

In [4]: `import pandas as pd #USE FOR DATAFRAMES`

In [5]: `stats = pd.read_csv(r'C:\Users\user\Desktop\15th,16th matplotlib\DataFrame_Pandas\DATAFRAME.csv')`

In [6]: `stats`

Out[6]:

	<b>CountryName</b>	<b>CountryCode</b>	<b>BirthRate</b>	<b>InternetUsers</b>	<b>IncomeGroup</b>
<b>0</b>	Aruba	ABW	10.244	78.9	High income
<b>1</b>	Afghanistan	AFG	35.253	5.9	Low income
<b>2</b>	Angola	AGO	45.985	19.1	Upper middle income
<b>3</b>	Albania	ALB	12.877	57.2	Upper middle income
<b>4</b>	United Arab Emirates	ARE	11.044	88.0	High income
...	...	...	...	...	...
<b>190</b>	Yemen, Rep.	YEM	32.947	20.0	Lower middle income
<b>191</b>	South Africa	ZAF	20.850	46.5	Upper middle income
<b>192</b>	Congo, Dem. Rep.	COD	42.394	2.2	Low income
<b>193</b>	Zambia	ZMB	40.471	15.4	Lower middle income
<b>194</b>	Zimbabwe	ZWE	35.715	18.5	Low income

195 rows × 5 columns

In [7]: `len(stats) #195 rows imported (this is for tracking later part )`

Out[7]: 195

In [8]: `#3. see columns  
stats.columns`

Out[8]: `Index(['CountryName', 'CountryCode', 'BirthRate', 'InternetUsers', 'IncomeGroup'],  
 dtype='object')`

In [9]: `len(stats.columns) #Length of columns`

Out[9]: 5

In [10]: `stats.head() # it will print top 5 rows`

Out[10]:

	CountryName	CountryCode	BirthRate	InternetUsers	IncomeGroup
0	Aruba	ABW	10.244	78.9	High income
1	Afghanistan	AFG	35.253	5.9	Low income
2	Angola	AGO	45.985	19.1	Upper middle income
3	Albania	ALB	12.877	57.2	Upper middle income
4	United Arab Emirates	ARE	11.044	88.0	High income

In [12]: `stats.head(2) # print top two rows`

Out[12]:

	CountryName	CountryCode	BirthRate	InternetUsers	IncomeGroup
0	Aruba	ABW	10.244	78.9	High income
1	Afghanistan	AFG	35.253	5.9	Low income

In [13]: `stats.tail() #Last 5 rows`

Out[13]:

	CountryName	CountryCode	BirthRate	InternetUsers	IncomeGroup
190	Yemen, Rep.	YEM	32.947	20.0	Lower middle income
191	South Africa	ZAF	20.850	46.5	Upper middle income
192	Congo, Dem. Rep.	COD	42.394	2.2	Low income
193	Zambia	ZMB	40.471	15.4	Lower middle income
194	Zimbabwe	ZWE	35.715	18.5	Low income

In [14]: `stats.tail(3)`

Out[14]:

	CountryName	CountryCode	BirthRate	InternetUsers	IncomeGroup
192	Congo, Dem. Rep.	COD	42.394	2.2	Low income
193	Zambia	ZMB	40.471	15.4	Lower middle income
194	Zimbabwe	ZWE	35.715	18.5	Low income

In [15]: `##strings are called as object information of the column  
#strings are called as object  
stats.info()`

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 195 entries, 0 to 194
Data columns (total 5 columns):
 #   Column      Non-Null Count  Dtype  
--- 
 0   CountryName    195 non-null   object  
 1   CountryCode     195 non-null   object  
 2   BirthRate       195 non-null   float64 
 3   InternetUsers  195 non-null   float64 
 4   IncomeGroup     195 non-null   object  
dtypes: float64(2), object(3)
memory usage: 7.7+ KB
```

In [16]: `# Renaming columns of a dataframe  
stats.head()`

Out[16]:

	CountryName	CountryCode	BirthRate	InternetUsers	IncomeGroup
<b>0</b>	Aruba	ABW	10.244	78.9	High income
<b>1</b>	Afghanistan	AFG	35.253	5.9	Low income
<b>2</b>	Angola	AGO	45.985	19.1	Upper middle income
<b>3</b>	Albania	ALB	12.877	57.2	Upper middle income
<b>4</b>	United Arab Emirates	ARE	11.044	88.0	High income

In [17]: `stats.columns`

Out[17]: `Index(['CountryName', 'CountryCode', 'BirthRate', 'InternetUsers',  
'IncomeGroup'],  
 dtype='object')`

In [18]: `stats.columns = ['a', 'b', 'c', 'd', 'e']  
stats.head()`

Out[18]:

	a	b	c	d	e
<b>0</b>	Aruba	ABW	10.244	78.9	High income
<b>1</b>	Afghanistan	AFG	35.253	5.9	Low income
<b>2</b>	Angola	AGO	45.985	19.1	Upper middle income
<b>3</b>	Albania	ALB	12.877	57.2	Upper middle income
<b>4</b>	United Arab Emirates	ARE	11.044	88.0	High income

In [19]: `stats.columns = ['CountryName', 'CountryCode', 'BirthRate', 'InternetUsers', 'Inc`

In [20]: `stats.head()`

Out[20]:

	CountryName	CountryCode	BirthRate	InternetUsers	IncomeGroup
0	Aruba	ABW	10.244	78.9	High income
1	Afghanistan	AFG	35.253	5.9	Low income
2	Angola	AGO	45.985	19.1	Upper middle income
3	Albania	ALB	12.877	57.2	Upper middle income
4	United Arab Emirates	ARE	11.044	88.0	High income

In [21]: # Rows:

