```python
import pandas as pd
import numpy as np
import seaborn as sns
import matplotlib.pyplot as plt
```

```python
data = pd.read_csv(r"E:\Python DA/data.csv")
```
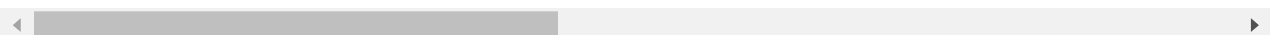
```python
data
```

	YearWeekISO	ReportingCountry	Denominator	NumberDosesReceived	NumberDosesExported
0	2020-W53	AT	7388778.0	0.0	0.0
1	2020-W53	AT	7388778.0	0.0	0.0
2	2020-W53	AT	7388778.0	0.0	0.0
3	2020-W53	AT	7388778.0	61425.0	0.0
4	2020-W53	AT	7388778.0	0.0	0.0
...	...	...	...	...	...
332341	2022-W28	SK	688658.0	0.0	0.0
332342	2022-W28	SK	688658.0	0.0	0.0
332343	2022-W28	SK	407927.0	0.0	0.0
332344	2022-W28	SK	189121.0	0.0	0.0
332345	2022-W28	SK	189121.0	0.0	0.0

332346 rows × 15 columns

```python
data.head()
```

	YearWeekISO	ReportingCountry	Denominator	NumberDosesReceived	NumberDosesExported	FirstD
0	2020-W53	AT	7388778.0	0.0	0.0	
1	2020-W53	AT	7388778.0	0.0	0.0	
2	2020-W53	AT	7388778.0	0.0	0.0	
3	2020-W53	AT	7388778.0	61425.0	0.0	5
4	2020-W53	AT	7388778.0	0.0	0.0	

```python
data.columns
```

```
Index(['YearWeekISO', 'ReportingCountry', 'Denominator', 'NumberDosesReceived',
       'NumberDosesExported', 'FirstDose', 'FirstDoseRefused', 'SecondDose',
```

```
'DoseAdditional1', 'DoseAdditional2', 'UnknownDose', 'Region',
'TargetGroup', 'Vaccine', 'Population'],
dtype='object')
```

In [7]: `data.tail()`

Out[7]:

	YearWeekISO	ReportingCountry	Denominator	NumberDosesReceived	NumberDosesExported
332341	2022-W28	SK	688658.0	0.0	0.0
332342	2022-W28	SK	688658.0	0.0	0.0
332343	2022-W28	SK	407927.0	0.0	0.0
332344	2022-W28	SK	189121.0	0.0	0.0
332345	2022-W28	SK	189121.0	0.0	0.0

In [8]: `data.describe()`

Out[8]:

	Denominator	NumberDosesReceived	NumberDosesExported	FirstDose	FirstDoseRefused	S
count	1.975470e+05	5.060100e+04	4.480100e+04	3.323460e+05	1447.000000	3.
mean	1.547142e+06	2.531798e+04	2.054059e+03	2.788179e+03	0.401520	2.
std	5.258897e+06	2.043213e+05	6.915973e+04	3.394291e+04	3.208059	3.
min	9.810000e+02	0.000000e+00	0.000000e+00	0.000000e+00	0.000000	0.
25%	9.731800e+04	0.000000e+00	0.000000e+00	0.000000e+00	0.000000	0.
50%	2.807540e+05	0.000000e+00	0.000000e+00	0.000000e+00	0.000000	0.
75%	1.041526e+06	0.000000e+00	0.000000e+00	5.700000e+01	0.000000	2.
max	6.941109e+07	9.818370e+06	6.858540e+06	3.425532e+06	73.000000	3.

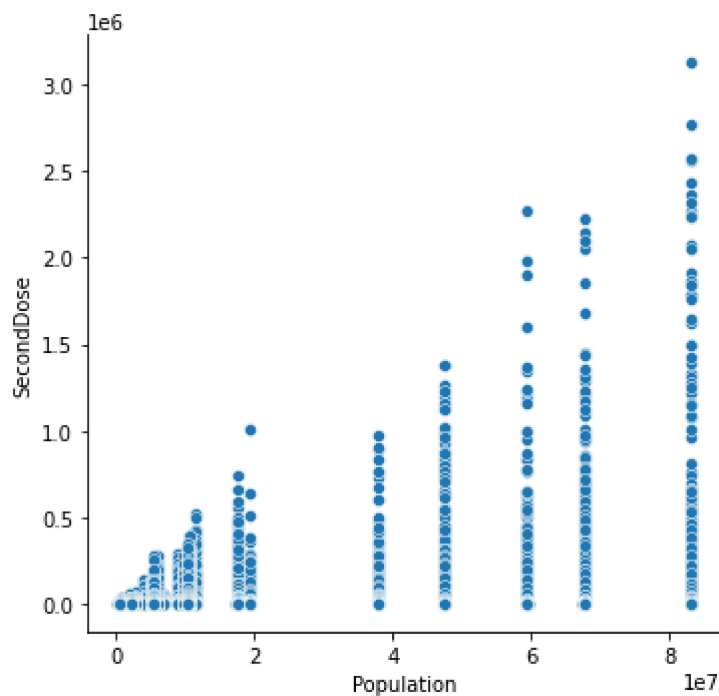# relating the variables with scatterplot

In [10]: `sns.relplot(y="FirstDose", x="Population", data=data)`

Out[10]: `<seaborn.axisgrid.FacetGrid at 0x22074be1cd0>`
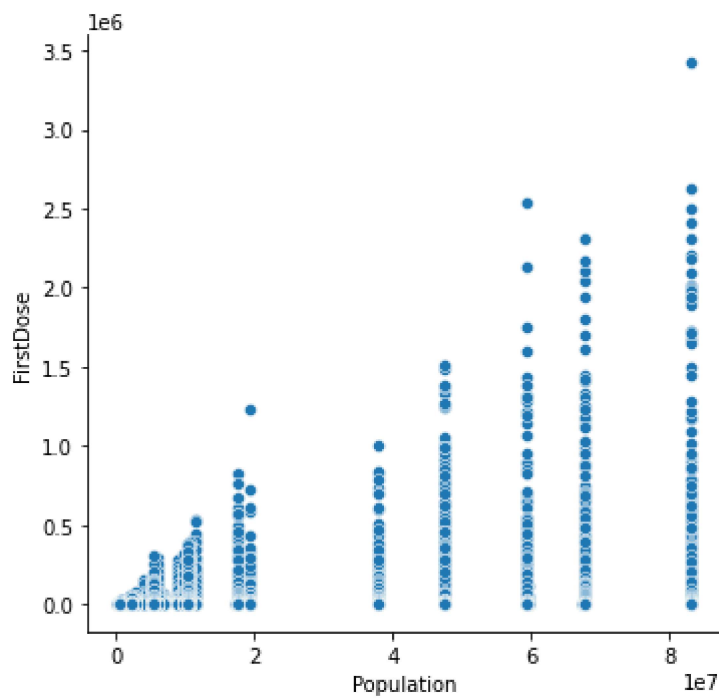
```
In [11]:  sns.relplot(y="SecondDose", x="Population",data=data)
```

Out[11]: <seaborn.axisgrid.FacetGrid at 0x22070ed5310>


```
In [ ]:  sns.pairplot(data)
```

```
In [ ]:  sns.relplot(x='Population', y='UnknownDose', kind='line', data=data)
```

```
In [ ]:
```