

```
In [3]: import pandas as pd
import numpy as np
import seaborn as sns
import matplotlib.pyplot as plt
```

```
In [30]: data=pd.read_csv(r"C:\Users\Sathish\Downloads\Latest Covid-19 India Status.csv")
```

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

```
Out[31]:
```

| | State/UTs | Total Cases | Active | Discharged | Deaths | Active Ratio (%) | Discharge Ratio (%) | Death Ratio (%) |
|---|----------------|-------------|--------|------------|--------|------------------|---------------------|-----------------|
| 0 | Maharashtra | 6122893 | 117869 | 5881167 | 123857 | 1.93 | 96.05 | 2.02 |
| 1 | Kerala | 3011694 | 108400 | 2889186 | 14108 | 3.60 | 95.93 | 0.47 |
| 2 | Karnataka | 2862338 | 39626 | 2787111 | 35601 | 1.38 | 97.37 | 1.24 |
| 3 | Tamil Nadu | 2506848 | 34076 | 2439576 | 33196 | 1.36 | 97.32 | 1.32 |
| 4 | Andhra Pradesh | 1911231 | 32356 | 1865956 | 12919 | 1.69 | 97.63 | 0.68 |

```
In [32]: data.tail()
```

```
Out[32]:
```

| | State/UTs | Total Cases | Active | Discharged | Deaths | Active Ratio (%) | Discharge Ratio (%) | Death Ratio (%) |
|----|--|-------------|--------|------------|--------|------------------|---------------------|-----------------|
| 31 | Sikkim | 21573 | 1975 | 19287 | 311 | 9.15 | 89.40 | 1.44 |
| 32 | Ladakh | 20143 | 183 | 19756 | 204 | 0.91 | 98.08 | 1.01 |
| 33 | Dadra and Nagar Haveli and Daman and Diu | 10576 | 38 | 10534 | 4 | 0.36 | 99.60 | 0.04 |
| 34 | Lakshadweep | 9965 | 246 | 9670 | 49 | 2.47 | 97.04 | 0.49 |
| 35 | Andaman and Nicobar | 7491 | 14 | 7349 | 128 | 0.19 | 98.10 | 1.71 |

```
In [33]: data.shape
```

```
Out[33]: (36, 8)
```

```
In [34]: data.columns
```

```
Out[34]: Index(['State/UTs', 'Total Cases', 'Active', 'Discharged', 'Deaths',
               'Active Ratio (%)', 'Discharge Ratio (%)', 'Death Ratio (%)'],
              dtype='object')
```

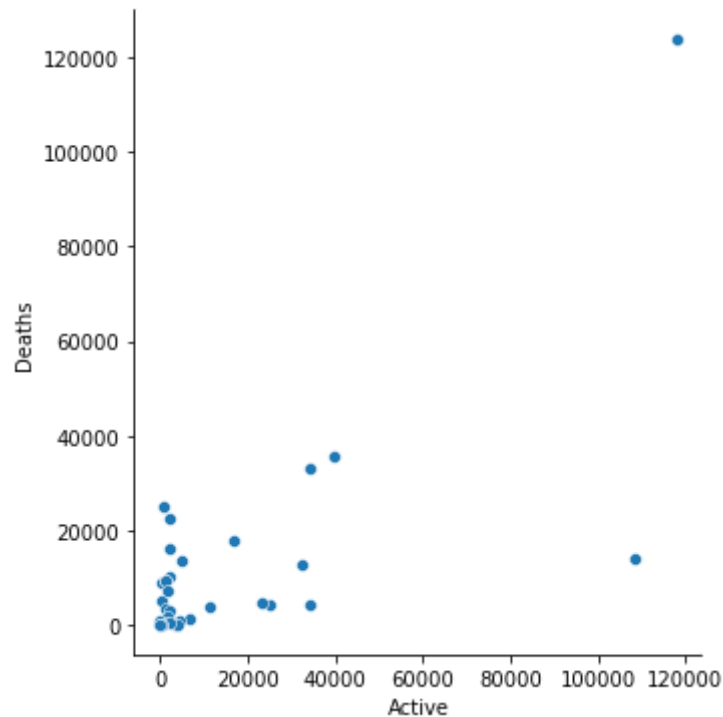
```
In [35]: data.isnull().sum()
```

```
Out[35]: State/UTs      0
Total Cases      0
Active           0
Discharged       0
```

```
Deaths          0
Active Ratio (%) 0
Discharge Ratio (%) 0
Death Ratio (%)  0
dtype: int64
```