```
stats[21:26] #how python know that only this is rows based on index
```

Out[21]:

	CountryName	CountryCode	BirthRate	InternetUsers	IncomeGroup
21	Belize	BLZ	23.092	33.60	Upper middle income
22	Bermuda	BMU	10.400	95.30	High income
23	Bolivia	BOL	24.236	36.94	Lower middle income
24	Brazil	BRA	14.931	51.04	Upper middle income
25	Barbados	BRB	12.188	73.00	High income

In [22]: stats[:10]

Out[22]:

	CountryName	CountryCode	BirthRate	InternetUsers	IncomeGroup
0	Aruba	ABW	10.244	78.9000	High income
1	Afghanistan	AFG	35.253	5.9000	Low income
2	Angola	AGO	45.985	19.1000	Upper middle income
3	Albania	ALB	12.877	57.2000	Upper middle income
4	United Arab Emirates	ARE	11.044	88.0000	High income
5	Argentina	ARG	17.716	59.9000	High income
6	Armenia	ARM	13.308	41.9000	Lower middle income
7	Antigua and Barbuda	ATG	16.447	63.4000	High income
8	Australia	AUS	13.200	83.0000	High income
9	Austria	AUT	9.400	80.6188	High income

In [23]: # How to reverse the dataframe

```
stats[ : : -1]
```

Out[23]:

	CountryName	CountryCode	BirthRate	InternetUsers	IncomeGroup
194	Zimbabwe	ZWE	35.715	18.5	Low income
193	Zambia	ZMB	40.471	15.4	Lower middle income
192	Congo, Dem. Rep.	COD	42.394	2.2	Low income
191	South Africa	ZAF	20.850	46.5	Upper middle income
190	Yemen, Rep.	YEM	32.947	20.0	Lower middle income
...	...	...	...	...	...
4	United Arab Emirates	ARE	11.044	88.0	High income
3	Albania	ALB	12.877	57.2	Upper middle income
2	Angola	AGO	45.985	19.1	Upper middle income
1	Afghanistan	AFG	35.253	5.9	Low income
0	Aruba	ABW	10.244	78.9	High income

195 rows × 5 columns

In [24]: stats

Out[24]:

	CountryName	CountryCode	BirthRate	InternetUsers	IncomeGroup
0	Aruba	ABW	10.244	78.9	High income
1	Afghanistan	AFG	35.253	5.9	Low income
2	Angola	AGO	45.985	19.1	Upper middle income
3	Albania	ALB	12.877	57.2	Upper middle income
4	United Arab Emirates	ARE	11.044	88.0	High income
...	...	...	...	...	...
190	Yemen, Rep.	YEM	32.947	20.0	Lower middle income
191	South Africa	ZAF	20.850	46.5	Upper middle income
192	Congo, Dem. Rep.	COD	42.394	2.2	Low income
193	Zambia	ZMB	40.471	15.4	Lower middle income
194	Zimbabwe	ZWE	35.715	18.5	Low income

195 rows × 5 columns

In [25]:

```
# get only every 20th row
stats[::20]
```

Out[25]:

	CountryName	CountryCode	BirthRate	InternetUsers	IncomeGroup
0	Aruba	ABW	10.244	78.9000	High income
20	Belarus	BLR	12.500	54.1700	Upper middle income
40	Costa Rica	CRI	15.022	45.9600	Upper middle income
60	Gabon	GAB	30.555	9.2000	Upper middle income
80	India	IND	20.291	15.1000	Lower middle income
100	Libya	LBY	21.425	16.5000	Upper middle income
120	Mozambique	MOZ	39.705	5.4000	Low income
140	Poland	POL	9.600	62.8492	High income
160	Suriname	SUR	18.455	37.4000	Upper middle income
180	Uruguay	URY	14.374	57.6900	High income

In [26]:

```
# COLUMNS:
stats.columns
```

```
Out[26]: Index(['CountryName', 'CountryCode', 'BirthRate', 'InternetUsers',
       'IncomeGroup'],
       dtype='object')
```

```
In [27]: stats.head()
```

```
Out[27]:
```

	<b>CountryName</b>	<b>CountryCode</b>	<b>BirthRate</b>	<b>InternetUsers</b>	<b>IncomeGroup</b>
<b>0</b>	Aruba	ABW	10.244	78.9	High income
<b>1</b>	Afghanistan	AFG	35.253	5.9	Low income
<b>2</b>	Angola	AGO	45.985	19.1	Upper middle income
<b>3</b>	Albania	ALB	12.877	57.2	Upper middle income
<b>4</b>	United Arab Emirates	ARE	11.044	88.0	High income

```
In [28]: stats['CountryName'].head()
```

```
Out[28]: 0          Aruba
1          Afghanistan
2          Angola
3          Albania
4  United Arab Emirates
Name: CountryName, dtype: object
```

```
In [29]: ['CountryName', 'BirthRate']
```

```
Out[29]: ['CountryName', 'BirthRate']
```

```
In [30]: stats[['CountryName', 'BirthRate']].head()
```

```
Out[30]:
```

	<b>CountryName</b>	<b>BirthRate</b>
<b>0</b>	Aruba	10.244
<b>1</b>	Afghanistan	35.253
<b>2</b>	Angola	45.985
<b>3</b>	Albania	12.877
<b>4</b>	United Arab Emirates	11.044

```
In [31]: stats.head()
```

```
Out[31]:
```

	<b>CountryName</b>	<b>CountryCode</b>	<b>BirthRate</b>	<b>InternetUsers</b>	<b>IncomeGroup</b>
<b>0</b>	Aruba	ABW	10.244	78.9	High income
<b>1</b>	Afghanistan	AFG	35.253	5.9	Low income
<b>2</b>	Angola	AGO	45.985	19.1	Upper middle income
<b>3</b>	Albania	ALB	12.877	57.2	Upper middle income
<b>4</b>	United Arab Emirates	ARE	11.044	88.0	High income

```
In [32]: stats['BirthRate']
```

```
Out[32]: 0      10.244
1      35.253
2      45.985
3      12.877
4      11.044
...
190    32.947
191    20.850
192    42.394
193    40.471
194    35.715
Name: BirthRate, Length: 195, dtype: float64
```

