

```
In [11]: import pandas as pd
import numpy as np
import seaborn as sns
import matplotlib.pyplot as plt
data = pd.read_csv(r"C:\Users\Admin\Downloads\covid19_italy_region.csv")
data.head()
```

	SNo	Date	Country	RegionCode	RegionName	Latitude	Longitude	HospitalizedPatients	IntensiveCarePatients
0	0	2020-02-24T18:00:00	ITA	13	Abruzzo	42.351222	13.398438	0	0
1	1	2020-02-24T18:00:00	ITA	17	Basilicata	40.639471	15.805148	0	0
2	2	2020-02-24T18:00:00	ITA	18	Calabria	38.905976	16.594402	0	0
3	3	2020-02-24T18:00:00	ITA	15	Campania	40.839566	14.250850	0	0
4	4	2020-02-24T18:00:00	ITA	8	Emilia-Romagna	44.494367	11.341721	10	2

```
In [12]: data.columns
```

```
Out[12]: Index(['SNo', 'Date', 'Country', 'RegionCode', 'RegionName', 'Latitude', 'Longitude', 'HospitalizedPatients', 'IntensiveCarePatients', 'TotalHospitalizedPatients', 'HomeConfinement', 'CurrentPositiveCases', 'NewPositiveCases', 'Recovered', 'Deaths', 'TotalPositiveCases', 'TestsPerformed'], dtype='object')
```

```
In [13]: data.tail()
```

	SNo	Date	Country	RegionCode	RegionName	Latitude	Longitude	HospitalizedPatients	IntensiveCarePatients
6022	6022	2020-12-06T17:00:00	ITA	19	Sicilia	38.115697	13.362357	1367	21
6023	6023	2020-12-06T17:00:00	ITA	9	Toscana	43.769231	11.255889	1360	25
6024	6024	2020-12-06T17:00:00	ITA	10	Umbria	43.106758	12.388247	332	6
6025	6025	2020-12-06T17:00:00	ITA	2	Valle d'Aosta	45.737503	7.320149	102	
6026	6026	2020-12-06T17:00:00	ITA	5	Veneto	45.434905	12.338452	2508	30

