CountryGDP

June 7, 2020

[ ]:
```
#Analyze GDP per capita for given set of Countries
```

[1]:
```
#import numpy
import numpy as np
```

[6]:
```
# adding data into respective array
countries = np.
 ↪array(['Algeria','Angola','Argentina','Australia','Austria','Bahamas','Bangladesh','Belarus
                      ␣
 ↪'Brazil','Bulgaria','Cambodia','Cameroon','Chile','China','Colombia','Cyprus','Denmark','El
 ↪Salvador',
                      ␣
 ↪'Estonia','Ethiopia','Fiji','Finland','France','Georgia','Ghana','Grenada','Guinea','Haiti'
                      ␣
 ↪'Hungary','India','Indonesia','Ireland','Italy','Japan','Kenya', 'South␣
 ↪Korea','Liberia','Malaysia',
                       'Mexico', 'Morocco','Nepal','New␣
 ↪Zealand','Norway','Pakistan','Peru','Qatar','Russia','Singapore',
                       'South Africa','Spain','Sweden','Switzerland','Thailand',␣
 ↪'United Arab Emirates','United Kingdom',
                       'United␣
 ↪States','Uruguay','Venezuela','Vietnam','Zimbabwe'])
gdp_per_capita = np.array([2255.225482,629.9553062,11601.63022,25306.
 ↪82494,27266.40335,19466.99052,588.3691778,2890.345675,
                            24733.62696,1445.760002,4803.398244,2618.876037,590.
 ↪4521124,665.7982328,7122.938458,2639.54156,
                            3362.4656,15378.16704,30860.12808,2579.115607,6525.
 ↪541272,229.6769525,2242.689259,27570.4852,
                            23016.84778,1334.646773,402.6953275,6047.200797,394.
 ↪1156638,385.5793827,1414.072488,5745.981529,
                            837.7464011,1206.991065,27715.52837,18937.
 ↪24998,39578.07441,478.2194906,16684.21278,279.2204061,
                            5345.213415,6288.25324,1908.304416,274.8728621,14646.
 ↪42094,40034.85063,672.1547506,3359.517402,
                            36152.66676,3054.727742,33529.83052,3825.
 ↪093781,15428.32098,33630.24604,39170.41371,2699.123242,
```

```
                                21058.43643,28272.40661,37691.02733,9581.05659,5671.
↪912202,757.4009286,347.7456605])
```

[15]:
```
# getting index of highest gdp
max_gdp_per_capita = gdp_per_capita.argmax()
# getting country name against same index
country_with_max_gdp_per_capita = countries[max_gdp_per_capita]
#country with highest gdp
country_with_max_gdp_per_capita
```

[15]: 'Norway'

[14]:
```
# getting index of lowest gdp
min_gdp_per_capita = gdp_per_capita.argmin()
# getting country name against same index
country_with_min_gdp_per_capita = countries[min_gdp_per_capita]
#country with lowest gdp
country_with_min_gdp_per_capita
```

[14]: 'Ethiopia'

[27]:
```
# Printing out text and input values iteratively
for country in countries:
    print ('evaluating country {}'.format(country))
```

```
evaluating country Algeria
evaluating country Angola
evaluating country Argentina
evaluating country Australia
evaluating country Austria
evaluating country Bahamas
evaluating country Bangladesh
evaluating country Belarus
evaluating country Belgium
evaluating country Bhutan
evaluating country Brazil
evaluating country Bulgaria
evaluating country Cambodia
evaluating country Cameroon
evaluating country Chile
evaluating country China
evaluating country Colombia
evaluating country Cyprus
evaluating country Denmark
evaluating country El Salvador
evaluating country Estonia
evaluating country Ethiopia
```

```
evaluating country Fiji
evaluating country Finland
evaluating country France
evaluating country Georgia
evaluating country Ghana
evaluating country Grenada
evaluating country Guinea
evaluating country Haiti
evaluating country Honduras
evaluating country Hungary
evaluating country India
evaluating country Indonesia
evaluating country Ireland
evaluating country Italy
evaluating country Japan
evaluating country Kenya
evaluating country South Korea
evaluating country Liberia
evaluating country Malaysia
evaluating country Mexico
evaluating country Morocco
evaluating country Nepal
evaluating country New Zealand
evaluating country Norway
evaluating country Pakistan
evaluating country Peru
evaluating country Qatar
evaluating country Russia
evaluating country Singapore
evaluating country South Africa
evaluating country Spain
evaluating country Sweden
evaluating country Switzerland
evaluating country Thailand
evaluating country United Arab Emirates
evaluating country United Kingdom
evaluating country United States
evaluating country Uruguay
evaluating country Venezuela
evaluating country Vietnam
evaluating country Zimbabwe
```