```
In [33]: # combine the two
```

```
stats[4:8][['CountryName','BirthRate']]
```

```
Out[33]:
```

	CountryName	BirthRate
4	United Arab Emirates	11.044
5	Argentina	17.716
6	Armenia	13.308
7	Antigua and Barbuda	16.447

```
In [34]: stats[['CountryName','BirthRate']][4:8]
```

```
Out[34]:
```

	CountryName	BirthRate
4	United Arab Emirates	11.044
5	Argentina	17.716
6	Armenia	13.308
7	Antigua and Barbuda	16.447

```
In [35]: df1 = stats[['CountryName','BirthRate']]
```

```
In [36]: df1
```

Out[36]:

	CountryName	BirthRate
0	Aruba	10.244
1	Afghanistan	35.253
2	Angola	45.985
3	Albania	12.877
4	United Arab Emirates	11.044
...	...	...
190	Yemen, Rep.	32.947
191	South Africa	20.850
192	Congo, Dem. Rep.	42.394
193	Zambia	40.471
194	Zimbabwe	35.715

195 rows × 2 columns

In [37]: df2 = stats[4:8]

In [38]: df2

Out[38]:

	CountryName	CountryCode	BirthRate	InternetUsers	IncomeGroup
4	United Arab Emirates	ARE	11.044	88.0	High income
5	Argentina	ARG	17.716	59.9	High income
6	Armenia	ARM	13.308	41.9	Lower middle income
7	Antigua and Barbuda	ATG	16.447	63.4	High income

In [39]: stats.head()

Out[39]:

	CountryName	CountryCode	BirthRate	InternetUsers	IncomeGroup
0	Aruba	ABW	10.244	78.9	High income
1	Afghanistan	AFG	35.253	5.9	Low income
2	Angola	AGO	45.985	19.1	Upper middle income
3	Albania	ALB	12.877	57.2	Upper middle income
4	United Arab Emirates	ARE	11.044	88.0	High income

In [40]: stats[['CountryCode', 'BirthRate', 'InternetUsers']][4:8] #subset dataframe

Out[40]:

	CountryCode	BirthRate	InternetUsers
4	ARE	11.044	88.0
5	ARG	17.716	59.9
6	ARM	13.308	41.9
7	ATG	16.447	63.4

In [41]:

```
#Mathmetical operation =
stats.BirthRate * stats.InternetUsers
```

Out[41]:

```
0      808.2516
1      207.9927
2      878.3135
3      736.5644
4      971.8720
...
190     658.9400
191     969.5250
192     93.2668
193     623.2534
194     660.7275
Length: 195, dtype: float64
```

In [43]:

```
# Add a column
stats['myCalc'] = stats.BirthRate * stats.InternetUsers
```

In [44]:

```
stats
```

Out[44]:

	CountryName	CountryCode	BirthRate	InternetUsers	IncomeGroup	myCalc
0	Aruba	ABW	10.244	78.9	High income	808.2516
1	Afghanistan	AFG	35.253	5.9	Low income	207.9927
2	Angola	AGO	45.985	19.1	Upper middle income	878.3135
3	Albania	ALB	12.877	57.2	Upper middle income	736.5644
4	United Arab Emirates	ARE	11.044	88.0	High income	971.8720
...	...	...	...	...	...	...
190	Yemen, Rep.	YEM	32.947	20.0	Lower middle income	658.9400
191	South Africa	ZAF	20.850	46.5	Upper middle income	969.5250
192	Congo, Dem. Rep.	COD	42.394	2.2	Low income	93.2668
193	Zambia	ZMB	40.471	15.4	Lower middle income	623.2534
194	Zimbabwe	ZWE	35.715	18.5	Low income	660.7275

195 rows × 6 columns

In [45]: #Remove a column

stats.drop('myCalc', axis = 1)

Out[45]:

	CountryName	CountryCode	BirthRate	InternetUsers	IncomeGroup
0	Aruba	ABW	10.244	78.9	High income
1	Afghanistan	AFG	35.253	5.9	Low income
2	Angola	AGO	45.985	19.1	Upper middle income
3	Albania	ALB	12.877	57.2	Upper middle income
4	United Arab Emirates	ARE	11.044	88.0	High income
...	...	...	...	...	...
190	Yemen, Rep.	YEM	32.947	20.0	Lower middle income
191	South Africa	ZAF	20.850	46.5	Upper middle income
192	Congo, Dem. Rep.	COD	42.394	2.2	Low income
193	Zambia	ZMB	40.471	15.4	Lower middle income
194	Zimbabwe	ZWE	35.715	18.5	Low income

195 rows × 5 columns

In [46]: `stats = stats.drop('myCalc', axis = 1)`In [47]: `stats.head()`

Out[47]:

	CountryName	CountryCode	BirthRate	InternetUsers	IncomeGroup
0	Aruba	ABW	10.244	78.9	High income
1	Afghanistan	AFG	35.253	5.9	Low income
2	Angola	AGO	45.985	19.1	Upper middle income
3	Albania	ALB	12.877	57.2	Upper middle income
4	United Arab Emirates	ARE	11.044	88.0	High income

In [48]: `stats.columns[2]`

Out[48]: 'BirthRate'

In [49]: `stats.InternetUsers < 2 #we are checking given condition if its correct true or fa`

```
Out[49]: 0    False
         1    False
         2    False
         3    False
         4    False
        ...
190    False
191    False
192    False
193    False
194    False
Name: InternetUsers, Length: 195, dtype: bool
```

```
In [51]: Filter = stats.InternetUsers < 2
Filter
```

```
Out[51]: 0    False
         1    False
         2    False
         3    False
         4    False
        ...
190    False
191    False
192    False
193    False
194    False
Name: InternetUsers, Length: 195, dtype: bool
```

```
In [53]: stats[3:7]
```

	CountryName	CountryCode	BirthRate	InternetUsers	IncomeGroup
3	Albania	ALB	12.877	57.2	Upper middle income
4	United Arab Emirates	ARE	11.044	88.0	High income
5	Argentina	ARG	17.716	59.9	High income
6	Armenia	ARM	13.308	41.9	Lower middle income