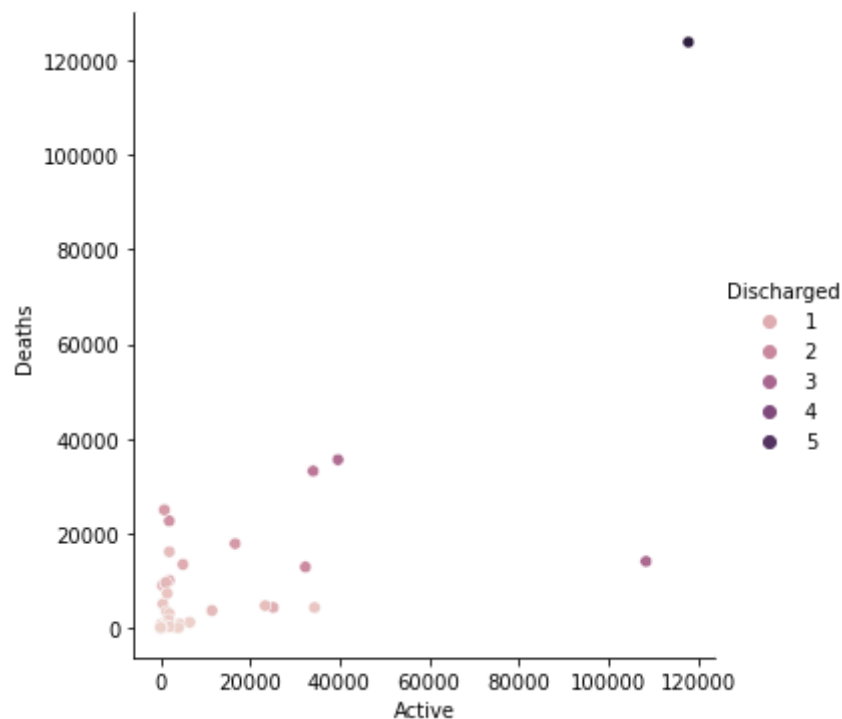
```
In [36]: sns.relplot(x="Active", y="Deaths", data=data)
```

```
Out[36]: <seaborn.axisgrid.FacetGrid at 0x1908ddd6b50>
```



```
In [37]: sns.relplot(x="Active", y="Deaths", hue='Discharged', data=data)
```

```
Out[37]: <seaborn.axisgrid.FacetGrid at 0x1908d963a30>
```

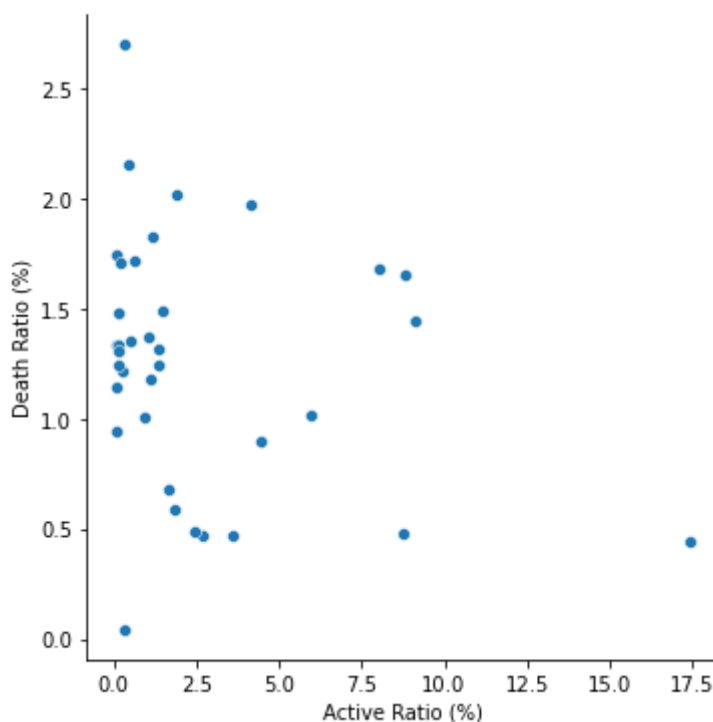


```
In [38]: data.columns
```

```
Out[38]: Index(['State/UTs', 'Total Cases', 'Active', 'Discharged', 'Deaths',  
              'Active Ratio (%)', 'Discharge Ratio (%)', 'Death Ratio (%)'],  
              dtype='object')
```

