

Portfolio assignment 5

20 min:

- Download lifeExpectancyAtBirth.csv from Brightspace ([original source](https://www.kaggle.com/utkarshxy/who-worldhealth-statistics-2020-complete?select=lifeExpectancyAtBirth.csv) (<https://www.kaggle.com/utkarshxy/who-worldhealth-statistics-2020-complete?select=lifeExpectancyAtBirth.csv>)).
- Move the file to the same folder as the Notebook that you will be working in.
- Load the dataset in your Notebook with the following code: `lifeExpectancy = pd.read_csv('lifeExpectancyAtBirth.csv', sep=',')`
- Look at the dataset with the `.head()` function.
- Filter the dataframe: We only want the life expectancy data about 2019 and 'Both sexes'
- Use this dataframe to perform a univariate analysis on the life expectancy in 2019.
- Which five countries have the highest life expectancy? Which five the lowest?

Commit the notebook and dataset to your portfolio when you're finished.

In [1]:

```
import pandas as pd
```

In [2]:

```
lifeExpectancy = pd.read_csv('../lifeExpectancyAtBirth.csv', sep=',')
```

In [3]:

```
lifeExpectancy.head()
```

Out[3]:

	Location	Period	Indicator	Dim1	First Tooltip
0	Afghanistan	2019	Life expectancy at birth (years)	Both sexes	63.21
1	Afghanistan	2019	Life expectancy at birth (years)	Male	63.29
2	Afghanistan	2019	Life expectancy at birth (years)	Female	63.16
3	Afghanistan	2015	Life expectancy at birth (years)	Both sexes	61.65
4	Afghanistan	2015	Life expectancy at birth (years)	Male	61.04

In [4]:

```
filter = (lifeExpectancy['Dim1'] == 'Both sexes') & (lifeExpectancy['Period'] == 2019)
lifeExpectancy[filter]
```

Out[4]:

	Location	Period	Indicator	Dim1	First Tooltip
0	Afghanistan	2019	Life expectancy at birth (years)	Both sexes	63.21
12	Albania	2019	Life expectancy at birth (years)	Both sexes	78.00
24	Algeria	2019	Life expectancy at birth (years)	Both sexes	77.13
36	Angola	2019	Life expectancy at birth (years)	Both sexes	63.06
48	Antigua and Barbuda	2019	Life expectancy at birth (years)	Both sexes	76.45
...
2137	Venezuela (Bolivarian Republic of)	2019	Life expectancy at birth (years)	Both sexes	73.95
2149	Viet Nam	2019	Life expectancy at birth (years)	Both sexes	73.74
2161	Yemen	2019	Life expectancy at birth (years)	Both sexes	66.63
2173	Zambia	2019	Life expectancy at birth (years)	Both sexes	62.45
2185	Zimbabwe	2019	Life expectancy at birth (years)	Both sexes	60.68

183 rows × 5 columns

In [5]:

```
grouped_df = lifeExpectancy[filter].groupby('Location')
mean_df = grouped_df.mean()
mean_df = mean_df.sort_values(by=['First Tooltip'])
mean_df
```

Out[5]:

	Period	First Tooltip
Location		
Lesotho	2019.0	50.75
Central African Republic	2019.0	53.10
Somalia	2019.0	56.47
Eswatini	2019.0	57.73
Mozambique	2019.0	58.14
...
Spain	2019.0	83.22
Singapore	2019.0	83.22
Republic of Korea	2019.0	83.30
Switzerland	2019.0	83.45
Japan	2019.0	84.26

183 rows × 2 columns