Data Visualization

1. Dataset : Covid-19 full data all around the world

2. Extracted dataset file name : Covid-19 country wise latest

3. Content information of the extracted Dataset :

Data extracted from the Dataset

RangeIndex : 187 entries, 0 to 186
Data columns (total 15 columns):

#	Column	Non-Null Count	Dtype
0	Country/Region	20 non-null	object
1	Confirmed	20 non-null	int64
2	Deaths	20 non-null	int64
3	Recovered	20 non-null	int64
4	Active	20 non-null	int64

Dtypes : float64(4), int64(9), object(2)
Memory usage : 22.0+ KB

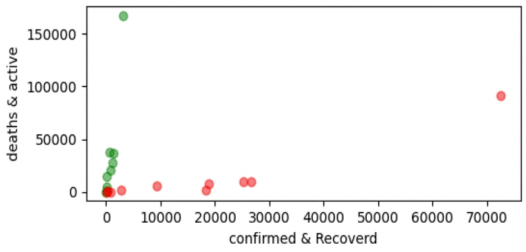
Column Description :

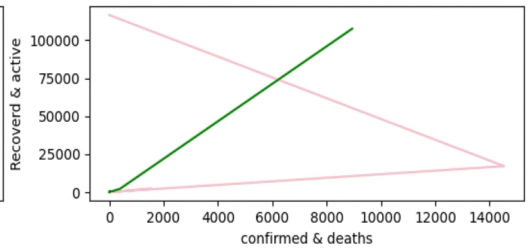
- First column contain the selected country and region in covid-19 dataset
- In second column contain the confirmed cases of with respective region in the dataset.
- Third column contain the Deaths with respective country In the Dataset
- In the following column have the Recovered data
- In the last column Active cases of covid-19 data in selected

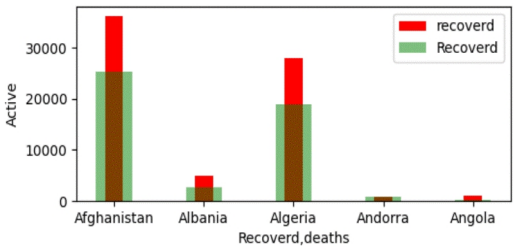
Relevant Code :

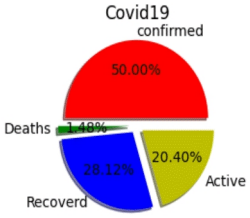
```python
from matplotlib import pyplot as plt
import pandas as pd

# reading the dataset from the csv file
data = pd.read_csv('covid19.csv')

# reading data
x1 = data.iloc[0:10,1].values
y1 = data.iloc[0:10,2].values
a1 = data.iloc[0:10,3].values
b1 = data.iloc[0:10,4].values

x2 = data.iloc[28:33,1].values
y2 = data.iloc[28:33,3].values
a2 = data.iloc[28:33,2].values
b2 = data.iloc[28:33,4].values



x3 = data.iloc[0:5,0].values
y3 = data.iloc[0:5,1].values
a3 = data.iloc[0:5,3].values

a4 = data.iloc[1,1:5].values


# scattering graph
plt.subplot(221)
plt.scatter(y1,x1,c='g',alpha=.5)
plt.scatter(a1,b1,c='r',alpha=.5)
plt.xlabel('confirmed & Recoverd')
plt.ylabel('deaths & active')

# plot graph
plt.subplot(222)
plt.plot(y2,x2,c='pink')
plt.plot(a2,b2,c='g')
plt.xlabel('confirmed & deaths')
plt.ylabel('Recoverd & active')

# bar graph
plt.subplot(223)
plt.bar(x3,y3,width=0.2,label="recoverd",color="r")
plt.bar(x3,a3,width=0.4,alpha=0.5,label="Recoverd",color="g")
plt.xlabel('Recoverd,deaths')
plt.ylabel('Active')
plt.legend()

# pie graph
plt.subplot(224)
color = ['r','g','b','y']
activities = ['confirmed','Deaths','Recoverd','Active']
plt.pie(a4,labels=activities,colors=color,shadow=True,explode=(.1,.1,.1,.1),autopct='%1.2f%%')
plt.title('Covid19')


plt.show()
```

Graphs :









Graphs Description :

1. In the first graph it's a Scatter graph there I represent the no.of active vs recovered and Confirmed and Deaths data from the Covid-19 dataset to visualize the ratio of both in one type of graph.

2. In the second graph I represent the graph in Plot type graph where consider no.of active vs recovered and Confirmed and Deaths extracted from the dataset covid-19 dataset

3. In the third graph I represent the graph in bar graph by taking the active column vs both recovered, deaths in the dataset to visualize the verification the respective data

4. In the last graph I represent data in the pie chart graph by taking the data from country column and confirmed,deaths,recovered,active columns from the dataset to visualize the percentage of the cases in covid-19 data

Conclusion :

In this analysis on covid-19 cases on confirmed,deaths,recovered & active with respective country's as there in the dataset how it's ratio is going on day by day

By this analysis we get to know how the covid-19 cases are rise and back normal condition after long time but still the graph is on average position compare to initial days its decreases