

# Bidemi Ehinmetan Tag along Code

May 30, 2023

```
[1]: import pandas as pd
united_nation = pd.read_csv(r'Untitled Folder/FoodBalanceSheets_E_Africa_NOFLAG_
↳(1).csv', encoding = "latin-1")
united_nation
```

```
[1]:
```

	Area Code	Area	Item Code	Item	Element Code \
0	4	Algeria	2501	Population	511
1	4	Algeria	2501	Population	5301
2	4	Algeria	2901	Grand Total	664
3	4	Algeria	2901	Grand Total	674
4	4	Algeria	2901	Grand Total	684
...	...	...	...	...	...
60938	181	Zimbabwe	2899	Miscellaneous	5142
60939	181	Zimbabwe	2899	Miscellaneous	645
60940	181	Zimbabwe	2899	Miscellaneous	664
60941	181	Zimbabwe	2899	Miscellaneous	674
60942	181	Zimbabwe	2899	Miscellaneous	684

  

	Element	Unit	Y2014 \
0	Total Population - Both sexes	1000 persons	38924.00
1	Domestic supply quantity	1000 tonnes	0.00
2	Food supply (kcal/capita/day)	kcal/capita/day	3377.00
3	Protein supply quantity (g/capita/day)	g/capita/day	94.90
4	Fat supply quantity (g/capita/day)	g/capita/day	80.06
...	...	...	...
60938	Food	1000 tonnes	42.00
60939	Food supply quantity (kg/capita/yr)	kg	3.06
60940	Food supply (kcal/capita/day)	kcal/capita/day	3.00
60941	Protein supply quantity (g/capita/day)	g/capita/day	0.10
60942	Fat supply quantity (g/capita/day)	g/capita/day	0.04

  

	Y2015	Y2016	Y2017	Y2018
0	39728.00	40551.00	41389.00	42228.00
1	0.00	0.00	0.00	0.00
2	3379.00	3372.00	3341.00	3322.00
3	94.35	94.72	92.82	91.83
4	79.36	77.40	80.19	77.28

...	...	...	...	...
60938	46.00	33.00	19.00	16.00
60939	3.33	2.35	1.33	1.08
60940	4.00	3.00	1.00	1.00
60941	0.11	0.08	0.04	0.04
60942	0.05	0.03	0.02	0.01

[60943 rows x 12 columns]

```
[20]: united_nation.describe(include='all')
united_nation
```

```
[20]:
```

	Area Code	Area	Item Code	Item	Element Code	\
0	4	Algeria	2501	Population	511	
1	4	Algeria	2501	Population	5301	
2	4	Algeria	2901	Grand Total	664	
3	4	Algeria	2901	Grand Total	674	
4	4	Algeria	2901	Grand Total	684	
...	...	...	...	...	...	
60938	181	Zimbabwe	2899	Miscellaneous	5142	
60939	181	Zimbabwe	2899	Miscellaneous	645	
60940	181	Zimbabwe	2899	Miscellaneous	664	
60941	181	Zimbabwe	2899	Miscellaneous	674	
60942	181	Zimbabwe	2899	Miscellaneous	684	

  

	Element	Unit	Y2014	\
0	Total Population - Both sexes	1000 persons	38924.00	
1	Domestic supply quantity	1000 tonnes	0.00	
2	Food supply (kcal/capita/day)	kcal/capita/day	3377.00	
3	Protein supply quantity (g/capita/day)	g/capita/day	94.90	
4	Fat supply quantity (g/capita/day)	g/capita/day	80.06	
...	...	...	...	
60938	Food	1000 tonnes	42.00	
60939	Food supply quantity (kg/capita/yr)	kg	3.06	
60940	Food supply (kcal/capita/day)	kcal/capita/day	3.00	
60941	Protein supply quantity (g/capita/day)	g/capita/day	0.10	
60942	Fat supply quantity (g/capita/day)	g/capita/day	0.04	

  

	Y2015	Y2016	Y2017	Y2018
0	39728.00	40551.00	41389.00	42228.00
1	0.00	0.00	0.00	0.00
2	3379.00	3372.00	3341.00	3322.00
3	94.35	94.72	92.82	91.83
4	79.36	77.40	80.19	77.28
...	...	...	...	...
60938	46.00	33.00	19.00	16.00
60939	3.33	2.35	1.33	1.08

