



## 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!**

### 1: View and add the dataset

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

```
In [3]: #Manually add the Summer Olympics, London 2012 dataset as arrays
countries = np.array(['Great Britain', 'China', 'Russia', 'United States', 'Korea'])
gold_medal = np.array([29, 38, 24, 46, 13, 7, 11])
silver_medal = np.array([17, 28, 25, 28, 8, 14, 11])
bronze_medal = np.array([19, 22, 32, 29, 7, 17, 14])
```

### Find the country with maximum gold medals

```
In [7]: #Use the argmax() method to find the highest number of gold medals
max_gold_medal_index = gold_medal.argmax()
country_max_gold_medal = countries[max_gold_medal_index]
print(f'Maximum gold medal index position: {max_gold_medal_index}')
print(f'Highest number of gold medals: {gold_medal.max()}')
```

```
Maximum gold medal index position: 3
Highest number of gold medals: 46
```

```
In [5]: #Print the name of the country
print(f'Country with maximum gold medals: {country_max_gold_medal}')
```

Country with maximum gold medals: United States

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

```
In [18]: #Use Boolean indexing technique to find the required output
print(f'Countries with more than 20 gold medals: {countries[gold_medal > 20]}')
```

Countries with more than 20 gold medals: ['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

```
In [22]: #Use a for loop to create the required output
for i in range(len(countries)):
    country = countries[i]
    gold = gold_medal[i]
    total = gold_medal[i] + silver_medal[i] + bronze_medal[i]
    print(f'{country}: {gold} gold medals, {total} medals in total')
```

Great Britain: 29 gold medals, 65 medals in total  
China: 38 gold medals, 88 medals in total  
Russia: 24 gold medals, 81 medals in total  
United States: 46 gold medals, 103 medals in total  
Korea: 13 gold medals, 28 medals in total  
Japan: 7 gold medals, 38 medals in total  
Germany: 11 gold medals, 36 medals in total