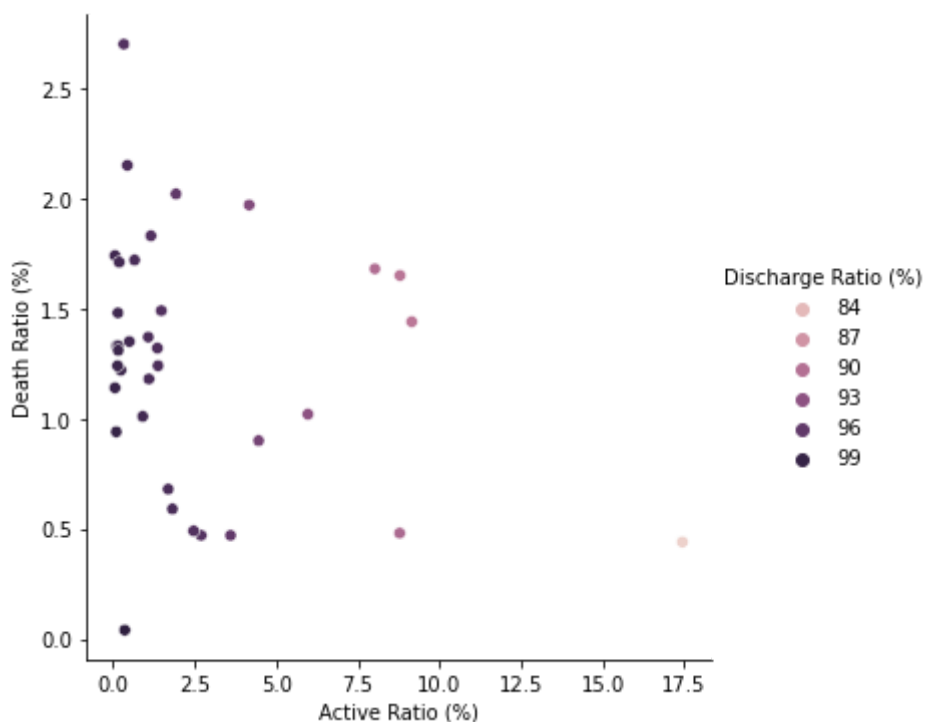
```
In [39]: sns.relplot(x="Active Ratio (%)", y="Death Ratio (%)", data=data)
```

```
Out[39]: <seaborn.axisgrid.FacetGrid at 0x1908dfe7310>
```



```
In [40]: sns.relplot(x="Active Ratio (%)", y="Death Ratio (%)", hue="Discharge Ratio (%)", data=
```