60940	4.00	3.00	1.00	1.00
60941	0.11	0.08	0.04	0.04
60942	0.05	0.03	0.02	0.01

[60943 rows x 12 columns]

```
[3]: #Number 2
#Compare column with more columns using groupby
united_nation.groupby(["Element"]).sum()
```

```
[3]:
```

	Area Code	Item Code	Element Code	\
Element				
Domestic supply quantity	708993	14197445	28068795	
Export Quantity	599910	11840553	26026133	
Fat supply quantity (g/capita/day)	675050	13535000	3435732	
Feed	176272	3538507	7282199	
Food	663295	13285035	25406622	
Food supply (kcal/capita/day)	674057	13511060	3329296	
Food supply quantity (kg/capita/yr)	658446	13185401	3163725	
Import Quantity	688174	13795966	28834929	
Losses	274353	5424803	10292107	
Other uses (non-food)	235554	4729749	8926728	
Processing	271940	5350416	10313310	
Production	526751	10450053	21388191	
Protein supply quantity (g/capita/day)	675050	13535000	3385502	
Residuals	623271	12421089	24066350	
Seed	103537	2035933	4211574	
Stock Variation	571566	11329527	21464704	
Total Population - Both sexes	6020	112545	22995	
Tourist consumption	50308	1486528	2869905	

  

	Y2014	Y2015	Y2016	\
Element				
Domestic supply quantity	1996716.35	2021493.55	2044842.70	
Export Quantity	150020.64	157614.47	151920.46	
Fat supply quantity (g/capita/day)	10225.56	10235.74	10102.77	
Feed	216927.89	225050.22	228958.65	
Food	1212332.49	1232361.10	1247022.17	
Food supply (kcal/capita/day)	454257.00	453383.00	451810.00	
Food supply quantity (kg/capita/yr)	49650.63	49345.13	48985.28	
Import Quantity	274144.48	267018.46	286582.78	
Losses	153223.00	155439.00	157787.00	
Other uses (non-food)	78718.13	66254.41	69563.68	
Processing	282923.00	287929.00	280631.00	
Production	1931287.75	1947019.39	1943537.15	
Protein supply quantity (g/capita/day)	11836.46	11833.95	11779.69	
Residuals	30149.00	30045.00	37224.00	

Seed	21922.92	23976.82	23389.20
Stock Variation	58749.83	34910.99	33140.12
Total Population - Both sexes	1031585.00	1058081.00	1085107.00
Tourist consumption	416.00	349.00	89.00

	Y2017	Y2018
Element		
Domestic supply quantity	2088198.10	2161192.10
Export Quantity	182338.80	181594.80
Fat supply quantity (g/capita/day)	10253.84	10258.69
Feed	223705.68	233489.68
Food	1258888.28	1303841.28
Food supply (kcal/capita/day)	454681.00	455261.00
Food supply quantity (kg/capita/yr)	48690.04	49056.85
Import Quantity	294559.09	287997.09
Losses	160614.00	163902.00
Other uses (non-food)	91645.97	91300.97
Processing	292836.00	308429.00
Production	2030056.89	2075072.89
Protein supply quantity (g/capita/day)	11842.45	11833.56
Residuals	35500.00	34864.00
Seed	24870.14	25263.14
Stock Variation	54316.91	20577.91
Total Population - Both sexes	1112641.00	1140605.00
Tourist consumption	91.00	90.00

```
[4]: #Number 3
      #Get all rows up including index 3
      united_nation.loc[:3]
```

```
[4]: Area Code      Area  Item Code      Item  Element Code  \
0      4  Algeria      2501  Population      511
1      4  Algeria      2501  Population      5301
2      4  Algeria      2901  Grand Total      664
3      4  Algeria      2901  Grand Total      674
```

	Element	Unit	Y2014	Y2015	\
0	Total Population - Both sexes	1000 persons	38924.0	39728.00	
1	Domestic supply quantity	1000 tonnes	0.0	0.00	
2	Food supply (kcal/capita/day)	kcal/capita/day	3377.0	3379.00	
3	Protein supply quantity (g/capita/day)	g/capita/day	94.9	94.35	

