

```
Out[57]: 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]: df[df.BirthRate>40]
```

Out[58]:

	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 [59]: Filter = df.InternetUsers < 2
```

```
In [60]: Filter2 = df.BirthRate > 40
```

```
In [61]: df[Filter & Filter2]
```

Out[61]:

	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

# 11th

```
In [62]: df[df.IncomeGroup == 'High income']
```

Out[62]:

	CountryName	CountryCode	BirthRate	InternetUsers	IncomeGroup
0	Aruba	ABW	10.244	78.90	High income
4	United Arab Emirates	ARE	11.044	88.00	High income
5	Argentina	ARG	17.716	59.90	High income
7	Antigua and Barbuda	ATG	16.447	63.40	High income
8	Australia	AUS	13.200	83.00	High income
...	...	...	...	...	...
174	Trinidad and Tobago	TTO	14.590	63.80	High income
180	Uruguay	URY	14.374	57.69	High income
181	United States	USA	12.500	84.20	High income
184	Venezuela, RB	VEN	19.842	54.90	High income
185	Virgin Islands (U.S.)	VIR	10.700	45.30	High income

67 rows × 5 columns

In [63]:

```
df[df.IncomeGroup == 'Low income']
```

Out[63]:

	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 [64]: df.IncomeGroup.unique()
```

Out[64]: array(['High income', 'Low income', 'Upper middle income', 'Lower middle income'], dtype=object)

```
In [65]: df.IncomeGroup.nunique()
```

Out[65]: 4

```
In [69]: import matplotlib.pyplot as plt
import seaborn as sns

%matplotlib inline
plt.rcParams['figure.figsize'] = 6,2
```

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

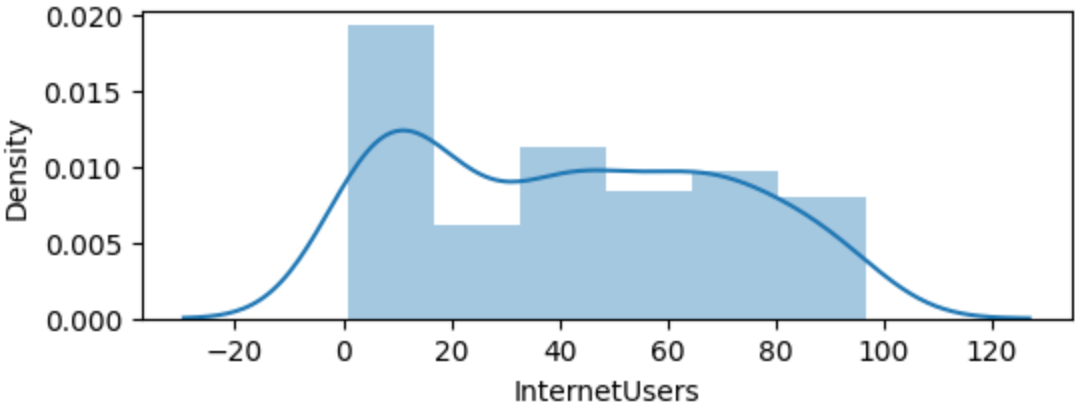
```
In [70]: df.columns
```

Out[70]: Index(['CountryName', 'CountryCode', 'BirthRate', 'InternetUsers',  
              'IncomeGroup'],  
              dtype='object')

