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 [ ]:
```
#Import required library
import numpy as np
```

In [ ]:
```
anually add the dataset
st_of_countries = np.array(['Algeria','Angola','Argentina','Australia','Aust
p_values = np.array([2255.225482,629.9553062,11601.63022,25306.82494,27266.4
et's create a dictionary from our two array

untries_dict = dict(zip(list_of_countries, gdp_values))

his is a global dictionary that we will use throughout the exercise
```

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

In [ ]:
```
#Use the argmax() method to find the highest GDP
index = np.argmax(gdp_values)
index
```

In [ ]:
```
highest_gdp = gdp_values[index]
highest_gdp
```

In [ ]:
```
#Print the name of the country
list_of_countries[index]
```

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

In [ ]:
```
#Use the argmin() method to find the lowest GDP
idx1 = np.argmin(gdp_values)
idx1
```

In [ ]:
```
lowest_gdp = gdp_values[idx1]
lowest_gdp
```

In [ ]:
```
#Print the name of the country
list_of_countries[idx1]
```

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

In [ ]:
```
#Use a for loop to print the required output
for i in range (len(list_of_countries)):
    print("Evaluating country", end = ": ")
    print(list_of_countries[i])
    print("\n")
```

In [ ]:
```
# Second Method: Use a for loop to print the required output
for country in list_of_countries:
    print('Evaluating country', format(country))
```

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

In [ ]:
```
#Use a for loop to print the required list
for i in range (len(list_of_countries)):
    print(list_of_countries[i], end = ": ")
    print(gdp_values[i])
    print("\n")
```

6: Print the following:

1. Highest GPD value
2. Lowest GDP value
3. Mean GDP value
4. Standardized GDP value
5. Sum of all the GDPs

In [ ]:

```
#Let's find out what are the mean, standardized and sum of all GDP

# --- Mean
mean = np.mean(gdp_values)
# --- Standardized value
standardized_gdp = np.std(gdp_values)
# --- Sum of all GDP values
sum_of_all = 0.0
for i in range (len(gdp_values)):
    sum_of_all = sum_of_all + gdp_values[i]

# Let's print them out
print ("Highest GDP value: ", highest_gdp)
print ("Lowest GDP value: ", lowest_gdp)
print ("Mean GDP value: ", mean)
print ("Standardized GDP value: ", standardized_gdp)
print ("Sum of all the GDPs: ", sum_of_all)
```