Assignment 5

March 7, 2021

0.0.1 Portfolio assignment 5

20 min: - Download lifeExpectancyAtBirth.csv from Onderwijsmateriaal/Datasets on Blackboard. - 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('Datasets/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.

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

[1]:
```
import pandas as pd
```

[2]:
```
life = pd.read_csv(r"lifeExpectancyAtBirth.csv")
life.head()
```

[2]:

	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

[3]:
```
life = life.rename(columns={"Dim1": "Gender", "First Tooltip": "Expected Age"})␣
↪# Renaming so it's easier to read.
```

[4]:
```
newLife = life[(life["Period"] == 2019) & (life["Gender"] == "Both sexes")] #␣
↪Filtering 2019 and Both Sexes
newLife
```

[4]:

	Location	Period
0	Afghanistan	2019

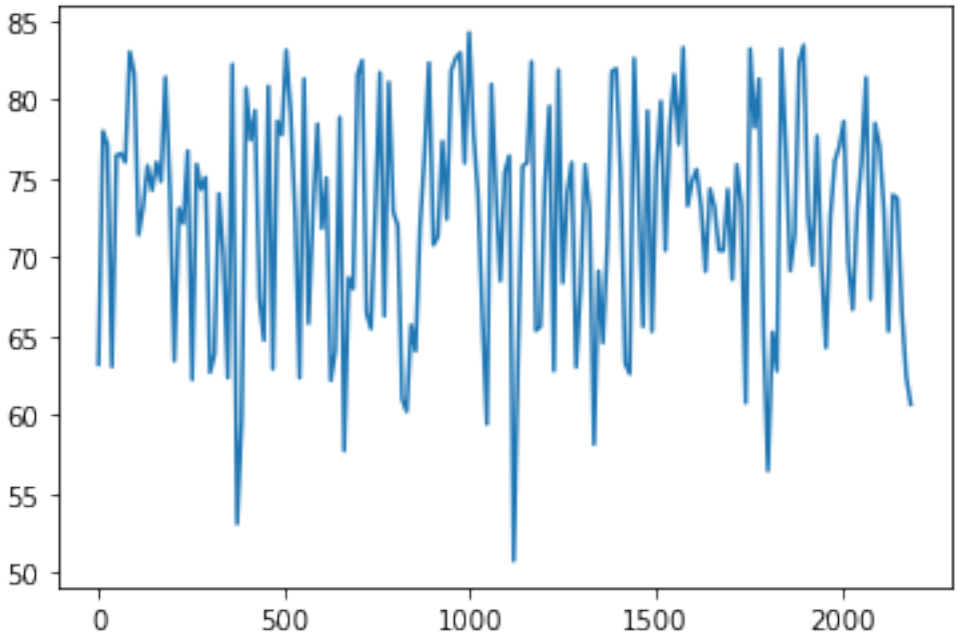
```
12                                  Albania    2019
24                                  Algeria    2019
36                                   Angola    2019
48                      Antigua and Barbuda    2019
…                                        …     …
2137  Venezuela (Bolivarian Republic of)    2019
2149                               Viet Nam    2019
2161                                  Yemen    2019
2173                                 Zambia    2019
2185                               Zimbabwe    2019

                                Indicator      Gender  Expected Age
0     Life expectancy at birth (years)  Both sexes         63.21
12    Life expectancy at birth (years)  Both sexes         78.00
24    Life expectancy at birth (years)  Both sexes         77.13
36    Life expectancy at birth (years)  Both sexes         63.06
48    Life expectancy at birth (years)  Both sexes         76.45
…                                   …         …            …
2137  Life expectancy at birth (years)  Both sexes         73.95
2149  Life expectancy at birth (years)  Both sexes         73.74
2161  Life expectancy at birth (years)  Both sexes         66.63
2173  Life expectancy at birth (years)  Both sexes         62.45
2185  Life expectancy at birth (years)  Both sexes         60.68

[183 rows x 5 columns]
```

[5]:
```
newLife['Expected Age'].plot()
```

[5]:
```
<AxesSubplot:>
```



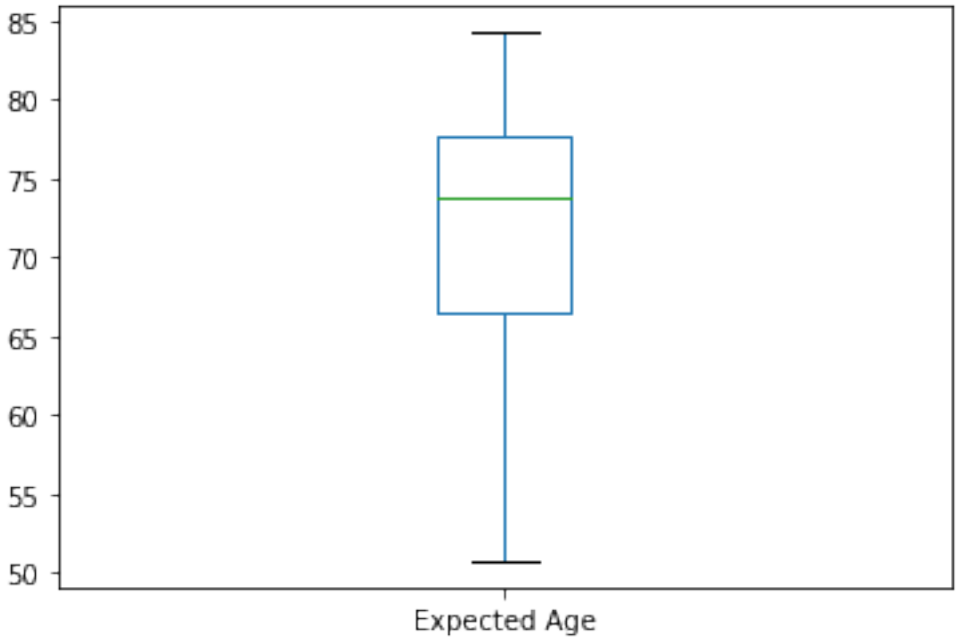
0.1 Boxplot

[6]:
```
newLife['Expected Age'].mean()
```

[6]: 72.54049180327873

[7]:
```
newLife['Expected Age'].plot(kind='box')
```

[7]: <AxesSubplot:>


85
80
75
70
65
60
55
50
Expected Age