: mean = 0.109801746442   std = 0.0231182311206

HIV prevalence rate Value: mean = 174.039046786   std = 229.230730912

Premature age-adjusted mortality Value: mean = 388.193320106   std = 100.800407134

Infant mortality Value: mean = 7.5074019245   std = 2.3874123979

Child mortality Value: mean = 63.2455379908   std = 26.0452395759

Food insecurity Value: mean = 0.147403945666   std = 0.0385288255518

Limited access to healthy foods Value: mean = 0.0855190915076   std = 0.0824530356733

Motor vehicle crash deaths Value: mean = 20.5635268022   std = 10.1264998479

Drug poisoning deaths Value: mean = 14.2178952473   std = 7.77124656439

Uninsured adults Value: mean = 0.213543836946   std = 0.0657688884442

Uninsured children Value: mean = 0.0830491750243   std = 0.0380081659797

Health care costs Value: mean = 9428.99157485   std = 1609.59371378

Could not see doctor due to cost Value: mean = 0.153625159915   std = 0.0555257005192

Other primary care providers Value: mean = 61.0507392473   std = 48.602434983

Median household income Value: mean = 45959.6085409   std = 11625.8757515

Children eligible for free lunch Value: mean = 0.435133972992   std = 0.171260082363

Homicide rate Value: mean = 6.34125412541   std = 4.78076085312

Hist of Population

Hist of Log Population