```
In [54]: stats[30:40]
```

Out[54]:

	CountryName	CountryCode	BirthRate	InternetUsers	IncomeGroup
30	Canada	CAN	10.900	85.80	High income
31	Switzerland	CHE	10.200	86.34	High income
32	Chile	CHL	13.385	66.50	High income
33	China	CHN	12.100	45.80	Upper middle income
34	Cote d'Ivoire	CIV	37.320	8.40	Lower middle income
35	Cameroon	CMR	37.236	6.40	Lower middle income
36	Congo, Rep.	COG	37.011	6.60	Lower middle income
37	Colombia	COL	16.076	51.70	Upper middle income
38	Comoros	COM	34.326	6.50	Low income
39	Cabo Verde	CPV	21.625	37.50	Lower middle income

In [55]: `stats.BirthRate>40`

Out[55]:

```
0    False
1    False
2     True
3    False
4    False
...
190   False
191   False
192     True
193     True
194   False
Name: BirthRate, Length: 195, dtype: bool
```

In [58]: `Filter2 = stats.BirthRate>40`  
`Filter2`

Out[58]:

```
0    False
1    False
2     True
3    False
4    False
...
190   False
191   False
192     True
193     True
194   False
Name: BirthRate, Length: 195, dtype: bool
```

In [59]: `stats[Filter2]`

Out[59]:

	CountryName	CountryCode	BirthRate	InternetUsers	IncomeGroup
2	Angola	AGO	45.985	19.1	Upper middle income
11	Burundi	BDI	44.151	1.3	Low income
14	Burkina Faso	BFA	40.551	9.1	Low income
65	Gambia, The	GMB	42.525	14.0	Low income
115	Mali	MLI	44.138	3.5	Low income
127	Niger	NER	49.661	1.7	Low income
128	Nigeria	NGA	40.045	38.0	Lower middle income
156	Somalia	SOM	43.891	1.5	Low income
167	Chad	TCD	45.745	2.3	Low income
178	Uganda	UGA	43.474	16.2	Low income
192	Congo, Dem. Rep.	COD	42.394	2.2	Low income
193	Zambia	ZMB	40.471	15.4	Lower middle income

In [60]: #Filter and Filter2  
Filter & Filter2Out[60]: 0 False  
1 False  
2 False  
3 False  
4 False  
...  
190 False  
191 False  
192 False  
193 False  
194 False  
Length: 195, dtype: bool

In [61]: stats[Filter &amp; Filter2]

	CountryName	CountryCode	BirthRate	InternetUsers	IncomeGroup
11	Burundi	BDI	44.151	1.3	Low income
127	Niger	NER	49.661	1.7	Low income
156	Somalia	SOM	43.891	1.5	Low income

In [62]: stats[(stats.BirthRate &gt; 40) &amp; (stats.InternetUsers &lt; 2)]

Out[62]:

	CountryName	CountryCode	BirthRate	InternetUsers	IncomeGroup
11	Burundi	BDI	44.151	1.3	Low income
127	Niger	NER	49.661	1.7	Low income
156	Somalia	SOM	43.891	1.5	Low income

In [63]:

stats.head()

Out[63]:

	CountryName	CountryCode	BirthRate	InternetUsers	IncomeGroup
0	Aruba	ABW	10.244	78.9	High income
1	Afghanistan	AFG	35.253	5.9	Low income
2	Angola	AGO	45.985	19.1	Upper middle income
3	Albania	ALB	12.877	57.2	Upper middle income
4	United Arab Emirates	ARE	11.044	88.0	High income

In [65]:

stats[stats.IncomeGroup == 'Low income']

Out[65]:

	CountryName	CountryCode	BirthRate	InternetUsers	IncomeGroup
1	Afghanistan	AFG	35.253	5.90	Low income
11	Burundi	BDI	44.151	1.30	Low income
13	Benin	BEN	36.440	4.90	Low income
14	Burkina Faso	BFA	40.551	9.10	Low income
29	Central African Republic	CAF	34.076	3.50	Low income
38	Comoros	COM	34.326	6.50	Low income
52	Eritrea	ERI	34.800	0.90	Low income
55	Ethiopia	ETH	32.925	1.90	Low income
64	Guinea	GIN	37.337	1.60	Low income
65	Gambia, The	GMB	42.525	14.00	Low income
66	Guinea-Bissau	GNB	37.503	3.10	Low income
77	Haiti	HTI	25.345	10.60	Low income
93	Cambodia	KHM	24.462	6.80	Low income
99	Liberia	LBR	35.521	3.20	Low income
111	Madagascar	MDG	34.686	3.00	Low income
115	Mali	MLI	44.138	3.50	Low income
120	Mozambique	MOZ	39.705	5.40	Low income
123	Malawi	MWI	39.459	5.05	Low income
127	Niger	NER	49.661	1.70	Low income
132	Nepal	NPL	20.923	13.30	Low income
148	Rwanda	RWA	32.689	9.00	Low income
154	Sierra Leone	SLE	36.729	1.70	Low income
156	Somalia	SOM	43.891	1.50	Low income
158	South Sudan	SSD	37.126	14.10	Low income
167	Chad	TCD	45.745	2.30	Low income
168	Togo	TGO	36.080	4.50	Low income
177	Tanzania	TZA	39.518	4.40	Low income
178	Uganda	UGA	43.474	16.20	Low income
192	Congo, Dem. Rep.	COD	42.394	2.20	Low income
194	Zimbabwe	ZWE	35.715	18.50	Low income

In [66]:

# How to get the unique categories

stats.IncomeGroup.unique()

```
Out[66]: array(['High income', 'Low income', 'Upper middle income',
       'Lower middle income'], dtype=object)
```

```
In [67]: import matplotlib.pyplot as plt # visualization
import seaborn as sns # distribution visualization