	Y2016	Y2017	Y2018
0	40551.00	41389.00	42228.00
1	0.00	0.00	0.00
2	3372.00	3341.00	3322.00
3	94.72	92.82	91.83

```
[13]: #Number 6
      united_nation.shape
```

```
[13]: (60943, 12)
```

```
[7]: #Number 7
      #Compare column with more columns using groupby
      united_nation.groupby(["Element"]).sum()
```

```
[7]:
```

	Area Code	Item Code	Element Code	\
Element				
Domestic supply quantity	708993	14197445	28068795	
Export Quantity	599910	11840553	26026133	
Fat supply quantity (g/capita/day)	675050	13535000	3435732	
Feed	176272	3538507	7282199	
Food	663295	13285035	25406622	
Food supply (kcal/capita/day)	674057	13511060	3329296	
Food supply quantity (kg/capita/yr)	658446	13185401	3163725	
Import Quantity	688174	13795966	28834929	
Losses	274353	5424803	10292107	
Other uses (non-food)	235554	4729749	8926728	
Processing	271940	5350416	10313310	
Production	526751	10450053	21388191	
Protein supply quantity (g/capita/day)	675050	13535000	3385502	
Residuals	623271	12421089	24066350	
Seed	103537	2035933	4211574	
Stock Variation	571566	11329527	21464704	
Total Population - Both sexes	6020	112545	22995	
Tourist consumption	50308	1486528	2869905	

  

	Y2014	Y2015	Y2016	\
Element				
Domestic supply quantity	1996716.35	2021493.55	2044842.70	
Export Quantity	150020.64	157614.47	151920.46	
Fat supply quantity (g/capita/day)	10225.56	10235.74	10102.77	
Feed	216927.89	225050.22	228958.65	
Food	1212332.49	1232361.10	1247022.17	
Food supply (kcal/capita/day)	454257.00	453383.00	451810.00	
Food supply quantity (kg/capita/yr)	49650.63	49345.13	48985.28	
Import Quantity	274144.48	267018.46	286582.78	
Losses	153223.00	155439.00	157787.00	
Other uses (non-food)	78718.13	66254.41	69563.68	
Processing	282923.00	287929.00	280631.00	
Production	1931287.75	1947019.39	1943537.15	
Protein supply quantity (g/capita/day)	11836.46	11833.95	11779.69	
Residuals	30149.00	30045.00	37224.00	
Seed	21922.92	23976.82	23389.20	

Stock Variation	58749.83	34910.99	33140.12
Total Population - Both sexes	1031585.00	1058081.00	1085107.00
Tourist consumption	416.00	349.00	89.00

	Y2017	Y2018
Element		
Domestic supply quantity	2088198.10	2161192.10
Export Quantity	182338.80	181594.80
Fat supply quantity (g/capita/day)	10253.84	10258.69
Feed	223705.68	233489.68
Food	1258888.28	1303841.28
Food supply (kcal/capita/day)	454681.00	455261.00
Food supply quantity (kg/capita/yr)	48690.04	49056.85
Import Quantity	294559.09	287997.09
Losses	160614.00	163902.00
Other uses (non-food)	91645.97	91300.97
Processing	292836.00	308429.00
Production	2030056.89	2075072.89
Protein supply quantity (g/capita/day)	11842.45	11833.56
Residuals	35500.00	34864.00
Seed	24870.14	25263.14
Stock Variation	54316.91	20577.91
Total Population - Both sexes	1112641.00	1140605.00
Tourist consumption	91.00	90.00

```
[ ]: #Number 5
my_tuppy = (1,2,5,8)
my_tuppy[2] = 6
```

```
[8]: #Number 8
S = [['him', 'sell'], [90, 28, 43]]
S[0][1][1]
```

```
[8]: 'e'
```

```
[9]: #Number 10
united_nation.describe()
```

```
[9]:
```

