**Practical-3**

**Aim**: **Collect the month wise COVID cases data for cities – Ahmedabad,**

**Vadodara, Rajkot, Surat. Plot this time series Data. Analyze the trend**

**as per time.**

**Program:**

# To import libraries

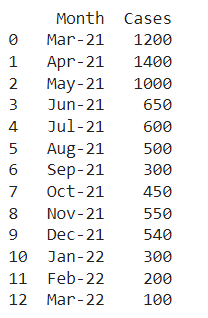
import pandas as pd

import matplotlib.pyplot as plt

# To import File and print month wise COVID records of Surat city

surat=pd.read\_csv("/content/Surat\_covid.csv")

print(surat)



**#** Line plot of COVID cases in Surat city

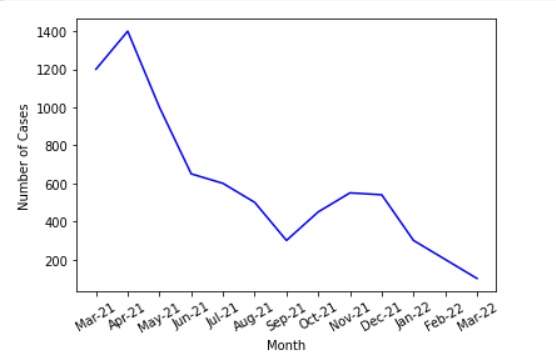
plt.plot(surat['Month'],surat['Cases'],c='b')

plt.xlabel('Month')

plt.ylabel('Number of Cases')

plt.xticks(rotation=30)

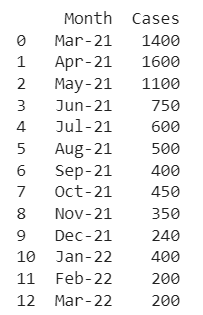
plt.show()



# To import File and print month wise COVID records of Ahmedabad city

ahmedabad=pd.read\_csv("/content/Ahmedabad\_covid.csv")

print(ahmedabad)



**#** Line plot of COVID cases in Ahmedabad city

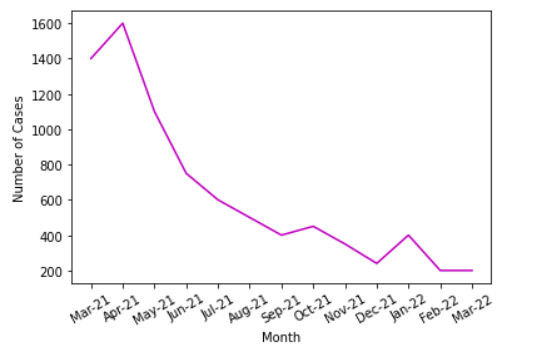
plt.plot(ahmedabad['Month'],ahmedabad['Cases'],c='m')

plt.xlabel('Month')

plt.ylabel('Number of Cases')

plt.xticks(rotation=30)

plt.show()



# To import File and print month wise COVID records of Vadodara city

vadodara=pd.read\_csv("/content/Vadodara\_covid.csv")

print(vadodara)



**#** Line plot of COVID cases in Vadodara city

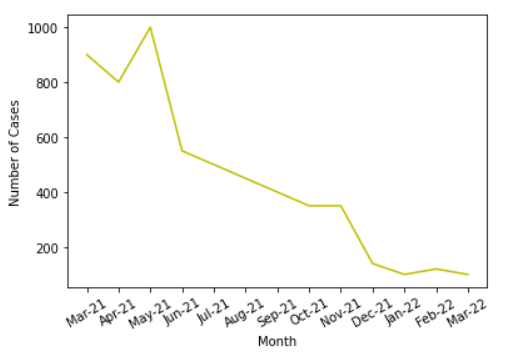
plt.plot(vadodara['Month'],vadodara['Cases'],c='y')

plt.xlabel('Month')

plt.ylabel('Number of Cases')

plt.xticks(rotation=30)

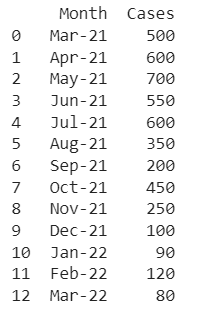
plt.show()



# To import File and print month wise COVID records of Rajkot city

rajkot=pd.read\_csv("/content/Rajkot\_covid.xlsx.csv")

print(rajkot)



**#** Line plot of COVID cases in Rajkot city

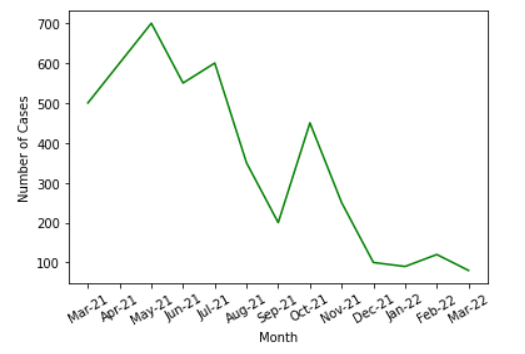
plt.plot(rajkot['Month'],rajkot['Cases'],c='g')

plt.xlabel('Month')

plt.ylabel('Number of Cases')

plt.xticks(rotation=30)

plt.show()



# To plot multiple line graph for analysis of all above cities

plt.plot(ahmedabad['Month'],ahmedabad['Cases'],c='m')

plt.plot(surat['Month'],surat['Cases'],c='b')

plt.plot(vadodara['Month'],vadodara['Cases'],c='y')

plt.plot(rajkot['Month'],rajkot['Cases'],c='g')

plt.xlabel('Month')

plt.ylabel('Number of Cases')

plt.xticks(rotation=30)

plt.legend(['Ahmedabad','Surat','Vadodara','Rajkot'])

plt.show()