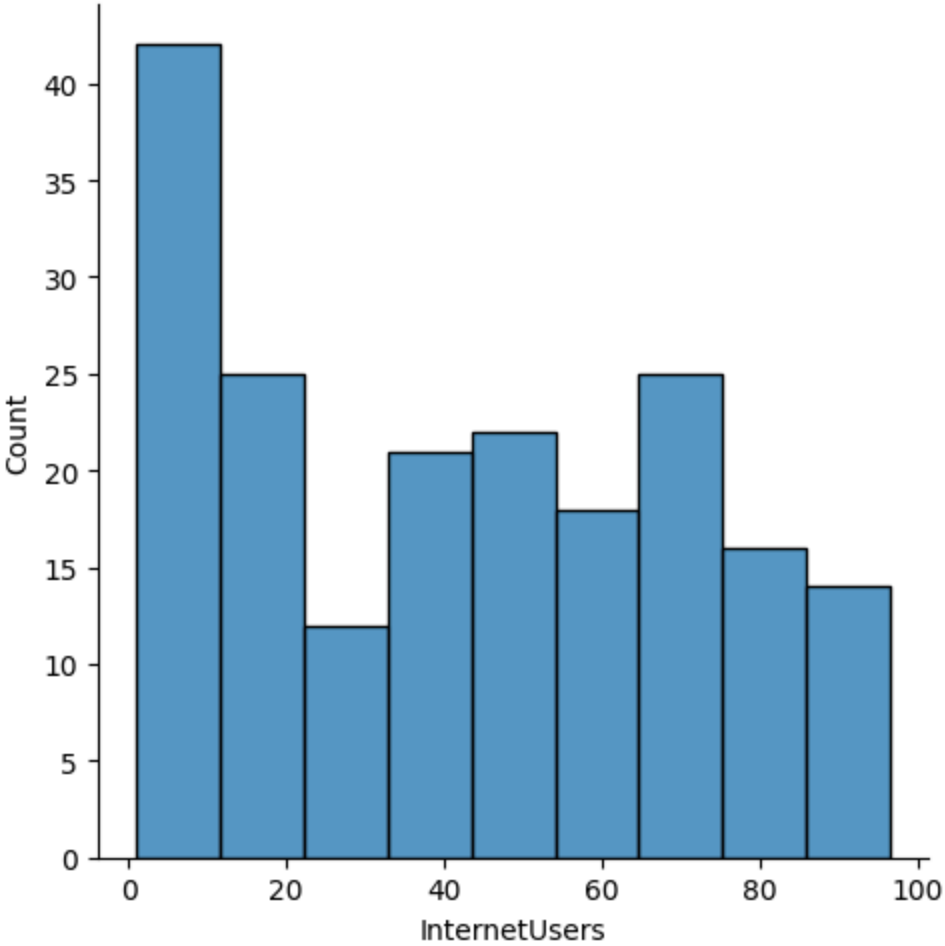
```
In [73]: df['InternetUsers']
```

Out[73]: 0      78.9  
         1      5.9  
         2     19.1  
         3     57.2  
         4     88.0  
         ...  
        190     20.0  
        191     46.5  
        192      2.2  
        193     15.4  
        194     18.5  
Name: InternetUsers, Length: 195, dtype: float64

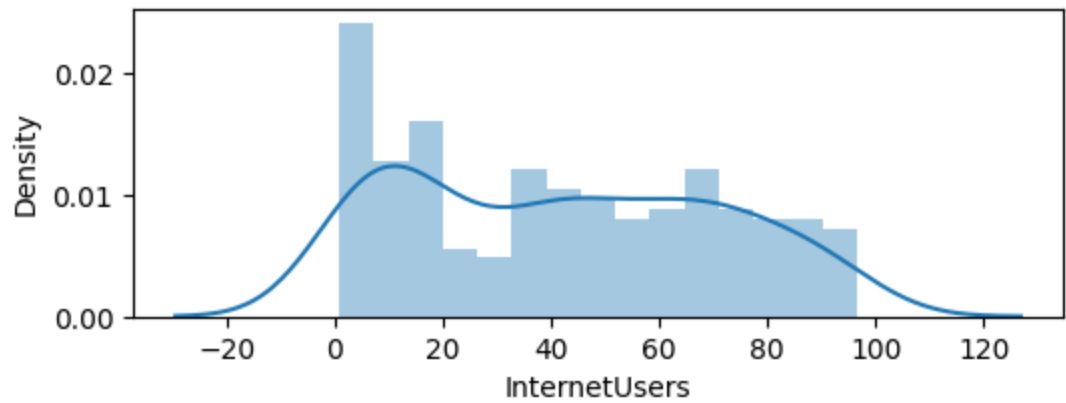
```
In [75]: vis1 = sns.distplot(df["InternetUsers"])
```



```
In [77]: vis2 = sns.distplot(df["InternetUsers"], bins=15)
```