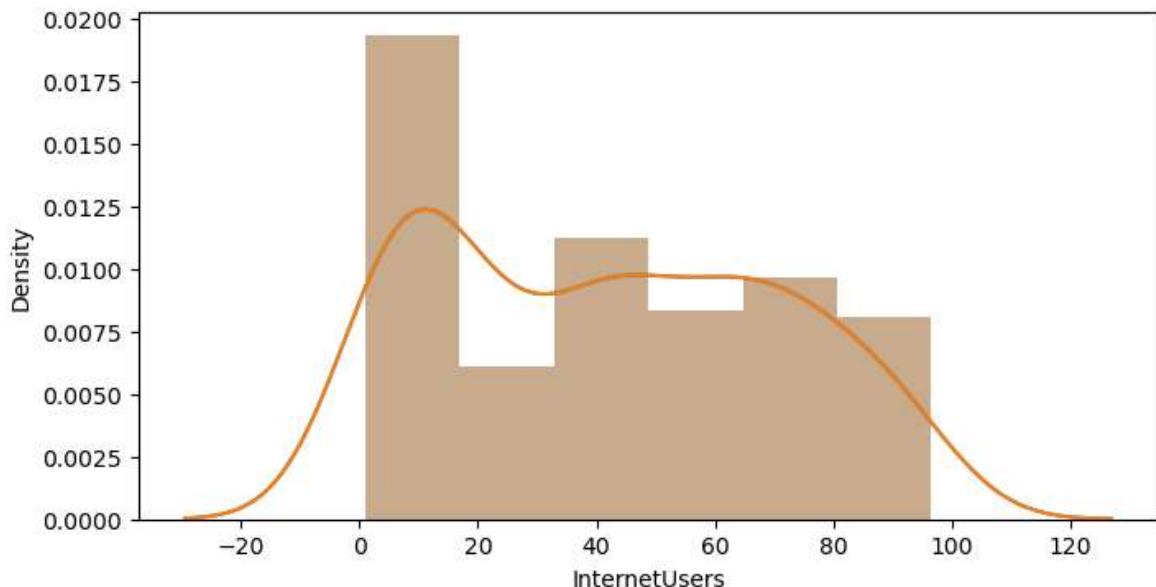
%matplotlib inline
plt.rcParams['figure.figsize'] = 8,4

import warnings
warnings.filterwarnings('ignore')
```

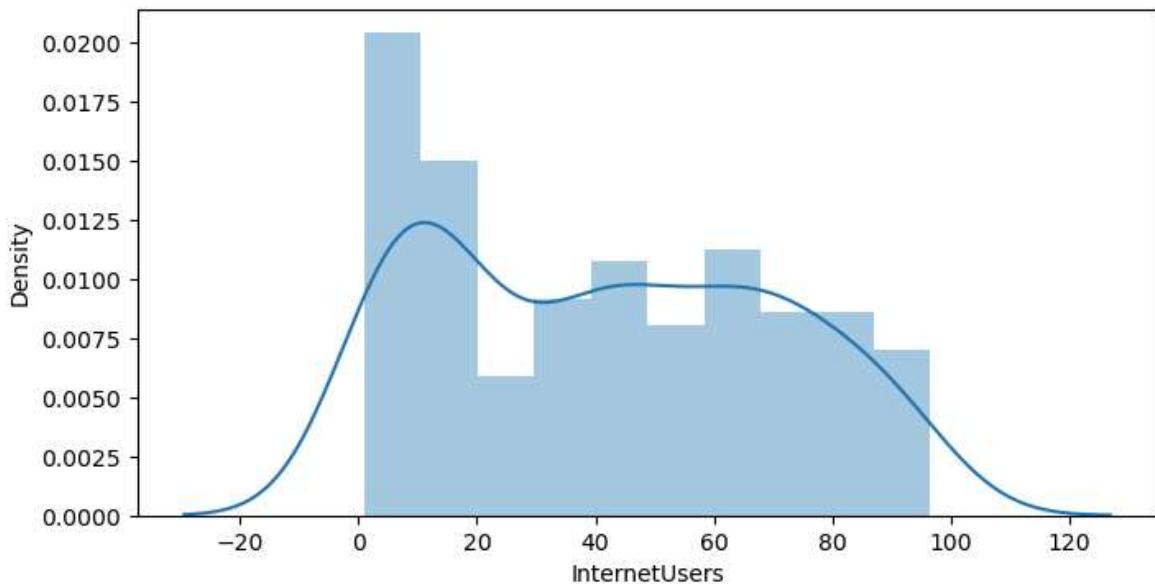
```
In [68]: stats.head()
```

	CountryName	CountryCode	BirthRate	InternetUsers	IncomeGroup
<b>0</b>	Aruba	ABW	10.244	78.9	High income
<b>1</b>	Afghanistan	AFG	35.253	5.9	Low income
<b>2</b>	Angola	AGO	45.985	19.1	Upper middle income
<b>3</b>	Albania	ALB	12.877	57.2	Upper middle income
<b>4</b>	United Arab Emirates	ARE	11.044	88.0	High income

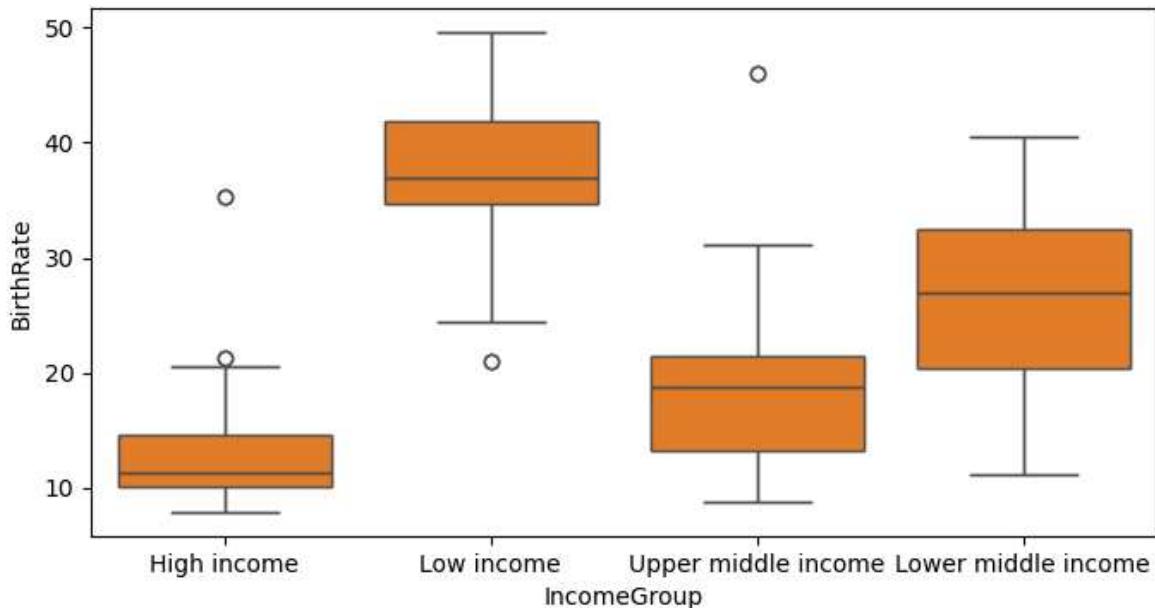
```
In [70]: # Distributions:
vis1 = sns.distplot(stats["InternetUsers"])
plt.show()
```