[28]:
```python
#printing out the entire list of the countries with their GDPs
for i in range(len(countries)):
    country = countries[i]
    gdp = gdp_per_capita[i]
    print ('country {} per capita gdp {} '.format(country,gdp))
```

```
country Algeria per capita gdp 2255.225482
country Angola per capita gdp 629.9553062
country Argentina per capita gdp 11601.63022
country Australia per capita gdp 25306.82494
country Austria per capita gdp 27266.40335
country Bahamas per capita gdp 19466.99052
country Bangladesh per capita gdp 588.3691778
country Belarus per capita gdp 2890.345675
country Belgium per capita gdp 24733.62696
country Bhutan per capita gdp 1445.760002
country Brazil per capita gdp 4803.398244
country Bulgaria per capita gdp 2618.876037
country Cambodia per capita gdp 590.4521124
country Cameroon per capita gdp 665.7982328
country Chile per capita gdp 7122.938458
country China per capita gdp 2639.54156
country Colombia per capita gdp 3362.4656
country Cyprus per capita gdp 15378.16704
country Denmark per capita gdp 30860.12808
country El Salvador per capita gdp 2579.115607
country Estonia per capita gdp 6525.541272
country Ethiopia per capita gdp 229.6769525
country Fiji per capita gdp 2242.689259
country Finland per capita gdp 27570.4852
country France per capita gdp 23016.84778
country Georgia per capita gdp 1334.646773
country Ghana per capita gdp 402.6953275
country Grenada per capita gdp 6047.200797
country Guinea per capita gdp 394.1156638
country Haiti per capita gdp 385.5793827
country Honduras per capita gdp 1414.072488
country Hungary per capita gdp 5745.981529
country India per capita gdp 837.7464011
country Indonesia per capita gdp 1206.991065
country Ireland per capita gdp 27715.52837
country Italy per capita gdp 18937.24998
country Japan per capita gdp 39578.07441
country Kenya per capita gdp 478.2194906
country South Korea per capita gdp 16684.21278
country Liberia per capita gdp 279.2204061
country Malaysia per capita gdp 5345.213415
country Mexico per capita gdp 6288.25324
country Morocco per capita gdp 1908.304416
country Nepal per capita gdp 274.8728621
country New Zealand per capita gdp 14646.42094
country Norway per capita gdp 40034.85063
country Pakistan per capita gdp 672.1547506
country Peru per capita gdp 3359.517402
```

```
country Qatar per capita gdp 36152.66676
country Russia per capita gdp 3054.727742
country Singapore per capita gdp 33529.83052
country South Africa per capita gdp 3825.093781
country Spain per capita gdp 15428.32098
country Sweden per capita gdp 33630.24604
country Switzerland per capita gdp 39170.41371
country Thailand per capita gdp 2699.123242
country United Arab Emirates per capita gdp 21058.43643
country United Kingdom per capita gdp 28272.40661
country United States per capita gdp 37691.02733
country Uruguay per capita gdp 9581.05659
country Venezuela per capita gdp 5671.912202
country Vietnam per capita gdp 757.4009286
country Zimbabwe per capita gdp 347.7456605
```

[34]:
```
#Printing the highest GDP value
print(gdp_per_capita.max())
```

```
40034.85063
```

[35]:
```
#lowest GDP value
print(gdp_per_capita.min())
```

```
229.6769525
```

[36]:
```
#mean GDP value
print(gdp_per_capita.mean())
```

```
11289.409271639683
```

[37]:
```
#standardized GDP value
print(gdp_per_capita.std())
```

```
12743.828910617945
```

[38]:
```
#the sum of all the GDPs
print(gdp_per_capita.sum())
```

```
711232.7841133
```