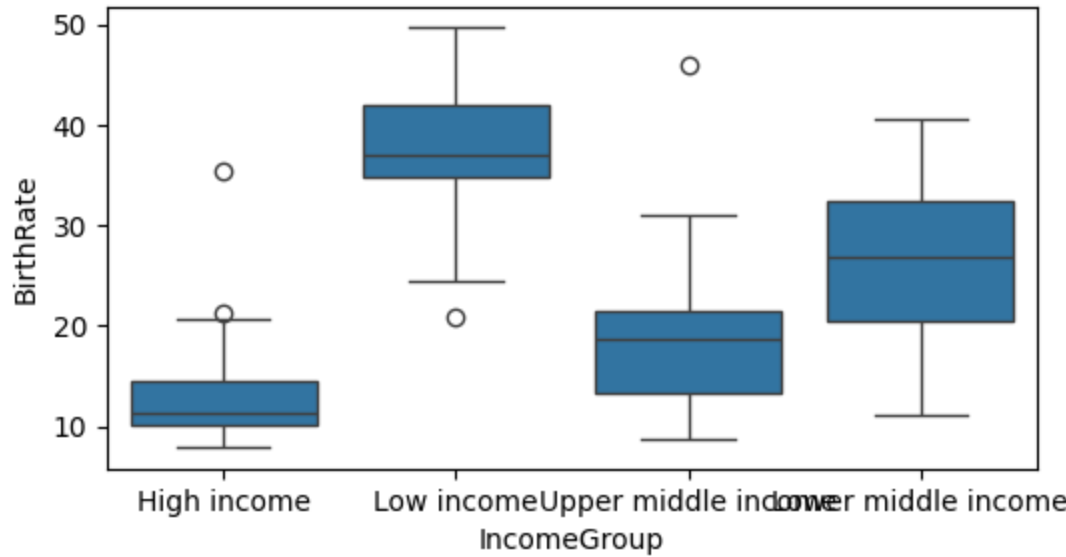


```
In [78]: vis3 = sns.distplot(df["InternetUsers"], bins= 15)
```

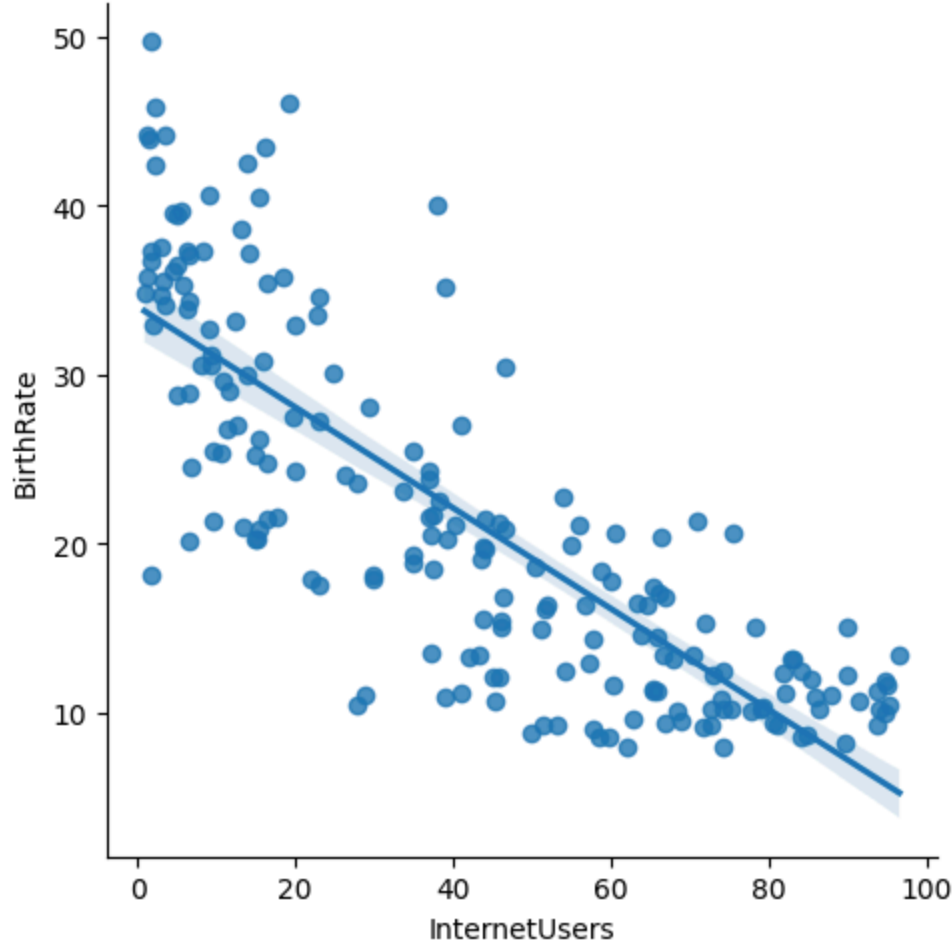


```
In [81]: plt.rcParams['figure.figsize'] = 6,3
```