```
In [71]: vis1 = sns.distplot(stats["InternetUsers"], bins=10)
plt.show()
```

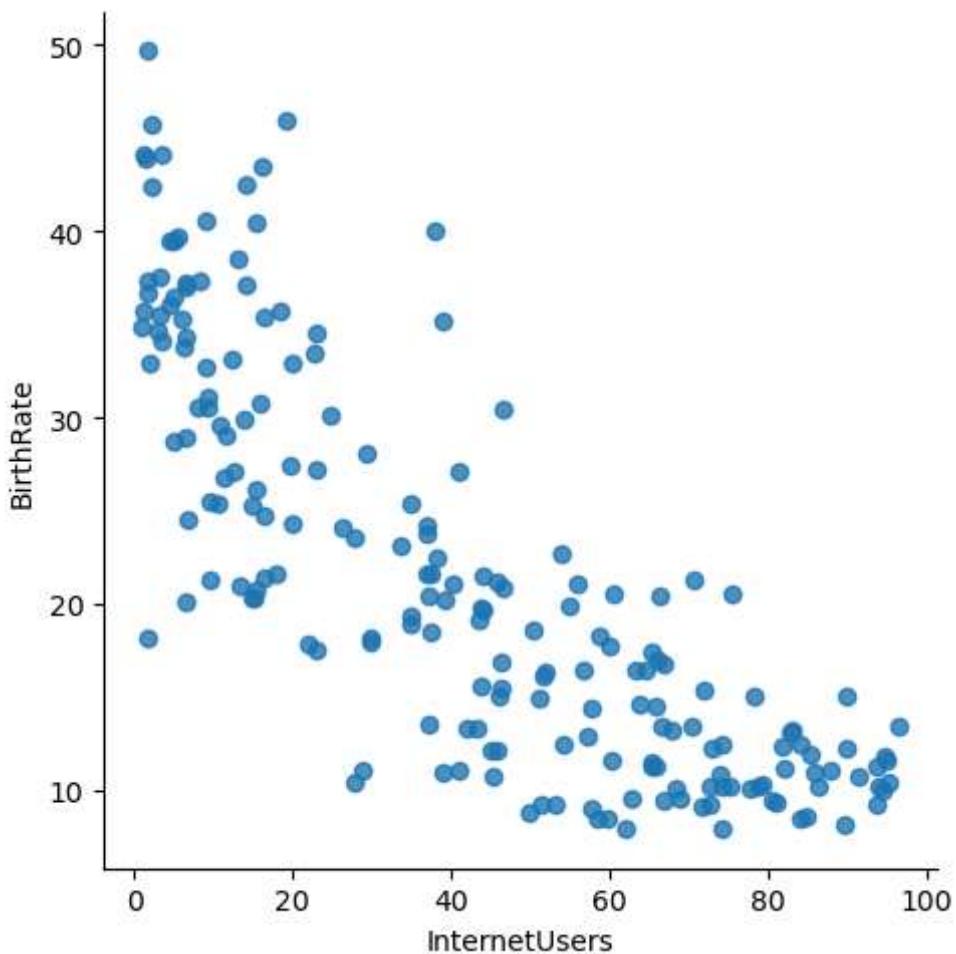
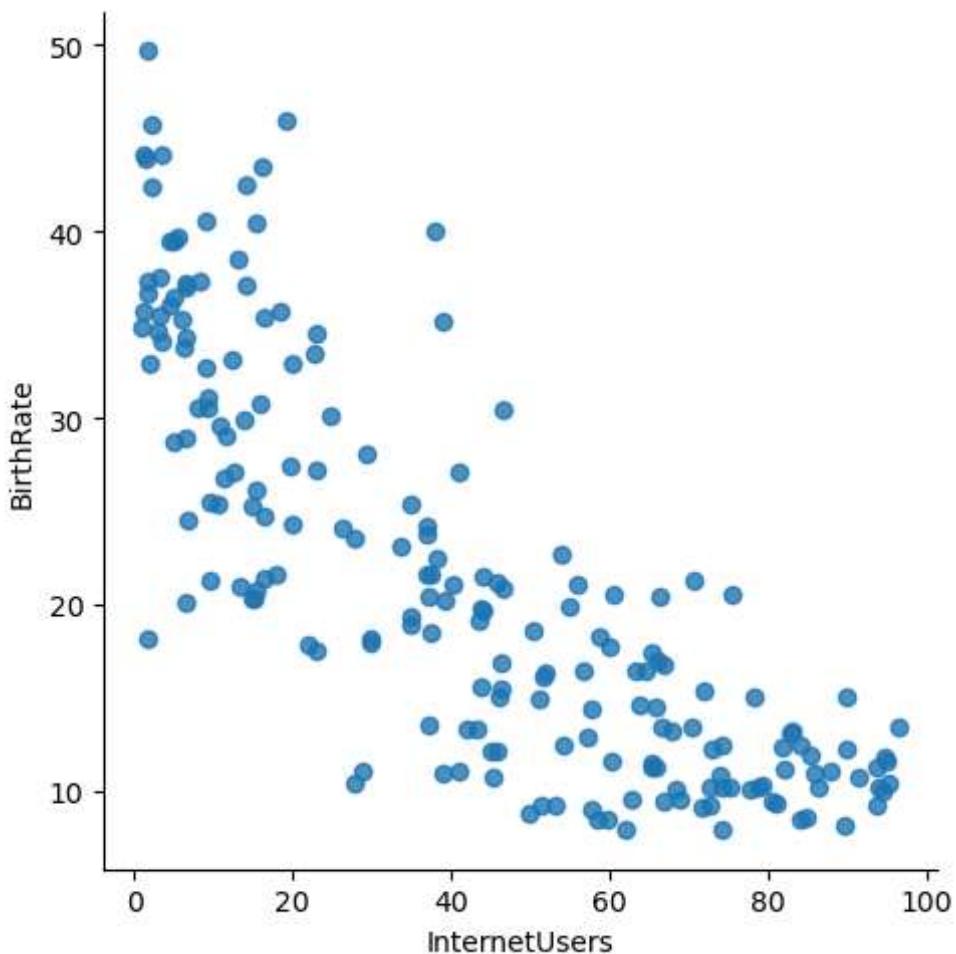