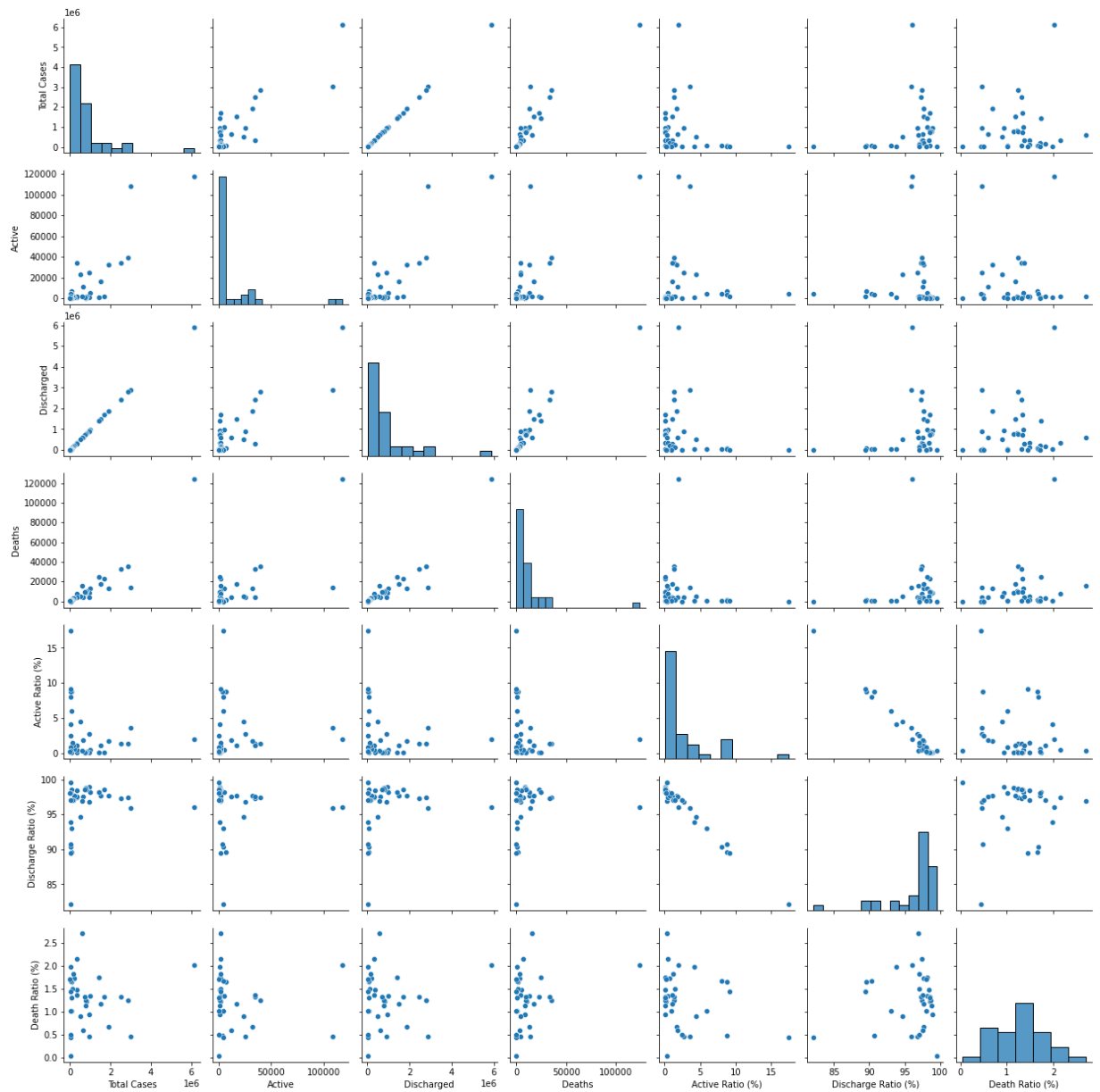
```
Out[40]: <seaborn.axisgrid.FacetGrid at 0x1908e02e190>
```



```
In [43]: sns.pairplot(data)
```