	Area Code	Item Code	Element Code	Y2014	Y2015 \
count	60943.000000	60943.000000	60943.000000	59354.000000	59395.000000
mean	134.265576	2687.176706	3814.856456	134.196282	135.235966
std	72.605709	146.055739	2212.007033	1567.663696	1603.403984
min	4.000000	2501.000000	511.000000	-1796.000000	-3161.000000
25%	74.000000	2562.000000	684.000000	0.000000	0.000000
50%	136.000000	2630.000000	5142.000000	0.090000	0.080000
75%	195.000000	2775.000000	5511.000000	8.340000	8.460000
max	276.000000	2961.000000	5911.000000	176405.000000	181137.000000

	Y2016	Y2017	Y2018
count	59408.000000	59437.000000	59507.000000
mean	136.555222	140.917765	143.758381
std	1640.007194	1671.862359	1710.782658
min	-3225.000000	-1582.000000	-3396.000000
25%	0.000000	0.000000	0.000000
50%	0.080000	0.100000	0.070000
75%	8.430000	9.000000	9.000000
max	185960.000000	190873.000000	195875.000000

```
[11]: import numpy as np
```

```
[12]: #Number 11
a4= np.array([[94, 89, 63],
              [93, 92, 48],
              [92, 94, 56]])
```

```
[13]: a4[:2,1:]
```

```
[13]: array([[89, 63],
            [92, 48]])
```

```
[14]: a4[:1,1:]
```

```
[14]: array([[89, 63]])
```

```
[15]: a4[:2,0:]
```

```
[15]: array([[94, 89, 63],
            [93, 92, 48]])
```

```
[16]: a4[:1,1:]
```

```
[16]: array([[89, 63]])
```

```
[17]: a4[1:,:]
```

```
[17]: array([[93, 92, 48],
            [92, 94, 56]])
```

```
[26]: #Number 12
#Compare column with more columns using groupby
united_nation.groupby(["Area Code"]).sum()
```

[26] :	Item Code	Element Code	Y2014	Y2015	Y2016 \
Area Code					
4	3532053	5017927	313375.33	324058.40	326007.41
7	3819908	5515088	208584.42	209565.67	214725.32
20	3704902	5259784	22339.92	23024.85	22970.65
32	3916078	5663196	217630.28	225220.72	231714.36
35	3396746	4787751	14576.94	14538.93	14569.40
37	3607546	5069094	28739.02	28885.34	29454.54
39	3606529	5108355	65940.17	65835.88	72673.76
45	124514	241681	32.00	41.34	54.91
46	3792029	5445560	38699.26	40255.51	40592.66
53	3453692	4852820	118050.79	108181.13	117963.59
59	3996567	5893126	849192.30	868218.73	858568.63
62	107853	209609	0.00	0.00	0.00
72	2956078	3980378	21332.28	23690.16	21783.91
74	3354410	4590308	28126.31	28367.30	28129.95
75	3145402	4272295	19607.87	19665.39	21758.15
81	3639339	5135536	308328.59	311092.13	314320.45
90	3782145	5431286	91213.40	92803.39	95450.24
107	3934818	5691192	195982.84	211591.29	211439.20
114	4185637	6211860	255211.01	265506.19	260257.56
122	3099348	4204994	19125.89	17965.84	17258.96
123	3249929	4309057	27898.35	28698.10	29746.68
129	3864258	5619900	128985.32	126674.90	129010.25
130	3879389	5600952	173454.86	167989.09	164970.42
133	3469876	4878889	123038.75	132456.58	147324.78
136	3222107	4297253	109557.63	61909.99	79872.42
137	3711587	5317897	50898.12	53372.42	49272.41
143	3743082	5414999	375977.76	412473.80	367884.18
144	3830309	5566682	160757.87	158231.17	159924.41
147	3452725	4813630	32026.42	30687.90	30389.07
158	3763737	5384208	108236.65	117834.65	123601.88
159	3954357	5726937	1399542.19	1414362.83	1482945.71
175	3035574	4011694	17708.67	17990.06	18524.83
181	3739292	5346770	78366.34	74041.79	75638.88
184	3824085	5477860	70001.38	70138.83	70921.76
193	3168050	4260866	12458.64	12386.93	12647.56
195	3922180	5643618	78533.93	91939.14	89017.72
196	188266	367816	305.20	358.20	416.32
197	3343306	4603040	62570.89	62523.14	52767.72
202	3759379	5450983	497289.52	468352.18	462224.16
206	146631	286940	0.00	0.00	0.00
209	3456174	4870226	53285.75	54072.07	54025.21
215	3809549	5461092	337430.64	341969.46	333765.86
217	3478828	4868747	47618.05	47834.59	47930.75
222	3602818	5131662	117029.33	128211.41	123778.86
226	3909109	5660301	218142.33	220615.72	202981.34