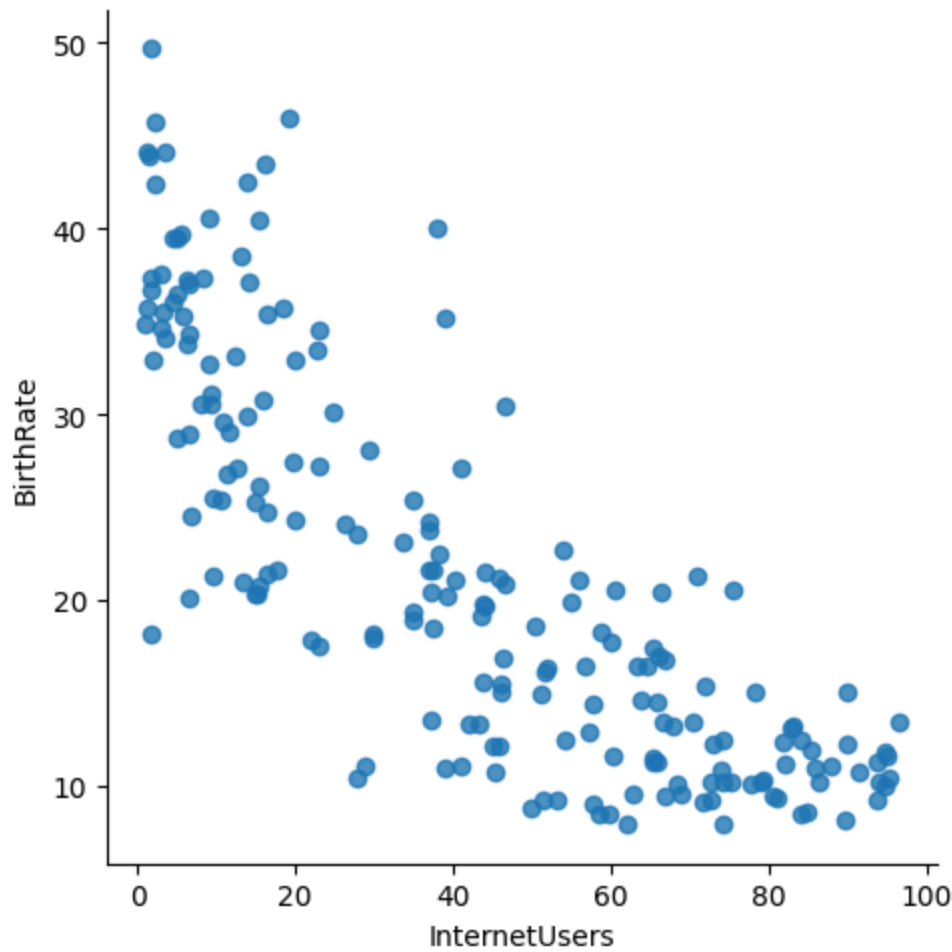
```
In [82]: vis4= sns.boxplot(data = df, x="IncomeGroup", y='BirthRate')
```