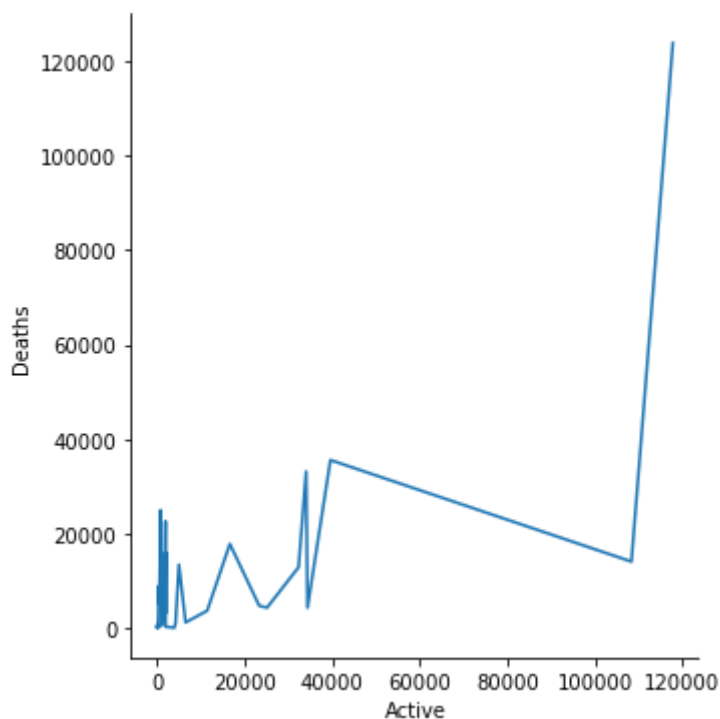
```
<seaborn.axisgrid.PairGrid at 0x1908e07b2b0>
```

Out[43]:



```
In [44]: sns.relplot(x="Active", y="Deaths", kind='line', data=data)
```

```
Out[44]: <seaborn.axisgrid.FacetGrid at 0x1909017dd90>
```

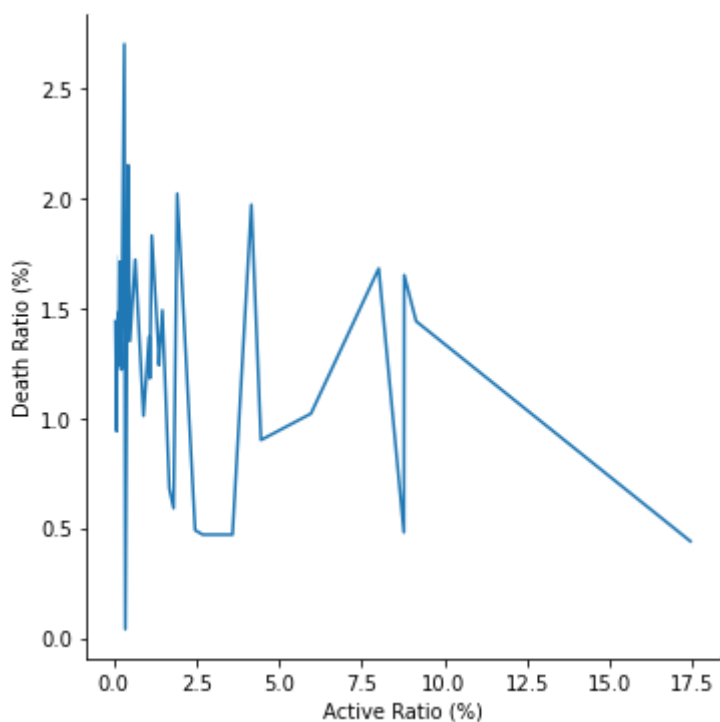


In [45]: `data.columns`

Out[45]: Index(['State/UTs', 'Total Cases', 'Active', 'Discharged', 'Deaths', 'Active Ratio (%)', 'Discharge Ratio (%)', 'Death Ratio (%)'], dtype='object')