233	3778795	5431243	105051.33	102701.22	107702.27
238	3878162	5598223	415935.50	429139.33	444567.57
251	3892801	5638889	99318.53	96214.00	97728.69
276	3534661	4866583	247577.56	230652.54	253197.29

	Y2017	Y2018
Area Code		
4	325644.27	341729.98
7	229159.57	235206.68
20	22101.30	23129.08
32	232030.43	233022.93
35	14650.74	14622.60
37	29937.00	30101.57
39	71594.68	72282.24
45	59.84	59.84
46	41181.68	42005.53
53	124771.22	124960.70
59	866379.92	852652.92
62	0.00	0.00
72	22729.91	23718.96
74	27979.64	28339.38
75	23154.18	23513.80
81	337599.06	358915.64
90	98138.87	103262.08
107	224599.01	227018.00
114	264660.66	270916.80
122	21267.96	19109.23
123	29342.20	29629.83
129	131197.73	134576.44
130	181098.71	187366.09
133	149928.33	159026.42
136	156665.46	157479.95
137	51114.83	47150.91
143	388495.36	399271.27
144	161407.98	164934.05
147	29874.89	29350.04
158	126707.58	133982.86
159	1483268.23	1499774.24
175	19102.77	18997.92
181	75919.34	76581.41
184	73663.69	74839.08
193	12662.63	12806.49
195	95681.15	95493.82
196	442.34	442.34
197	55311.33	55981.73
202	517590.54	509787.97
206	0.00	0.00

209	54343.33	55045.07
215	322616.85	349763.41
217	49841.88	54872.00
222	124167.20	127343.17
226	213950.38	222147.25
233	101855.07	112970.72
238	448683.76	450788.86
251	103223.77	101604.27
276	239931.92	268054.39

```
[27]: #Number 18
united_nation.groupby(["Item"]).sum()
```

```
[27]:
```

	Area Code	Item Code	Element Code	Y2014	Y2015	\
Item						
Alcohol, Non-Food	38447	752497	1515090	2403.00	2180.00	
Alcoholic Beverages	75016	1649136	2171381	102410.11	98783.72	
Animal Products	18060	397035	90990	11935.65	11811.73	
Animal fats	85279	1882494	2567303	209460.54	200675.72	
Apples and products	69280	1352989	1920418	9499.23	10559.15	
...	...	...	...	...	...	
Vegetables, Other	77779	1518715	2275409	155038.96	158104.08	
Vegetal Products	18060	391905	90990	107145.19	107064.17	
Wheat and products	87073	1639683	2654934	232670.13	234710.51	
Wine	66206	1319535	1818328	4497.36	4251.81	
Yams	50798	970905	1525745	200396.96	203151.78	
	Y2016	Y2017	Y2018			
Item						
Alcohol, Non-Food	2223.00	2348.00	2293.00			
Alcoholic Beverages	96958.75	95581.06	97847.27			
Animal Products	11661.69	11547.65	11578.61			
Animal fats	183314.22	269617.53	269648.27			
Apples and products	9853.26	10198.90	9640.51			
...	...	...	...			
Vegetables, Other	156218.90	157752.59	163987.21			
Vegetal Products	106792.72	107655.20	107775.39			
Wheat and products	239377.07	240047.62	242645.19			
Wine	3872.09	4178.02	4039.32			
Yams	220626.20	229174.59	221272.09			

[119 rows x 8 columns]

```
[14]: #Number 15
united_nation.groupby(["Area"]).sum()
```

[14]:

