# Assignment 02

November 19, 2021

## 1 Assignment 02: Evaluate the Summer Olympics, London 2012 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!**

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**1: View and add the dataset**

[1]:
```
#Import the necessary library
import numpy as np
```

[2]:
```
#Manually add the Summer Olympics, London 2012 dataset as arrays

country_name = np.array(['Great Britain', 'China', 'Russia', 'United States',␣
↪'Korea', 'Japan', 'Germany'])
country_code = np.array(['GBR', 'CHN', 'RUS', 'US', 'KOR', 'JPN', 'GER'])
gold_list    = np.array([ 29, 38, 24, 46, 13, 7, 11 ])
silver_list  = np.array([ 17, 28, 25, 28, 8, 14, 11 ])
bronze_list  = np.array([ 19, 22, 32, 29, 7, 17, 14 ])
```

**Find the country with maximum gold medals**

[3]:
```
#Use the argmax() method to find the highest number of gold medals
max_gold_index = gold_list.argmax()
print(max_gold_index)
max_gold_no = gold_list[max_gold_index]
print(max_gold_no)
```

```
3
46
```

[4]:
```
#Print the name of the country
max_gold_country = country_name[max_gold_index]
```

```
print('Country with highest no. of Gold medal is: ', max_gold_country)
```

```
Country with highest no. of Gold medal is:  United States
```

**Find the countries with more than 20 gold medals**

[5]:
```
#Use Boolean indexing technique to find the required output
gold_morethan_20_boolindex = gold_list>20
country_gold_morethan_20 = country_name[gold_morethan_20_boolindex == True]
print(country_gold_morethan_20)
```

```
['Great Britain' 'China' 'Russia' 'United States']
```

**Evaluate the dataset and print the name of each country with its gold medals and total number of medals**

[6]:
```
#Use a for loop to create the required output
for i in range(len(country_name)):
    country = country_name[i]
    gold = gold_list[i]
    total = gold_list[i] + silver_list[i] + bronze_list[i]
    print(country,' : Gold = ', gold, ' , Total = ', total)
```

```
Great Britain  : Gold =  29  , Total =  65
China  : Gold =  38  , Total =  88
Russia  : Gold =  24  , Total =  81
United States  : Gold =  46  , Total =  103
Korea  : Gold =  13  , Total =  28
Japan  : Gold =  7  , Total =  38
Germany  : Gold =  11  , Total =  36
```

[ ]:
```

```