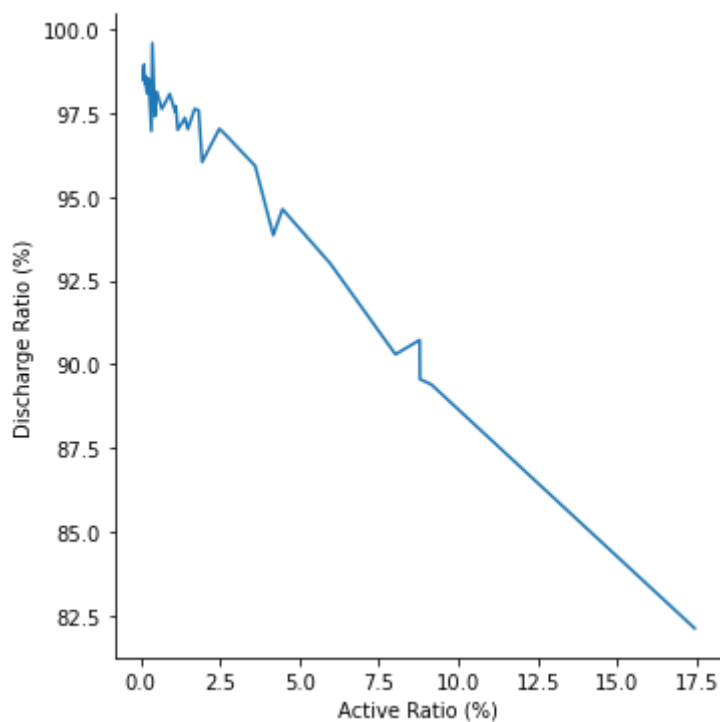
In [46]: `sns.relplot(x="Active Ratio (%)", y="Death Ratio (%)", kind='line', data=data)`

Out[46]: <seaborn.axisgrid.FacetGrid at 0x190904d0be0>



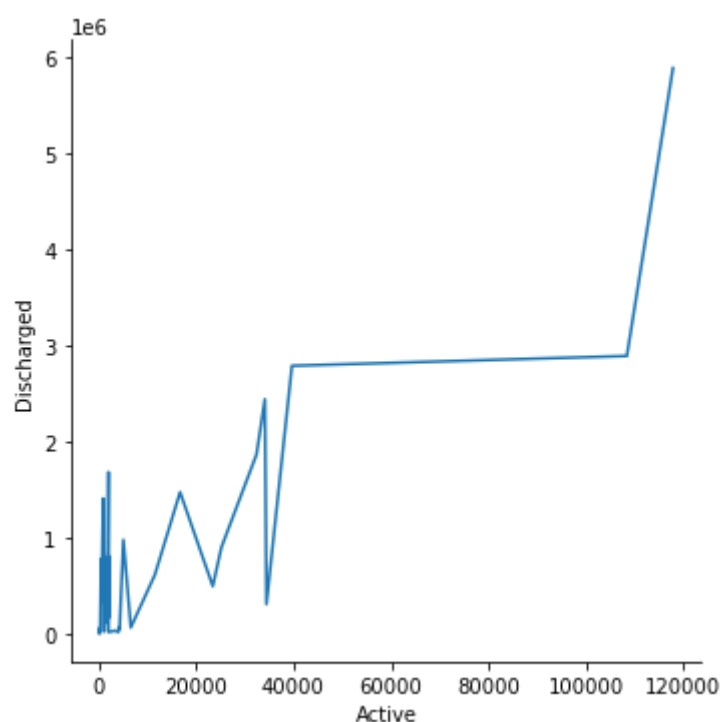
In [47]: `sns.relplot(x="Active Ratio (%)", y="Discharge Ratio (%)", kind='line', data=data)`

Out[47]: <seaborn.axisgrid.FacetGrid at 0x19090500eb0>



```
In [49]: sns.relplot(x="Active", y="Discharged", kind='line', data=data)
```

```
Out[49]: <seaborn.axisgrid.FacetGrid at 0x19090eb4820>
```

