**Practice Project 001 - Source Code**

# #### 1: View and add the dataset

# In[13]:

#Import required library

import numpy as np

# In[14]:

#Manually add the dataset

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 = 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])

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

# In[15]:

#Use the argmax() method to find the highest GDP

gdp[gdp.argmax()]

# In[16]:

#Print the name of the country

countries[gdp.argmax()]

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

# In[17]:

#Use the argmin() method to find the lowest GDP

gdp[gdp.argmin()]

# In[18]:

#Print the name of the country

countries[gdp.argmin()]

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

# In[19]:

#Use a for loop to print the required output

for country in countries :

print('evaluating country',country)

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

# In[20]:

#Use a for loop to print the required list

for i in range(len(countries)) :

print(countries[i] , gdp[i] , sep = '\t\t\t')

# #### 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[21]:

print('Highest GDP Value =' , gdp[gdp.argmax()])

print('Lowest GDP Value =' , gdp[gdp.argmin()])

print('Mean GDP Value =' , np.mean(gdp))

print('Standardized GDP Value =' , np.std(gdp))

print('Sum of all GDP =' , np.sum(gdp))