

hubert_mentel2

November 7, 2024

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

```
[3]: df = pd.read_csv('IHME_ORB_C19HSDS_2020_Y2020M12D03.CSV')
df
```

```
[3]:      SbjNum NetDuration InterviewTimeVStart InterviewTimeVEnd \
0      133476254      0:10:14      7/17/2020 13:53      7/17/2020 14:26
1      133281846      0:22:16      7/10/2020 12:53      7/10/2020 14:47
2      133280780      0:19:23      7/10/2020 12:35      7/10/2020 12:54
3      133281834      0:10:11      7/10/2020 10:21      7/10/2020 10:32
4      133491249      0:09:59      7/18/2020 8:27      7/18/2020 8:39
...      ...      ...      ...      ...
3053  133323839      0:09:03      7/11/2020 12:44      7/11/2020 12:53
3054  133305818      0:06:57      7/11/2020 16:18      7/11/2020 16:25
3055  133260048      0:21:46      7/9/2020 11:49      7/9/2020 12:12
3056  133305807      0:06:50      7/11/2020 9:05      7/11/2020 9:12
3057  133352713      0:09:20      7/13/2020 9:56      7/13/2020 14:44

      Date  Srvyr  Country  LANG  R1  R1_5  ...  G11_Other  G11_99  \
0      7/17/2020 8:53    3232      2      1      9  15.0  ...      NaN      NaN
1      7/10/2020 7:53    3206      2      4     12  22.0  ...      NaN      NaN
2      7/10/2020 7:35    3202      2      3     10  13.0  ...      NaN      NaN
3      7/10/2020 5:21    3212      2      1     12   9.0  ...      NaN      NaN
4      7/18/2020 3:27    3225      2      3     11  28.0  ...      NaN      NaN
...      ...      ...      ...      ..      ...      ...      ...
3053  7/11/2020 5:44    3012      1      7      8   NaN  ...      NaN      NaN
3054  7/11/2020 9:18    3008      1      1      3   NaN  ...      NaN      NaN
3055   7/9/2020 4:49    3004      1      1      7   NaN  ...      NaN      NaN
3056  7/11/2020 2:05    3008      1      1      3   NaN  ...      NaN      NaN
3057  7/13/2020 2:56    3003      1      1      2   NaN  ...      NaN      NaN

      FinalOutcome  NumOfVisits  weight_combined  kenya_weight  nigeria_weight  \
0                  1              1              0.829860         NaN         0.829860
1                  1              1              1.416946         NaN         1.416946
2                  1              1              0.883601         NaN         0.883601
3                  1              1              1.416946         NaN         1.416946
4                  1              1              0.829860         NaN         0.829860
```

...
3053	1	1	3.791351	3.791351	NaN	
3054	1	1	1.157689	1.157689	NaN	
3055	1	1	0.799916	0.799916	NaN	
3056	1	1	0.799916	0.799916	NaN	
3057	1	3	1.157689	1.157689	NaN	

	southafrica_weight	agegroup	gk_weight
0	NaN	1	1.555754
1	NaN	2	1.949579
2	NaN	2	2.151458
3	NaN	2	2.325065
4	NaN	1	1.640484
...
3053	NaN	3	2.354356
3054	NaN	2	1.869021
3055	NaN	1	1.907830
3056	NaN	1	1.753344
3057	NaN	2	1.869021

[3058 rows x 247 columns]

```
[5]: # srednia
series1 = df["weight_combined"]
series1
np.mean(series1)
```

[5]: 1.0009869195359713

```
[7]: # mediana
series2 = df["gk_weight"]
series2
np.median(series2)
```

[7]: 2.046237019

```
[9]: # odchylenie standardowe
np.std(series1)
```

[9]: 0.4030393741519619

```
[11]: # wariancja
np.var(series1)
```

[11]: 0.16244073711680515

```
[13]: # korelacja
np.corrcoef(series1, series2)[0, 1]
```

[13]: 0.22123768551326237

```
[15]: # kowariancja  
      np.cov(series1, series2)[0, 1]
```

[15]: 0.07658173104603606

```
[ ]:
```