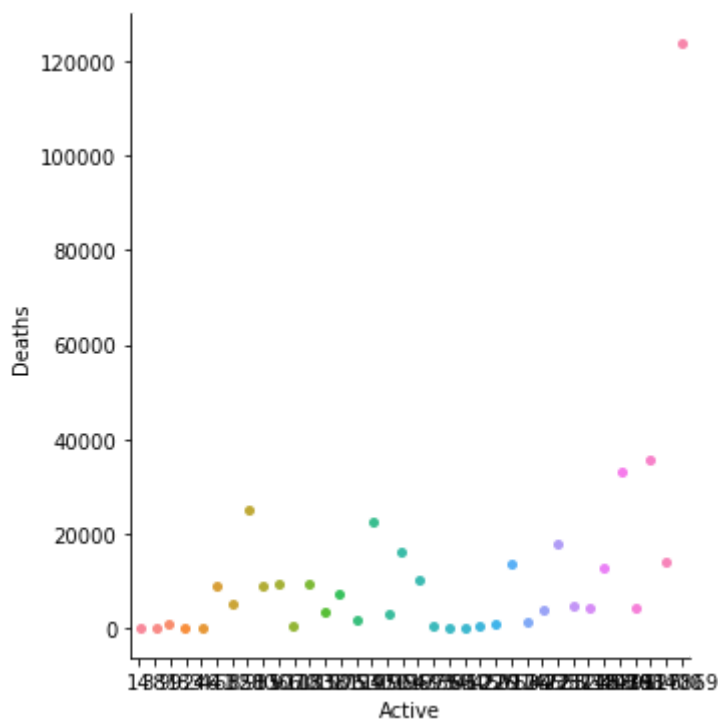


```
In [51]: data.columns
```

```
Out[51]: Index(['State/UTs', 'Total Cases', 'Active', 'Discharged', 'Deaths',
               'Active Ratio (%)', 'Discharge Ratio (%)', 'Death Ratio (%)'],
              dtype='object')
```

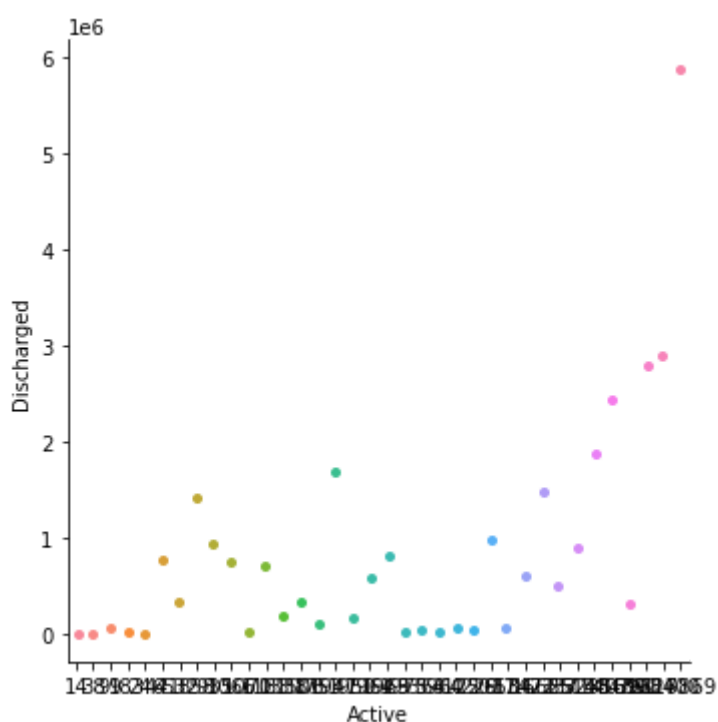
```
In [52]: sns.catplot(x="Active", y="Deaths", data=data)
```

```
Out[52]: <seaborn.axisgrid.FacetGrid at 0x190904c9bb0>
```



```
In [53]: sns.catplot(x="Active", y="Discharged", data=data)
```

```
Out[53]: <seaborn.axisgrid.FacetGrid at 0x19090782910>
```