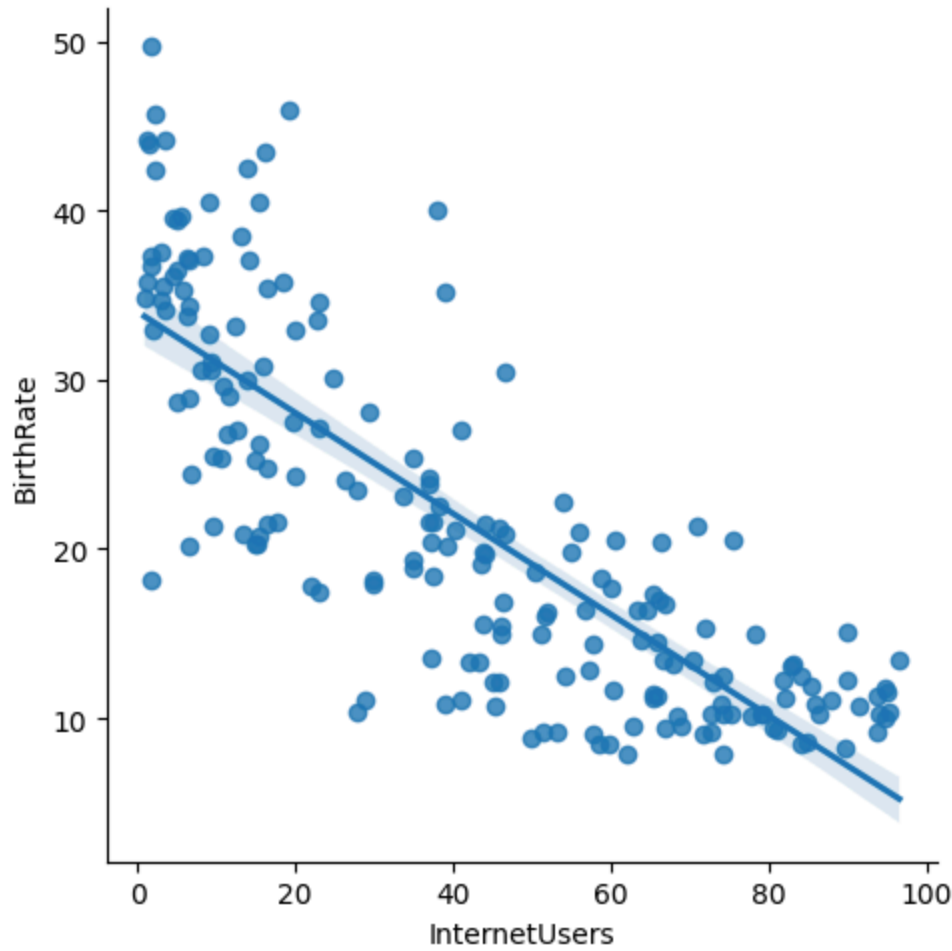
```
In [85]: vis5 = sns.lmplot(data = df, x="InternetUsers", y='BirthRate')
```



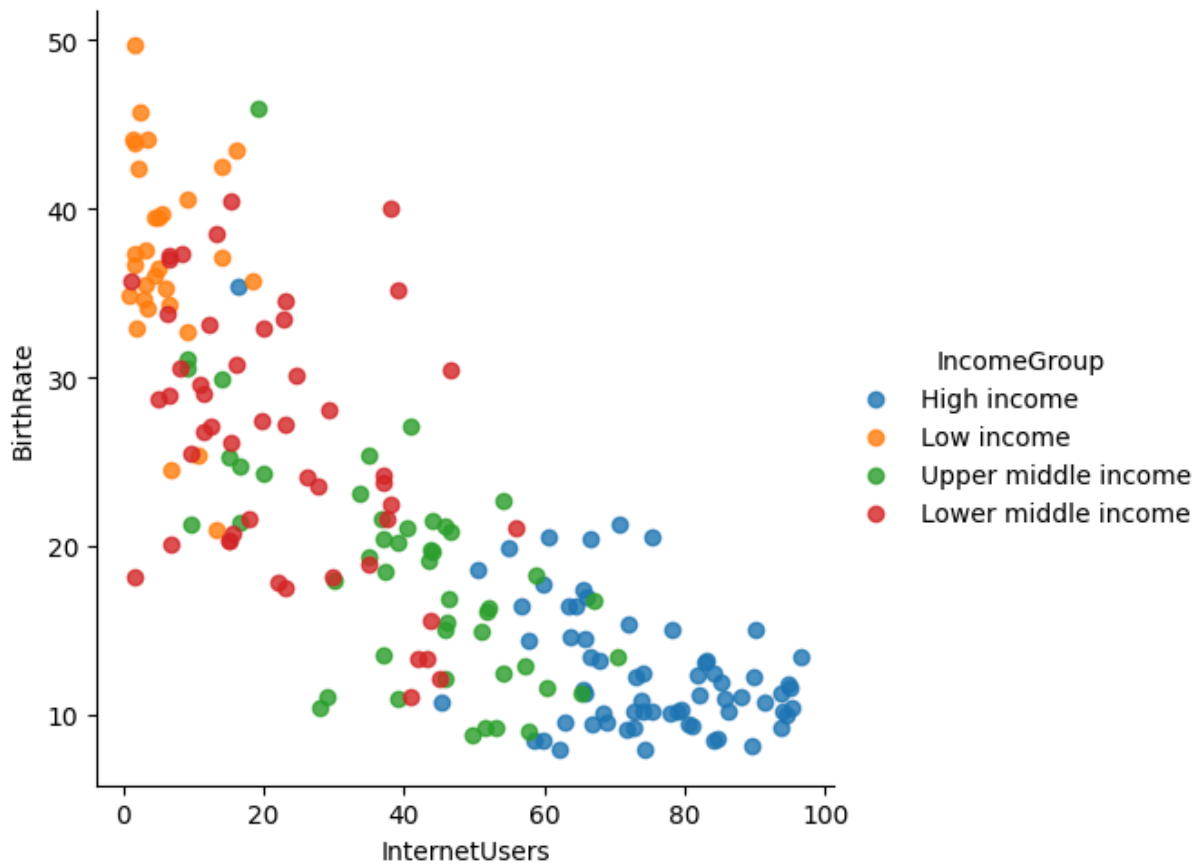
```
In [86]: vis5 = sns.lmplot(data = df, x="InternetUsers", y='BirthRate',fit_reg = False)
```