	Area Code	Item Code	Element Code	Y2014 \
Area				
Algeria	5252	3532053	5017927	313375.33
Angola	9968	3819908	5515088	208584.42
Benin	68105	3453692	4852820	118050.79
Botswana	27560	3704902	5259784	22339.92
Burkina Faso	328297	3778795	5431243	105051.33
Cabo Verde	44100	3396746	4787751	14576.94
Cameroon	46720	3916078	5663196	217630.28
Central African Republic	49728	3607546	5069094	28739.02
Chad	52377	3606529	5108355	65940.17
Comoros	2025	124514	241681	32.00
Congo	64998	3792029	5445560	38699.26
Côte d'Ivoire	156969	3934818	5691192	195982.84
Djibouti	78840	2956078	3980378	21332.28
Egypt	87792	3996567	5893126	849192.30
Eswatini	268356	3456174	4870226	53285.75
Ethiopia	344386	3878162	5598223	415935.50
Ethiopia PDR	2418	107853	209609	0.00
Gabon	92130	3354410	4590308	28126.31
Gambia	87600	3145402	4272295	19607.87
Ghana	109674	3639339	5135536	308328.59
Guinea	126900	3782145	5431286	91213.40
Guinea-Bissau	197400	3035574	4011694	17708.67
Kenya	177840	4185637	6211860	255211.01
Lesotho	140300	3099348	4204994	19125.89
Liberia	148338	3249929	4309057	27898.35
Madagascar	185631	3864258	5619900	128985.32
Malawi	188110	3879389	5600952	173454.86
Mali	171969	3469876	4878889	123038.75
Mauritania	162520	3222107	4297253	109557.63
Mauritius	188786	3711587	5317897	50898.12
Morocco	199199	3743082	5414999	375977.76
Mozambique	205488	3830309	5566682	160757.87
Namibia	188601	3452725	4813630	32026.42
Niger	221674	3763737	5384208	108236.65
Nigeria	234366	3954357	5726937	1399542.19
Rwanda	262384	3824085	5477860	70001.38
Sao Tome and Principe	227161	3168050	4260866	12458.64
Senegal	285090	3922180	5643618	78533.93
Seychelles	13328	188266	367816	305.20
Sierra Leone	244674	3343306	4603040	62570.89
South Africa	282598	3759379	5450983	497289.52
Sudan	363216	3534661	4866583	247577.56
Sudan (former)	10918	146631	286940	0.00
Togo	280798	3478828	4868747	47618.05
Tunisia	297036	3602818	5131662	117029.33

Uganda	329508	3909109	5660301	218142.33
United Republic of Tanzania	305085	3809549	5461092	337430.64
Zambia	364201	3892801	5638889	99318.53
Zimbabwe	252133	3739292	5346770	78366.34

	Y2015	Y2016	Y2017	Y2018
Area				
Algeria	324058.40	326007.41	325644.27	341729.98
Angola	209565.67	214725.32	229159.57	235206.68
Benin	108181.13	117963.59	124771.22	124960.70
Botswana	23024.85	22970.65	22101.30	23129.08
Burkina Faso	102701.22	107702.27	101855.07	112970.72
Cabo Verde	14538.93	14569.40	14650.74	14622.60
Cameroon	225220.72	231714.36	232030.43	233022.93
Central African Republic	28885.34	29454.54	29937.00	30101.57
Chad	65835.88	72673.76	71594.68	72282.24
Comoros	41.34	54.91	59.84	59.84
Congo	40255.51	40592.66	41181.68	42005.53
Côte d'Ivoire	211591.29	211439.20	224599.01	227018.00
Djibouti	23690.16	21783.91	22729.91	23718.96
Egypt	868218.73	858568.63	866379.92	852652.92
Eswatini	54072.07	54025.21	54343.33	55045.07
Ethiopia	429139.33	444567.57	448683.76	450788.86
Ethiopia PDR	0.00	0.00	0.00	0.00
Gabon	28367.30	28129.95	27979.64	28339.38
Gambia	19665.39	21758.15	23154.18	23513.80
Ghana	311092.13	314320.45	337599.06	358915.64
Guinea	92803.39	95450.24	98138.87	103262.08
Guinea-Bissau	17990.06	18524.83	19102.77	18997.92
Kenya	265506.19	260257.56	264660.66	270916.80
Lesotho	17965.84	17258.96	21267.96	19109.23
Liberia	28698.10	29746.68	29342.20	29629.83
Madagascar	126674.90	129010.25	131197.73	134576.44
Malawi	167989.09	164970.42	181098.71	187366.09
Mali	132456.58	147324.78	149928.33	159026.42
Mauritania	61909.99	79872.42	156665.46	157479.95
Mauritius	53372.42	49272.41	51114.83	47150.91
Morocco	412473.80	367884.18	388495.36	399271.27
Mozambique	158231.17	159924.41	161407.98	164934.05
Namibia	30687.90	30389.07	29874.89	29350.04
Niger	117834.65	123601.88	126707.58	133982.86
Nigeria	1414362.83	1482945.71	1483268.23	1499774.24
Rwanda	70138.83	70921.76	73663.69	74839.08
Sao Tome and Principe	12386.93	12647.56	12662.63	12806.49
Senegal	91939.14	89017.72	95681.15	95493.82
Seychelles	358.20	416.32	442.34	442.34
Sierra Leone	62523.14	52767.72	55311.33	55981.73