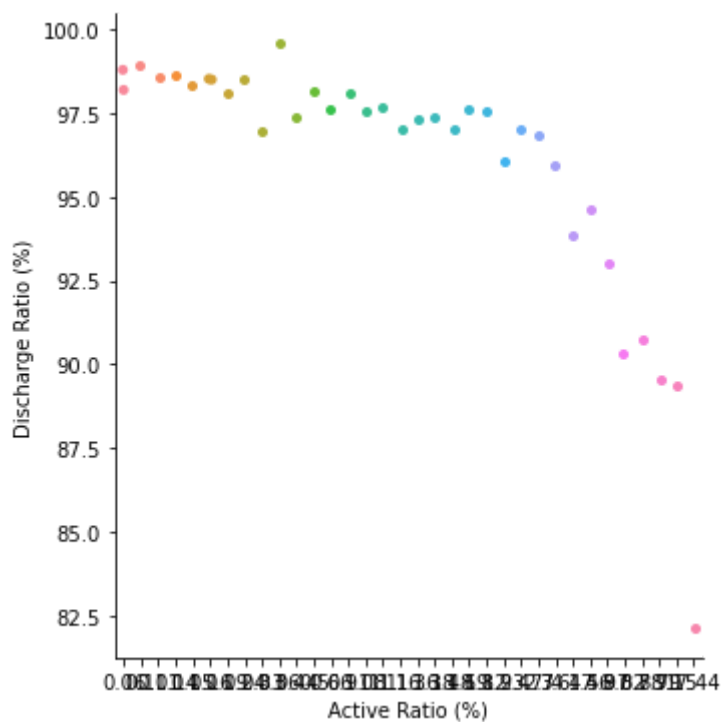


```
In [54]: data.columns
```

```
Out[54]: Index(['State/UTs', 'Total Cases', 'Active', 'Discharged', 'Deaths',  
              'Active Ratio (%)', 'Discharge Ratio (%)', 'Death Ratio (%)'],  
              dtype='object')
```

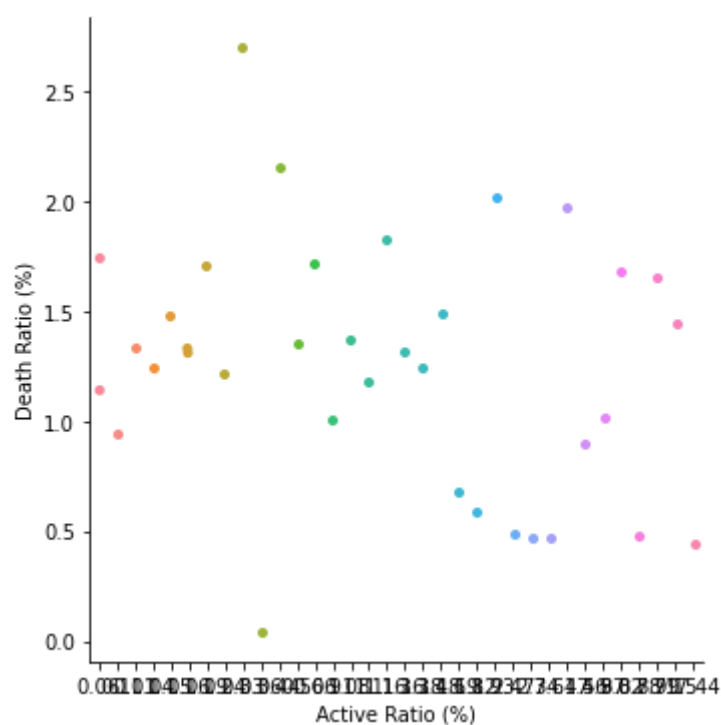
```
In [55]: sns.catplot(x="Active Ratio (%)", y="Discharge Ratio (%)", data=data)
```

```
Out[55]: <seaborn.axisgrid.FacetGrid at 0x190920e8b80>
```



```
In [56]: sns.catplot(x="Active Ratio (%)", y="Death Ratio (%)", data=data)
```

```
Out[56]: <seaborn.axisgrid.FacetGrid at 0x190920cca00>
```



```
In [ ]:
```