

```
import pandas as pd
```

```
from google.colab import files
```

```
uploaded = files.upload()
```

 Data.csv

- **Data.csv**(n/a) - 16557 bytes, last modified: 11/27/2019 - 100% done
Saving Data.csv to Data.csv

```
import io
```

```
df = pd.read_csv(io.BytesIO(uploaded['Data.csv']))
print(df)
```

```
#datafileusedisimported
```

```
↳
```

	Country	...	Dystopia	Residual
0	Switzerland	...		2.51738
1	Iceland	...		2.70201
2	Denmark	...		2.49204
3	Norway	...		2.46531
4	Canada	...		2.45176
..
153	Rwanda	...		0.67042
154	Benin	...		1.63328
155	Syria	...		0.32858
156	Burundi	...		1.83302
157	Togo	...		1.56726

```
[158 rows x 12 columns]
```

```
ser = pd.Series(df['Country'])
data = ser.head(20)
print(data)
#first20countriesaredisplayed
```

```

0      Switzerland
1      Iceland
2      Denmark
3      Norway
4      Canada
5      Finland
6      Netherlands
7      Sweden

```

```
print(data[1:10])
```

```
#10 rows are selected using indexing
```

```

1      Western Europe
2      Western Europe
3      Western Europe
4      North America
5      Western Europe
6      Western Europe
7      Western Europe
8      Australia and New Zealand
9      Australia and New Zealand
Name: Region, dtype: object

```

```
print(data.iloc[1:7])
```

```
#implicit data indexing
```

```

1      Western Europe
2      Western Europe
3      Western Europe
4      North America
5      Western Europe
6      Western Europe
Name: Region, dtype: object

```

```
ser = pd.Series(df['Happiness Rank'])
```

```
data = ser.head(20)
```

```
print(data)
```

```
#first 20 Happiest countries are displayed
```

```
0      1
1      2
2      3
3      4
4      5
5      6
```

```
data = pd.read_csv('Data.csv', usecols=['Country', 'Region', 'Happiness Rank'])
print(data)
#Country, Region, Happiness Rank of first 20 are displayed
```

	Country	Region	Happiness Rank
0	Switzerland	Western Europe	1
1	Iceland	Western Europe	2
2	Denmark	Western Europe	3
3	Norway	Western Europe	4
4	Canada	North America	5
..
153	Rwanda	Sub-Saharan Africa	154
154	Benin	Sub-Saharan Africa	155
155	Syria	Middle East and Northern Africa	156
156	Burundi	Sub-Saharan Africa	157
157	Togo	Sub-Saharan Africa	158

[158 rows x 3 columns]

```
data = pd.read_csv('Data.csv')
data[data.Country == 'Iceland']
#Particularly Iceland's field is displayed
```

Country	Region	Happiness Rank	Happiness Score	Standard Error	Economy (GDP per Capita)	Family	Health (Life Expectancy)	Free
1	Western	2	7.561	0.04004	1.00000	1.40000	0.04704	0.000

```
data = pd.read_csv('Data.csv')
data.head()[['Country','Region','Happiness Rank','Happiness Score']]
# selects the first 5 rows of our data set. And then it takes only the 'country','region','ha
```

	Country	Region	Happiness Rank	Happiness Score
0	Switzerland	Western Europe	1	7.587
1	Iceland	Western Europe	2	7.561
2	Denmark	Western Europe	3	7.527
3	Norway	Western Europe	4	7.522
4	Canada	North America	5	7.427

```
data.dropna(inplace = True)
print(data)
#filling all NA values
```

	Country	Region	Happiness Rank
0	Switzerland	Western Europe	1
1	Iceland	Western Europe	2
2	Denmark	Western Europe	3
3	Norway	Western Europe	4
4	Canada	North America	5
..
153	Rwanda	Sub-Saharan Africa	154
154	Benin	Sub-Saharan Africa	155
155	Syria	Middle East and Northern Africa	156
156	Burundi	Sub-Saharan Africa	157
157	Togo	Sub-Saharan Africa	158

```
[158 rows x 3 columns]
```

```
import matplotlib.pyplot as plt
import numpy as np
x=range(1,100)
print("Original",x)
ts = pd.Series(x)
ts=ts.cumsum()
print("Data Series",ts)
ts.plot()
#plotting
```

```
Original range(1, 100)
```

```
Data Series 0      1
```

```
1      3
```

```
2      6
```

```
...
```

```
94    4560
```

```
95    4656
```

```
96    4753
```

```
97    4851
```

```
98    4950
```

```
Length: 99, dtype: int64
```

```
<matplotlib.axes._subplots.AxesSubplot at 0x7fc7a8935588>
```