```
In [14]: data.describe()
```

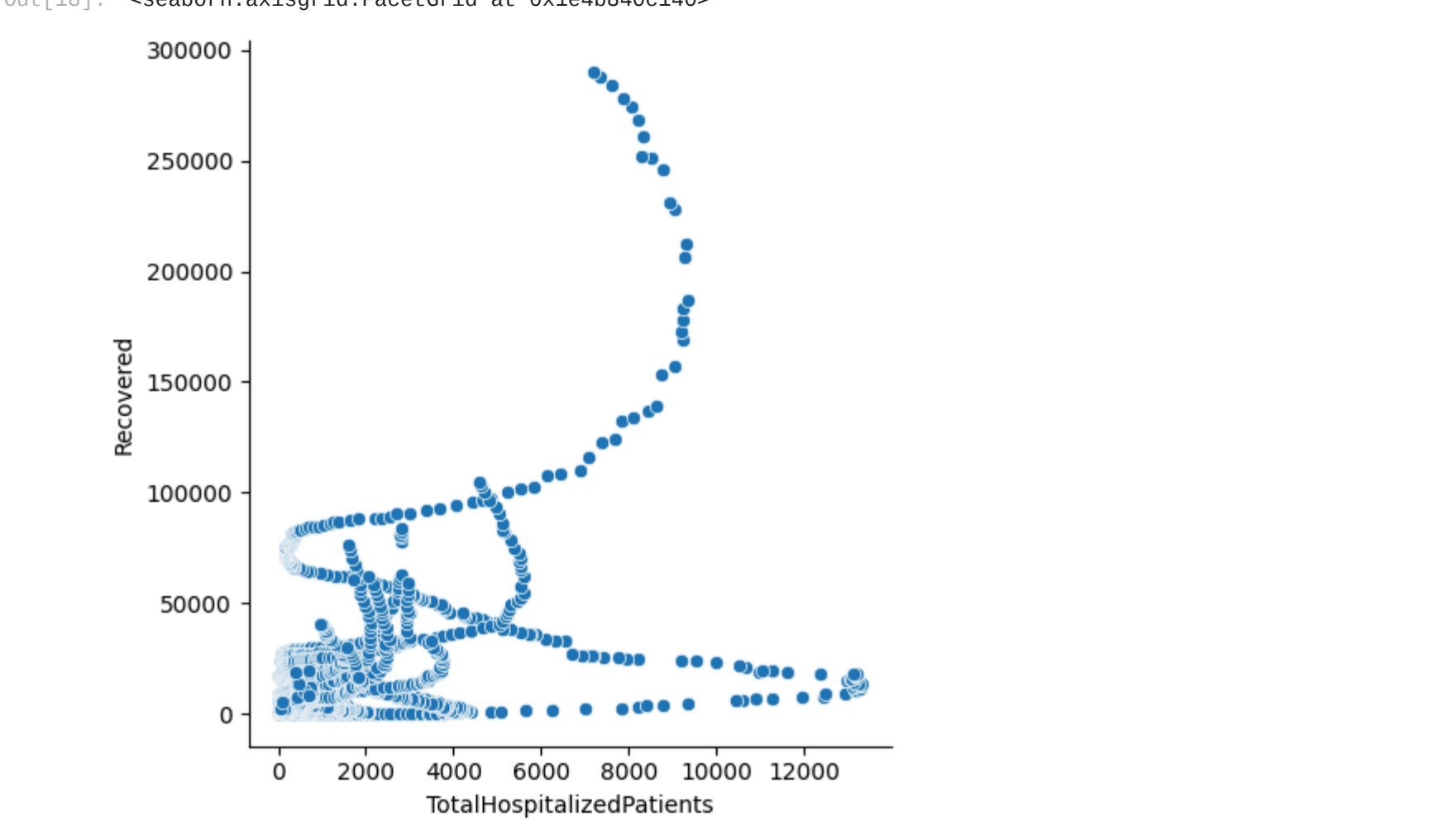
	SNo	RegionCode	Latitude	Longitude	HospitalizedPatients	IntensiveCarePatients	TotalHospitalizedPatients
count	6027.000000	6027.000000	6027.000000	6027.000000	6027.000000	6027.000000	6027.000000
mean	3013.000000	11.857143	43.046293	12.225955	509.093579	55.892318	564.985897
std	1739.989368	6.274319	2.488987	2.659168	1272.731157	134.957979	1403.362357
min	0.000000	1.000000	38.115697	7.320149	0.000000	0.000000	0.000000
25%	1506.500000	7.000000	41.125596	11.121231	16.000000	1.000000	17.000000
50%	3013.000000	12.000000	43.616760	12.388247	93.000000	9.000000	106.000000
75%	4519.500000	17.000000	45.434905	13.768136	384.500000	46.000000	434.000000
