

Assignment 01: Evaluate the GDP Dataset

The comments/sections provided are your cues to perform the assignment. You don't need to limit yourself to the number of rows/cells provided. You can add additional rows in each section to add more lines of code.

If at any point in time you need help on solving this assignment, view our demo video to understand the different steps of the code.

Happy coding!

1: View and add the dataset

In [1]:

```
#Import required library
import numpy as np
```

In [2]:

```
#Manually add the dataset

countries = np.array(['Algeria','Angola','Argentina','Australia','Austria','Bahamas','Bangl

GDP =np.array([2255.225482,629.9553062,11601.63022,25306.82494,27266.40335,19466.99052,588.
```

2: Find and print the name of the country with the highest GDP

In [5]:

```
#Use the argmax() method to find the highest GDP
gdp_per_capital = GDP.argmax()
```

In [8]:

```
#Print the name of the country
countries_with_highest_gdp = countries[gdp_per_capital]
countries_with_highest_gdp
```

Out[8]:

'Norway'

3: Find and print the name of the country with the lowest GDP

In [11]:

```
#Use the argmin() method to find the Lowest GDP
gdp_per_capital_low = GDP.argmin()
countries_with_lowest_gdp = countries[gdp_per_capital_low]
```

In [12]:

```
#Print the name of the country
countries_with_lowest_gdp
```

Out[12]:

'Ethiopia'

4: Print out text ('evaluating country') and input value ('country name') iteratively

In [14]:

```
#Use a for loop to print the required output
for country in countries:
    print("evaluating the country {}".format(country))
evaluating the country Algeria
evaluating the country Angola
evaluating the country Argentina
evaluating the country Australia
evaluating the country Austria
evaluating the country Bahamas
evaluating the country Bangladesh
evaluating the country Belarus
evaluating the country Belgium
evaluating the country Bhutan
evaluating the country Brazil
evaluating the country Bulgaria
evaluating the country Cambodia
evaluating the country Cameroon
evaluating the country Chile
evaluating the country China
evaluating the country Colombia
evaluating the country Cyprus
evaluating the country Denmark
evaluating the country El Salvador
evaluating the country Estonia
evaluating the country Ethiopia
evaluating the country Fiji
evaluating the country Finland
evaluating the country France
evaluating the country Georgia
evaluating the country Ghana
evaluating the country Grenada
evaluating the country Guinea
evaluating the country Haiti
evaluating the country Honduras
evaluating the country Hungary
evaluating the country India
evaluating the country Indonesia
evaluating the country Ireland
evaluating the country Italy
evaluating the country Japan
evaluating the country Kenya
evaluating the country South Korea
evaluating the country Liberia
evaluating the country Malaysia
evaluating the country Mexico
evaluating the country Morocco
evaluating the country Nepal
evaluating the country New Zealand
evaluating the country Norway
evaluating the country Pakistan
evaluating the country Peru
evaluating the country Qatar
evaluating the country Russia
evaluating the country Singapore
evaluating the country South Africa
evaluating the country Spain
```

evaluating the country Sweden evaluating the country Switzerland

```
evaluating the country Thailand
evaluating the country United Arab Emirates
evaluating the country United Kingdom
evaluating the country United States
evaluating the country Uruguay
evaluating the country Venezuela
evaluating the country Vietnam
evaluating the country Zimbabwe
```

5: Print out the entire list of the countries with their GDPs

In [17]:

#Use a for loop to print the required list

```
for i in range(len(countries)):
    country = countries[i]
    country_with_gdp = GDP[i]
    print("country {} GDP {}".format(country,country_with_gdp))
country Algeria GDP 2255.225482
country Angola GDP 629.9553062
country Argentina GDP 11601.63022
country Australia GDP 25306.82494
country Austria GDP 27266.40335
country Bahamas GDP 19466.99052
country Bangladesh GDP 588.3691778
country Belarus GDP 2890.345675
country Belgium GDP 24733.62696
country Bhutan GDP 1445.760002
country Brazil GDP 4803.398244
country Bulgaria GDP 2618.876037
country Cambodia GDP 590.4521124
country Cameroon GDP 665.7982328
country Chile GDP 7122.938458
country China GDP 2639.54156
country Colombia GDP 3362.4656
country Cyprus GDP 15378.16704
country Denmark GDP 30860.12808
country El Salvador GDP 2579.115607
country Estonia GDP 6525.541272
country Ethiopia GDP 229.6769525
country Fiji GDP 2242.689259
country Finland GDP 27570.4852
country France GDP 23016.84778
country Georgia GDP 1334.646773
country Ghana GDP 402.6953275
country Grenada GDP 6047.200797
country Guinea GDP 394.1156638
country Haiti GDP 385.5793827
country Honduras GDP 1414.072488
country Hungary GDP 5745.981529
country India GDP 837.7464011
country Indonesia GDP 1206.991065
country Ireland GDP 27715.52837
country Italy GDP 18937.24998
country Japan GDP 39578.07441
country Kenya GDP 478.2194906
country South Korea GDP 16684.21278
country Liberia GDP 279.2204061
country Malaysia GDP 5345.213415
country Mexico GDP 6288.25324
country Morocco GDP 1908.304416
country Nepal GDP 274.8728621
country New Zealand GDP 14646.42094
country Norway GDP 40034.85063
country Pakistan GDP 672.1547506
country Peru GDP 3359.517402
country Qatar GDP 36152.66676
country Russia GDP 3054.727742
```

country Singapore GDP 33529.83052

```
country South Africa GDP 3825.093781
country Spain GDP 15428.32098
country Sweden GDP 33630.24604
country Switzerland GDP 39170.41371
country Thailand GDP 2699.123242
country United Arab Emirates GDP 21058.43643
country United Kingdom GDP 28272.40661
country United States GDP 37691.02733
country Uruguay GDP 9581.05659
country Venezuela GDP 5671.912202
country Vietnam GDP 757.4009286
country Zimbabwe GDP 347.7456605
```

6: Print the following:

- 1. Highest GPD value
- 2. Lowest GDP value
- 3. Mean GDP value

12743.828910617945

- 4. Standardized GDP value
- 5. Sum of all the GDPs

```
In [18]:
    GDP.max()
Out[18]:
40034.85063
In [19]:
    GDP.min()
Out[19]:
229.6769525
In [20]:
    GDP.mean()
Out[20]:
11289.409271639683
In [22]:
    GDP.std()
```

in [24]:	
GDP.sum()	
Out[24]:	
11232.7841133	
in []:	