```
In [73]: #BOX PLOTS:
vis2 = sns.boxplot(data = stats, x="IncomeGroup", y='BirthRate')
plt.show()
```

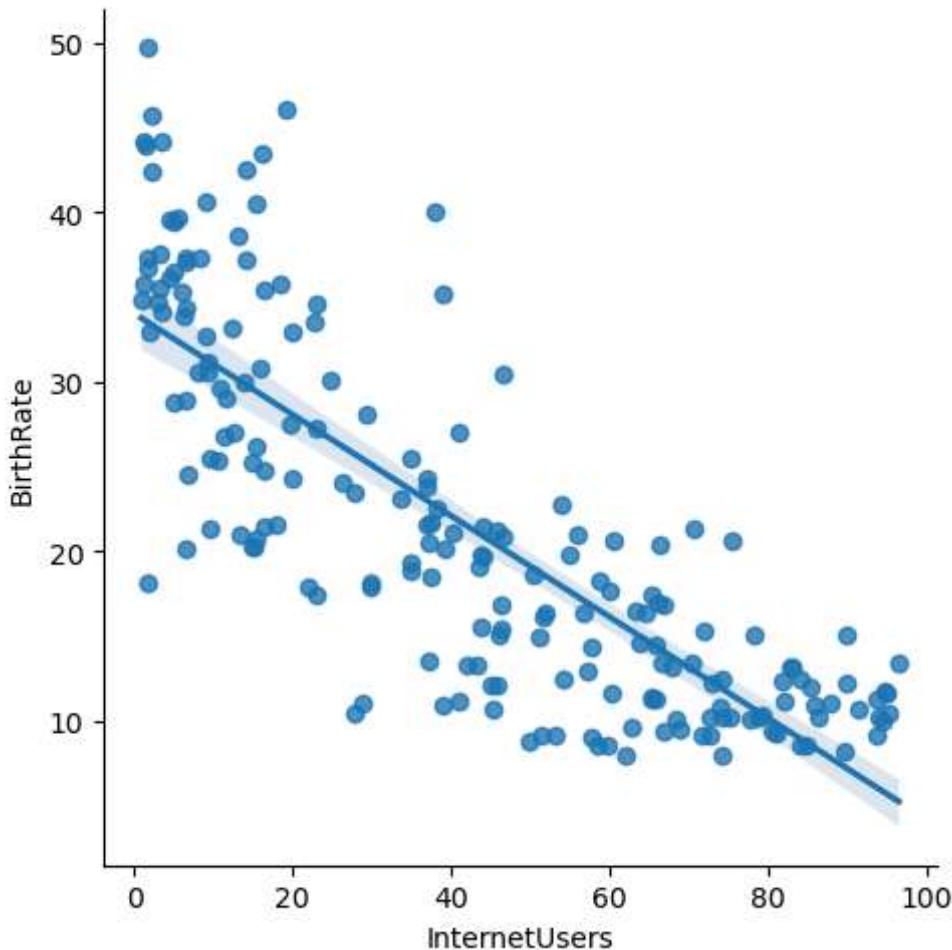


## visualizing with seaborn

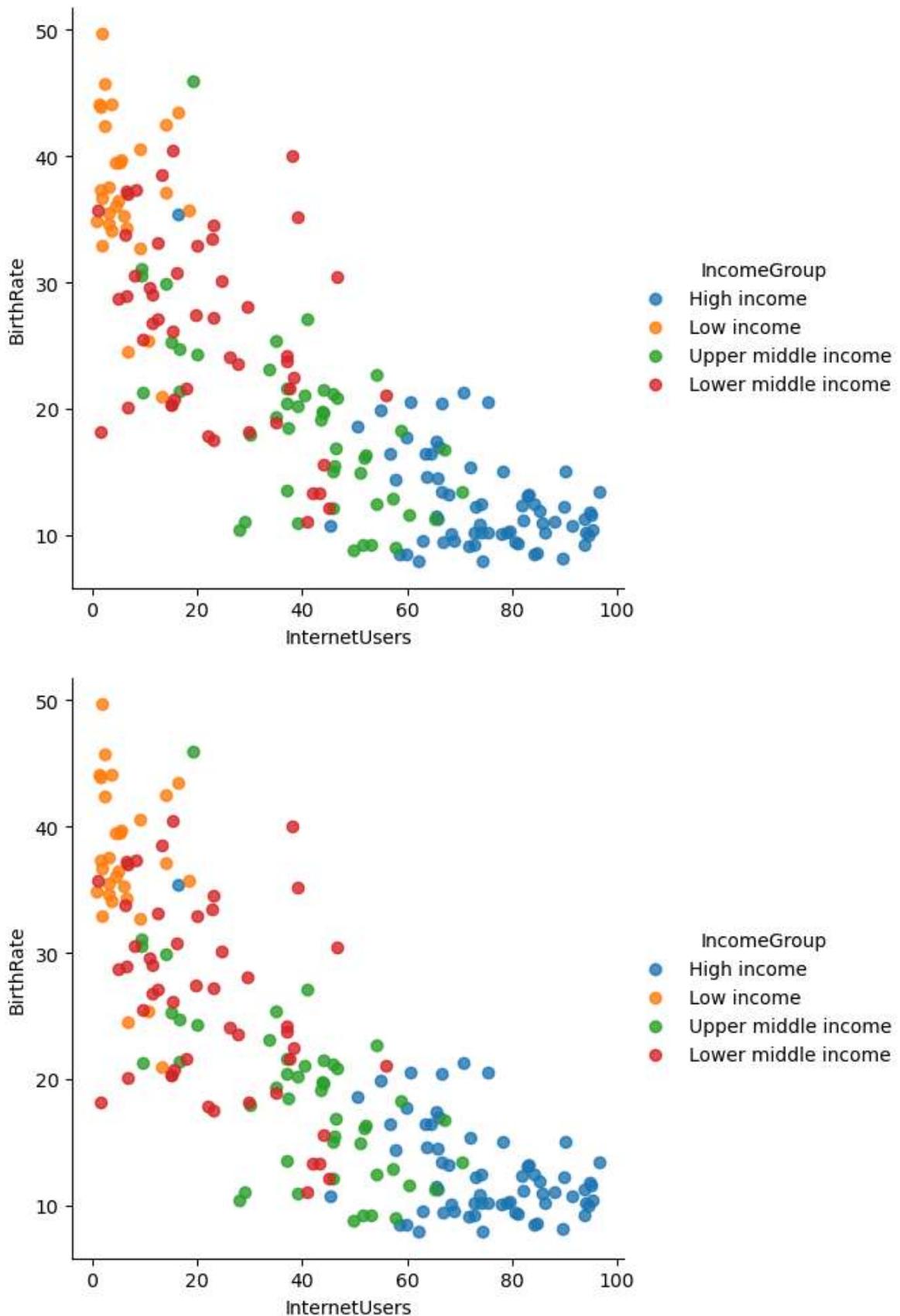
```
In [75]: vis3 = sns.lmplot(data = stats,x = 'InternetUsers', y = 'BirthRate', fit_reg = F
plt.show()
#Lm - Linear model
```



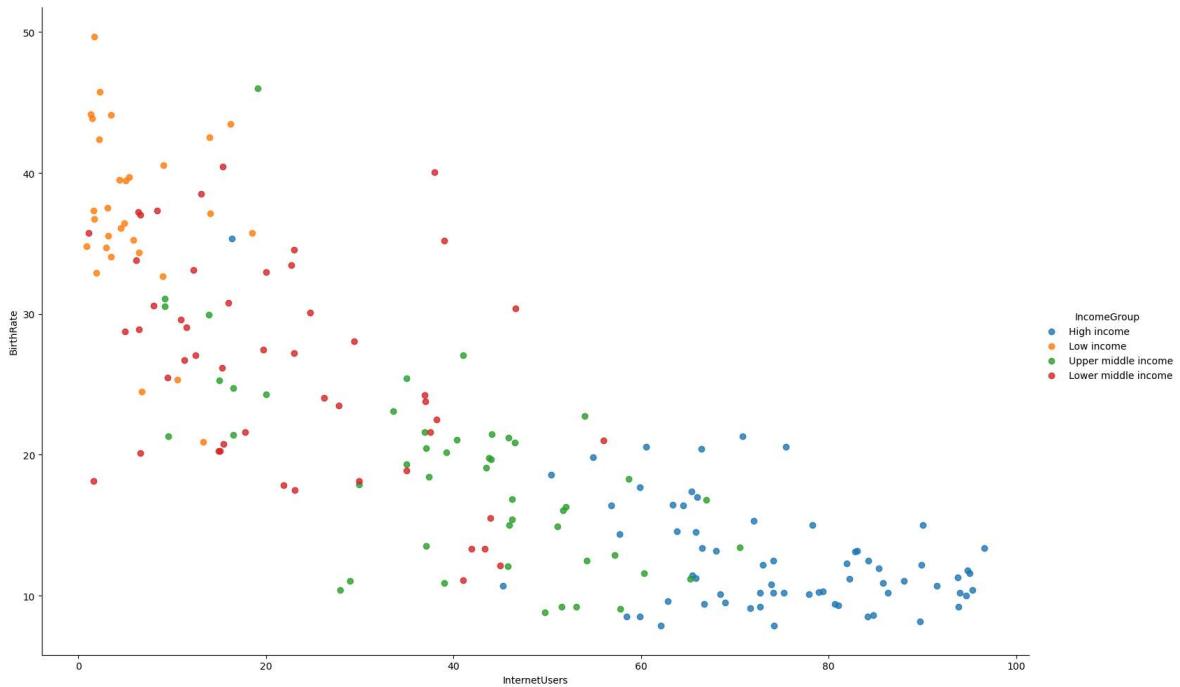
```
In [76]: vis4 = sns.lmplot(data = stats,x = 'InternetUsers', y = 'BirthRate')
plt.show()
```



```
In [78]: vis5 = sns.lmplot(data = stats,x = 'InternetUsers', y = 'BirthRate',
                      fit_reg = False,hue = 'IncomeGroup')
plt.show()
#hue - parameter for color
```



```
In [85]: vis5 = sns.lmplot(data = stats,x = 'InternetUsers', y = 'BirthRate',
                      fit_reg = False,hue = 'IncomeGroup', aspect = 1.5 , height=10)
plt.show()
```



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