

Analyse GDP of Countries

December 15, 2022

1 Import required libraries

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

2 Dataset

```
[3]: countries = np.  
    ↪array(['Algeria', 'Angola', 'Argentina', 'Australia', 'Austria', 'Bahamas', 'Bangladesh',  
          ↪  
          ↪'Belarus', 'Belgium', 'Bhutan', 'Brazil', 'Bulgaria', 'Cambodia', 'Cameroon',  
          ↪'Chile', 'China', 'Colombia', 'Cyprus', 'Denmark', 'El  
    ↪Salvador', 'Estonia',  
          ↪  
    ↪'Ethiopia', 'Fiji', 'Finland', 'France', 'Georgia', 'Ghana', 'Grenada', 'Guinea',  
          ↪  
    ↪'Haiti', 'Honduras', '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])

```

3 Country with highest GDP

```
[4]: max_gdp_per_capita = gdp_per_capita.argmax()
```

```
[5]: country_with_max_gdp_per_capita = countries[max_gdp_per_capita]
```

```
[6]: country_with_max_gdp_per_capita
```

```
[6]: 'Norway'
```

4 Country with lowest GDP

```
[7]: min_gdp_per_capita = gdp_per_capita.argmin()
```

```
[8]: country_with_min_gdp_per_capita = countries[min_gdp_per_capita]
```

```
[9]: country_with_min_gdp_per_capita
```

```
[9]: 'Ethiopia'
```

5 Print text and input values iteratively

```
[11]: for country in countries:
      print('ecaluating country {}'.format(country))
```

```

ecaluating country Algeria
ecaluating country Angola

```

ecaluating country Argentina
ecaluating country Australia
ecaluating country Austria
ecaluating country Bahamas
ecaluating country Bangladesh
ecaluating country Belarus
ecaluating country Belgium
ecaluating country Bhutan
ecaluating country Brazil
ecaluating country Bulgaria
ecaluating country Cambodia
ecaluating country Cameroon
ecaluating country Chile
ecaluating country China
ecaluating country Colombia
ecaluating country Cyprus
ecaluating country Denmark
ecaluating country El Salvador
ecaluating country Estonia
ecaluating country Ethiopia
ecaluating country Fiji
ecaluating country Finland
ecaluating country France
ecaluating country Georgia
ecaluating country Ghana
ecaluating country Grenada
ecaluating country Guinea
ecaluating country Haiti
ecaluating country Honduras
ecaluating country Hungary
ecaluating country India
ecaluating country Indonesia
ecaluating country Ireland
ecaluating country Italy
ecaluating country Japan
ecaluating country Kenya
ecaluating country South Korea
ecaluating country Liberia
ecaluating country Malaysia
ecaluating country Mexico
ecaluating country Morocco
ecaluating country Nepal
ecaluating country New Zealand
ecaluating country Norway
ecaluating country Pakistan
ecaluating country Peru
ecaluating country Qatar
ecaluating country Russia

```
ecaluating country Singapore
ecaluating country South Africa
ecaluating country Spain
ecaluating country Sweden
ecaluating country Switzerland
ecaluating country Thailand
ecaluating country United Arab Emirates
ecaluating country United Kingdom
ecaluating country United States
ecaluating country Uruguay
ecaluating country Venezuela
ecaluating country Vietnam
ecaluating country Zimbabwe
```

6 Print list of the countries with their GDPs

```
[12]: for i in range (len(countries)):
      country = countries[i]
      country_gdp_per_capita = gdp_per_capita[i]
      print('country {} per capita gdp is {}'.format(country,
      ↪country_gdp_per_capita))
```

```
country Algeria per capita gdp is 2255.225482
country Angola per capita gdp is 629.9553062
country Argentina per capita gdp is 11601.63022
country Australia per capita gdp is 25306.82494
country Austria per capita gdp is 27266.40335
country Bahamas per capita gdp is 19466.99052
country Bangladesh per capita gdp is 588.3691778
country Belarus per capita gdp is 2890.345675
country Belgium per capita gdp is 24733.62696
country Bhutan per capita gdp is 1445.760002
country Brazil per capita gdp is 4803.398244
country Bulgaria per capita gdp is 2618.876037
country Cambodia per capita gdp is 590.4521124
country Cameroon per capita gdp is 665.7982328
country Chile per capita gdp is 7122.938458
country China per capita gdp is 2639.54156
country Colombia per capita gdp is 3362.4656
country Cyprus per capita gdp is 15378.16704
country Denmark per capita gdp is 30860.12808
country El Salvador per capita gdp is 2579.115607
country Estonia per capita gdp is 6525.541272
country Ethiopia per capita gdp is 229.6769525
country Fiji per capita gdp is 2242.689259
country Finland per capita gdp is 27570.4852
```

country France per capita gdp is 23016.84778
country Georgia per capita gdp is 1334.646773
country Ghana per capita gdp is 402.6953275
country Grenada per capita gdp is 6047.200797
country Guinea per capita gdp is 394.1156638
country Haiti per capita gdp is 385.5793827
country Honduras per capita gdp is 1414.072488
country Hungary per capita gdp is 5745.981529
country India per capita gdp is 837.7464011
country Indonesia per capita gdp is 1206.991065
country Ireland per capita gdp is 27715.52837
country Italy per capita gdp is 18937.24998
country Japan per capita gdp is 39578.07441
country Kenya per capita gdp is 478.2194906
country South Korea per capita gdp is 16684.21278
country Liberia per capita gdp is 279.2204061
country Malaysia per capita gdp is 5345.213415
country Mexico per capita gdp is 6288.25324
country Morocco per capita gdp is 1908.304416
country Nepal per capita gdp is 274.8728621
country New Zealand per capita gdp is 14646.42094
country Norway per capita gdp is 40034.85063
country Pakistan per capita gdp is 672.1547506
country Peru per capita gdp is 3359.517402
country Qatar per capita gdp is 36152.66676
country Russia per capita gdp is 3054.727742
country Singapore per capita gdp is 33529.83052
country South Africa per capita gdp is 3825.093781
country Spain per capita gdp is 15428.32098
country Sweden per capita gdp is 33630.24604
country Switzerland per capita gdp is 39170.41371
country Thailand per capita gdp is 2699.123242
country United Arab Emirates per capita gdp is 21058.43643
country United Kingdom per capita gdp is 28272.40661
country United States per capita gdp is 37691.02733
country Uruguay per capita gdp is 9581.05659
country Venezuela per capita gdp is 5671.912202
country Vietnam per capita gdp is 757.4009286
country Zimbabwe per capita gdp is 347.7456605

7 Print the highest GDP value, lowest GDP value, mean GDP value, standardized GDP value, and the sum of all the GDPs

```
[13]: print(gdp_per_capita.max())  
      print(gdp_per_capita.min())  
      print(gdp_per_capita.mean())  
      print(gdp_per_capita.std())  
      print(gdp_per_capita.sum())
```

```
40034.85063  
229.6769525  
11289.409271639683  
12743.828910617945  
711232.7841133
```

```
[ ]:
```