South Africa	468352.18	462224.16	517590.54	509787.97
Sudan	230652.54	253197.29	239931.92	268054.39
Sudan (former)	0.00	0.00	0.00	0.00
Togo	47834.59	47930.75	49841.88	54872.00
Tunisia	128211.41	123778.86	124167.20	127343.17
Uganda	220615.72	202981.34	213950.38	222147.25
United Republic of Tanzania	341969.46	333765.86	322616.85	349763.41
Zambia	96214.00	97728.69	103223.77	101604.27
Zimbabwe	74041.79	75638.88	75919.34	76581.41

```
[2]: united_nation.mean()
```

/tmp/ipykernel\_760/3002978627.py:1: FutureWarning: Dropping of nuisance columns in DataFrame reductions (with 'numeric\_only=None') is deprecated; in a future version this will raise TypeError. Select only valid columns before calling the reduction.

```
united_nation.mean()
```

```
[2]: Area Code      134.265576
Item Code      2687.176706
Element Code    3814.856456
Y2014          134.196282
Y2015          135.235966
Y2016          136.555222
Y2017          140.917765
Y2018          143.758381
dtype: float64
```

```
[3]: united_nation.info()
```

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 60943 entries, 0 to 60942
Data columns (total 12 columns):
#   Column          Non-Null Count  Dtype
---  -
0   Area Code       60943 non-null  int64
1   Area            60943 non-null  object
2   Item Code       60943 non-null  int64
3   Item            60943 non-null  object
4   Element Code    60943 non-null  int64
5   Element         60943 non-null  object
6   Unit            60943 non-null  object
7   Y2014           59354 non-null  float64
8   Y2015           59395 non-null  float64
9   Y2016           59408 non-null  float64
10  Y2017           59437 non-null  float64
11  Y2018           59507 non-null  float64
dtypes: float64(5), int64(3), object(4)
```

memory usage: 5.6+ MB

```
[4]: #Number 14
y = [(2, 4), (7, 8), (1, 5, 9)]
```

```
[5]: print(y[1][-1])
```

8

```
[12]: #Number 20
print(f"Unique values present in Area column are: {united_nation['Area'].
      ↪unique()}")
```

Unique values present in Area column are: ['Algeria' 'Angola' 'Benin' 'Botswana'  
'Burkina Faso' 'Cabo Verde'  
'Cameroon' 'Central African Republic' 'Chad' 'Comoros' 'Congo'  
'Côte d'Ivoire' 'Djibouti' 'Egypt' 'Eswatini' 'Ethiopia' 'Ethiopia PDR'  
'Gabon' 'Gambia' 'Ghana' 'Guinea' 'Guinea-Bissau' 'Kenya' 'Lesotho'  
'Liberia' 'Madagascar' 'Malawi' 'Mali' 'Mauritania' 'Mauritius' 'Morocco'  
'Mozambique' 'Namibia' 'Niger' 'Nigeria' 'Rwanda' 'Sao Tome and Principe'  
'Senegal' 'Seychelles' 'Sierra Leone' 'South Africa' 'Sudan'  
'Sudan (former)' 'Togo' 'Tunisia' 'Uganda' 'United Republic of Tanzania'  
'Zambia' 'Zimbabwe']

```
[ ]:
```