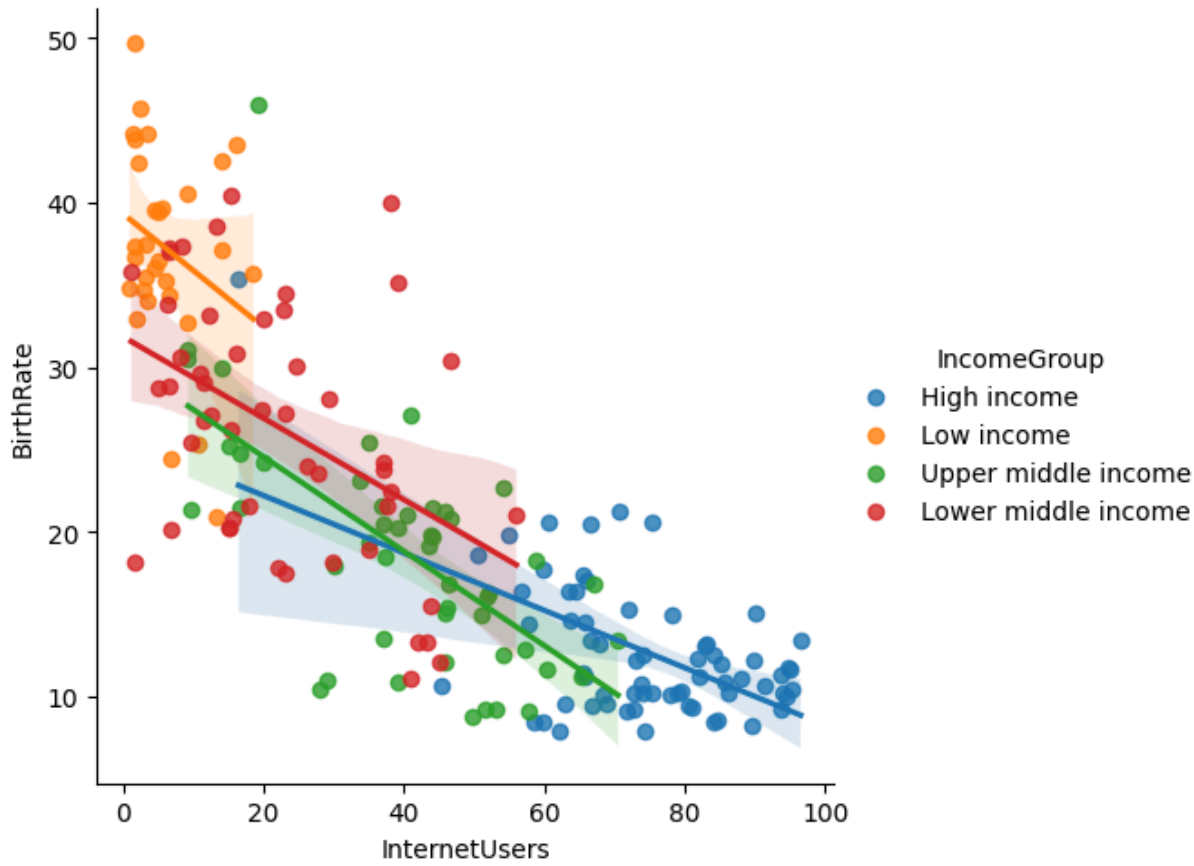
```
In [87]: vis5 = sns.lmplot(data = df, x="InternetUsers", y='BirthRate',fit_reg = True)
```



```
In [88]: vis5 = sns.lmplot(data = df, x="InternetUsers", y='BirthRate',fit_reg = False,hue=
```



```
In [89]: vis5 = sns.lmplot(data = df, x="InternetUsers", y='BirthRate',fit_reg = True,hue= 'IncomeGroup')
```



```
In [ ]:
```