max	6026.000000	22.000000	46.499335	16.867367	12077.000000	1381.000000	13328.000000

```
In [15]: data.isnull().sum()
```

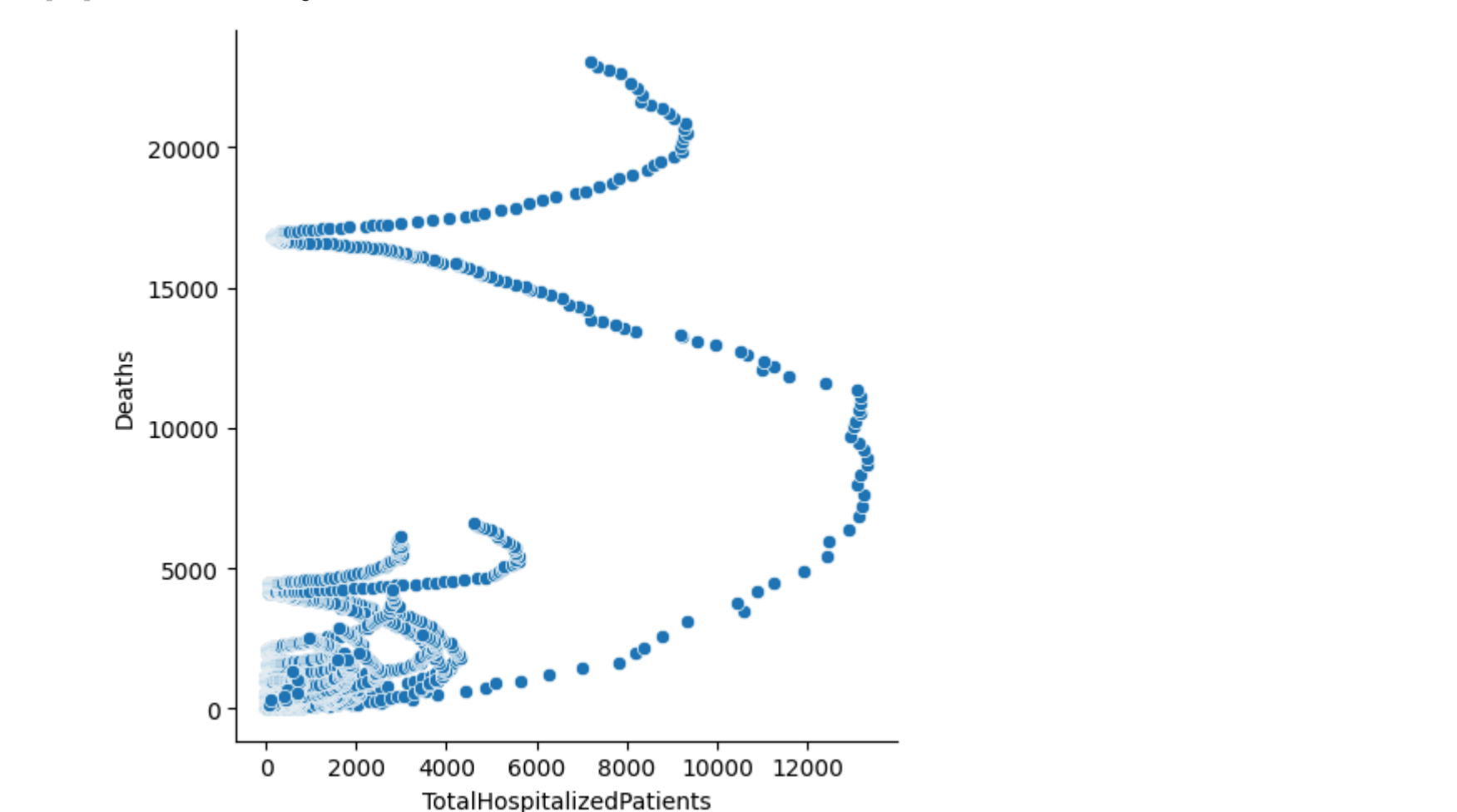
SNo	0
Date	0
Country	0
RegionCode	0
RegionName	0
Latitude	0
Longitude	0
HospitalizedPatients	0
IntensiveCarePatients	0
TotalHospitalizedPatients	0
HomeConfinement	0
CurrentPositiveCases	0
NewPositiveCases	0
Recovered	0
Deaths	0
TotalPositiveCases	0
TestsPerformed	1155
dtype: int64	

RELATING THE VARIABLES WITH SCATTERPLOTS

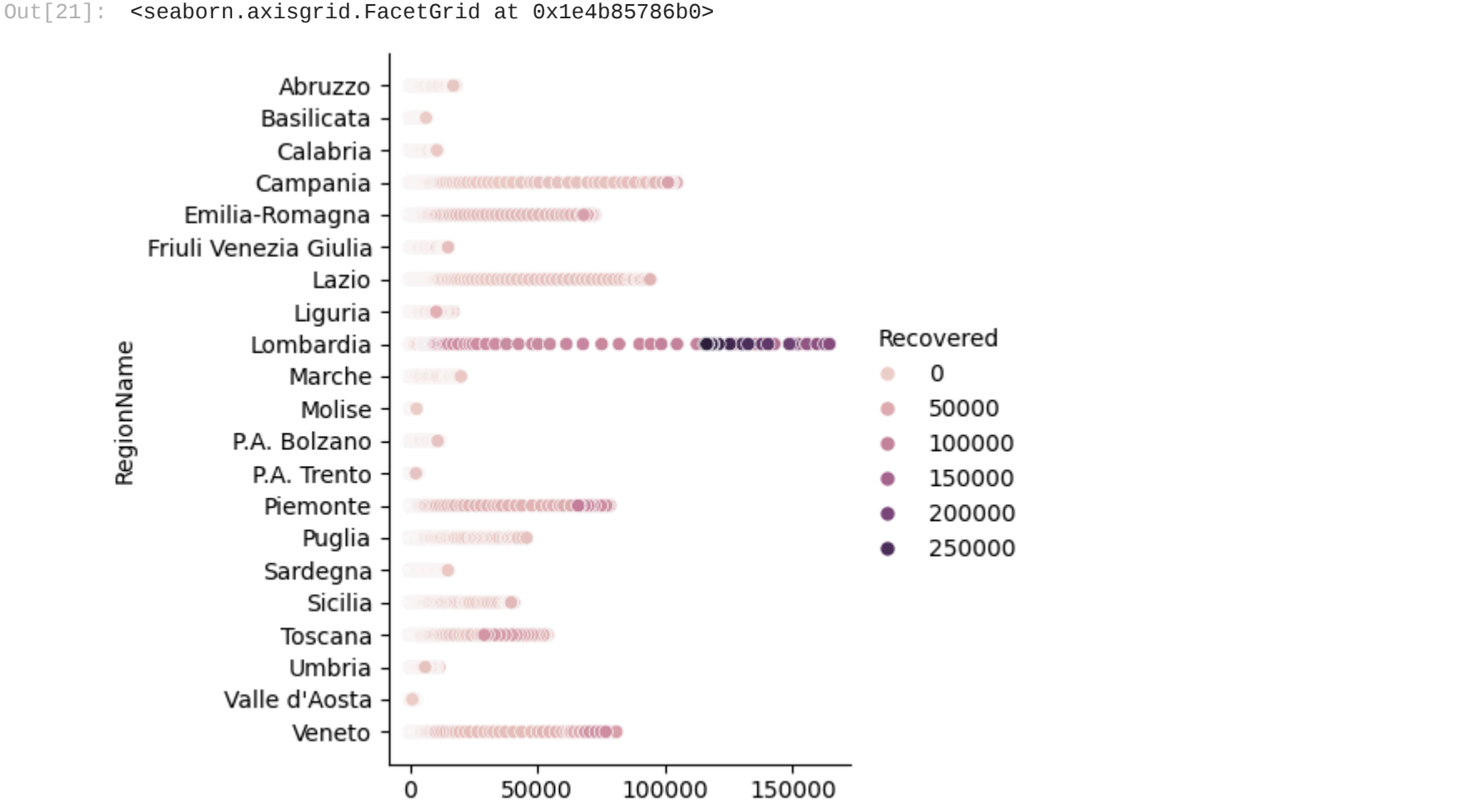
```
In [18]: sns.relplot(x="TotalHospitalizedPatients",y="Recovered",data=data)
```



```
In [19]: sns.relplot(x="TotalHospitalizedPatients",y="Deaths",data=data)
```



```
