

1. Getting started with COVID Analysis - Dataset walkthrough:

```
In [8]: import pandas as pd

In [9]: df = pd.read_csv("country_wise_latest.csv")

In [10]: df

Out[10]:
```

| | Country/Region | Confirmed | Deaths | Recovered | Active | New cases | New deaths | New recovered | Deaths / 100 Cases | Recovered / 100 Cases | Deaths / 100 Recovered | Confirmed last week | 1 week change | 1 week % increase | WHO Region |
|-----|--------------------|-----------|--------|-----------|--------|-----------|------------|---------------|--------------------|-----------------------|------------------------|---------------------|---------------|-------------------|-----------------------|
| 0 | Afghanistan | 36263 | 1269 | 25198 | 9796 | 106 | 10 | 18 | 3.50 | 69.49 | 5.04 | 35526 | 737 | 2.07 | Eastern Mediterranean |
| 1 | Albania | 4880 | 144 | 2745 | 1991 | 117 | 6 | 63 | 2.95 | 56.25 | 5.25 | 4171 | 709 | 17.00 | Europe |
| 2 | Algeria | 27973 | 1163 | 18837 | 7973 | 616 | 8 | 749 | 4.16 | 67.34 | 6.17 | 23691 | 4282 | 18.07 | Africa |
| 3 | Andorra | 907 | 52 | 803 | 52 | 10 | 0 | 0 | 5.73 | 88.53 | 6.48 | 884 | 23 | 2.60 | Europe |
| 4 | Angola | 950 | 41 | 242 | 667 | 18 | 1 | 0 | 4.32 | 25.47 | 16.94 | 749 | 201 | 26.84 | Africa |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 182 | West Bank and Gaza | 10621 | 78 | 3752 | 6791 | 152 | 2 | 0 | 0.73 | 35.33 | 2.08 | 8916 | 1705 | 19.12 | Eastern Mediterranean |
| 183 | Western Sahara | 10 | 1 | 8 | 1 | 0 | 0 | 0 | 10.00 | 80.00 | 12.50 | 10 | 0 | 0.00 | Africa |
| 184 | Yemen | 1691 | 483 | 833 | 375 | 10 | 4 | 36 | 28.56 | 49.26 | 57.98 | 1619 | 72 | 4.45 | Eastern Mediterranean |
| 185 | Zambia | 4552 | 140 | 2815 | 1597 | 71 | 1 | 465 | 3.08 | 61.84 | 4.97 | 3326 | 1226 | 36.86 | Africa |
| 186 | Zimbabwe | 2704 | 36 | 542 | 2126 | 192 | 2 | 24 | 1.33 | 20.04 | 6.64 | 1713 | 991 | 57.85 | Africa |

187 rows × 15 columns

```
In [11]: df.head()

Out[11]:
```

| | Country/Region | Confirmed | Deaths | Recovered | Active | New cases | New deaths | New recovered | Deaths / 100 Cases | Recovered / 100 Cases | Deaths / 100 Recovered | Confirmed last week | 1 week change | 1 week % increase | WHO Region |
|---|----------------|-----------|--------|-----------|--------|-----------|------------|---------------|--------------------|-----------------------|------------------------|---------------------|---------------|-------------------|-----------------------|
| 0 | Afghanistan | 36263 | 1269 | 25198 | 9796 | 106 | 10 | 18 | 3.50 | 69.49 | 5.04 | 35526 | 737 | 2.07 | Eastern Mediterranean |
| 1 | Albania | 4880 | 144 | 2745 | 1991 | 117 | 6 | 63 | 2.95 | 56.25 | 5.25 | 4171 | 709 | 17.00 | Europe |
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| 3 | Andorra | 907 | 52 | 803 | 52 | 10 | 0 | 0 | 5.73 | 88.53 | 6.48 | 884 | 23 | 2.60 | Europe |
| 4 | Angola | 950 | 41 | 242 | 667 | 18 | 1 | 0 | 4.32 | 25.47 | 16.94 | 749 | 201 | 26.84 | Africa |

2. Check the Null values in the Dataset :

```
In [20]: x = df.isnull().sum()

In [21]: print("Null values in the Dataset :",x)

Null values in the Dataset : Country/Region      0
Confirmed      0
Deaths         0
Recovered      0
Active         0
New cases      0
New deaths     0
New recovered  0
Deaths / 100 Cases      0
Recovered / 100 Cases  0
Deaths / 100 Recovered 0
Confirmed last week     0
1 week change    0
1 week % increase    0
WHO Region       0
dtype: int64
```

3. Find the Number of Unique countries :

```
In [22]: def nunique(data):
          return len(set(list(data)))
n = nunique(df['Country/Region'])
print("Number of Unique countries :",n)

Number of Unique countries : 187
```

4. Which Country is having Maximum Confirmed Cases :

```
In [23]: x = []
b = len(df["Confirmed"])
for i in df["Confirmed"]:
    x.append(i)
a = max(x)
for i in range(b):
    if(df["Confirmed"][i]==a):
        print(df["Country/Region"][i],':',df["Confirmed"][i])

US : 4290259
```

5. Which Country is having Maximum Death Cases :

```
In [25]: a = []
b = len(df["Deaths"])
for i in df["Deaths"]:
    a.append(i)
c = max(a)
for i in range(b):
    if(df["Deaths"][i]==c):
        print(df["Country/Region"][i],':',df["Deaths"][i])

US : 148011
```

6. What are the Average Cases in a Country ?

```
In [26]: sum1 = df["Confirmed"].sum()

length = len(df["Country/Region"])

print("Average Cases :",sum1/length,)

Average Cases : 88130.935828877
```

7. What is the Total number of Deaths as per the Dataset ?

```
In [27]: total = df["Deaths"].sum()

print("Total number of Death cases as per the Dataset :",total)

Total number of Death cases as per the Dataset : 654036
```

8. What is the Total number of Confirmed Cases as per the Dataset ?

```
In [19]: total_1 = df["Confirmed"].sum()

print("Total number of Confirmed cases as per the Dataset :", total_1)

Total number of Confirmed cases as per the Dataset : 16480485
```