In [21]: sns.relplot(x="CurrentPositiveCases",y="RegionName",hue="Recovered",data=data)
```

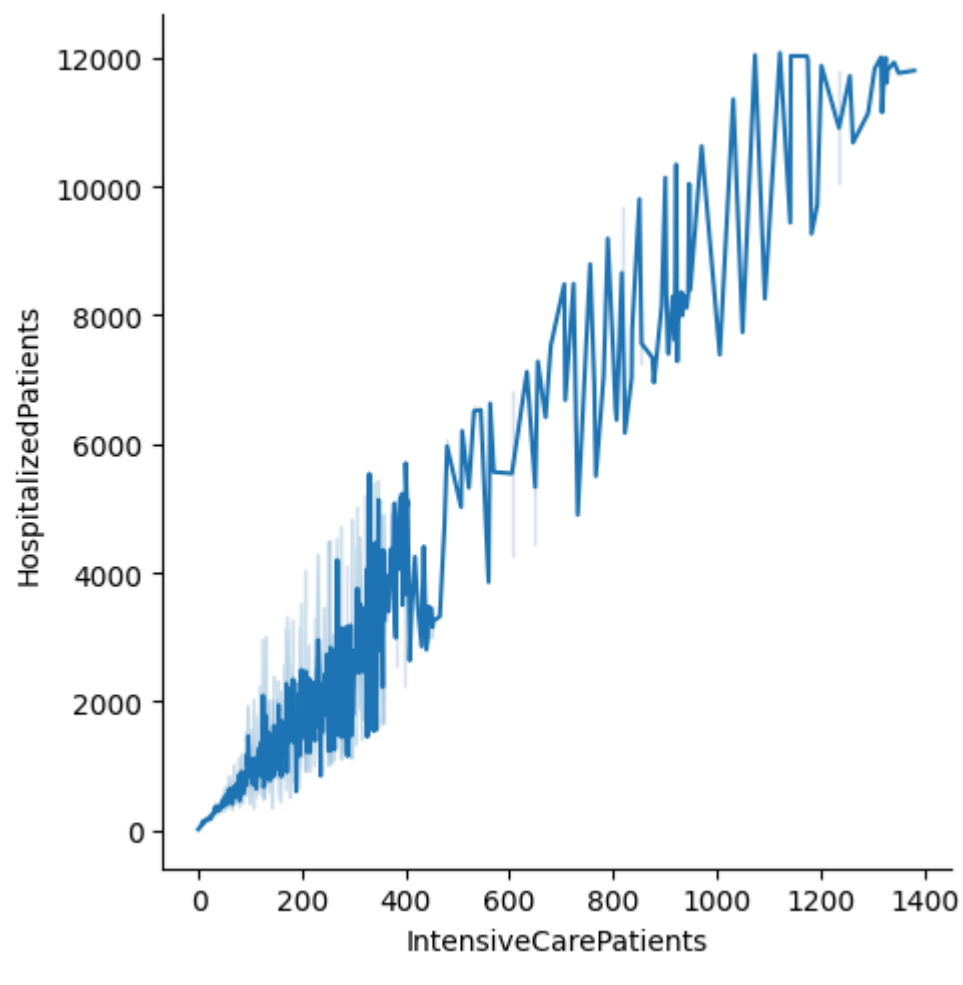


```
In [22]: sns.pairplot(data)
```



```
In [26]: sns.relplot(x="IntensiveCarePatients",y="HospitalizedPatients",kind="line",data=data)
```





```
In [27]: data.columns
```

```
Out[27]: Index(['SNo', 'Date', 'Country', 'RegionCode', 'RegionName', 'Latitude',  
              'Longitude', 'HospitalizedPatients', 'IntensiveCarePatients',  
              'TotalHospitalizedPatients', 'HomeConfinement', 'CurrentPositiveCases',  
              'NewPositiveCases', 'Recovered', 'Deaths', 'TotalPositiveCases',  
              'TestsPerformed'],  
              dtype='object')
```

```
In [ ]:
```