

In [ ]:

```
# Data collected from "https://covid19.who.int/WHO-COVID-19-global-data.csv"  
# pip install matplotlib  
# pip install pandas  
# pip install numpy
```

In [ ]:

```
import os  
import urllib  
import matplotlib.pyplot as Mat  
import pandas as pd  
import numpy as np
```

In [ ]:

```
url = "https://covid19.who.int/WHO-COVID-19-global-data.csv"  
file_path = os.path.join("data", "covid")
```

In [ ]:

```
os.makedirs(file_path, exist_ok=True)  
csv_path = os.path.join(file_path, "WHO-COVID-19-Data.csv")  
urllib.request.urlretrieve(url, csv_path)
```

In [ ]:

```
DataF = pd.read_csv(csv_path)
```

In [ ]:

```
DataF
```

In [ ]:

```
DataF_index = DataF.index  
DataF_index
```

In [ ]:

```
DataF_columns = DataF.columns  
DataF_columns
```

In [ ]:

```
DataF_index.values
```

In [ ]:

```
DataF.values
```

In [ ]:

```
DataF.dtypes
```

In [ ]:

```
DataF.shape
```

In [ ]:

```
DataF.head()
```

In [ ]:

```
DataF.tail()
```

In [ ]:

```
DataF.info()
```

In [ ]:

```
DataF.describe()
```

In [ ]:

```
DataF["Country"]
```

In [ ]:

```
DataF["Country"].unique()
```

In [ ]:

```
DataF["Country_code"].unique()
```

In [ ]:

```
DataF.columns = [col.strip() for col in DataF.columns]  
DataF.columns
```

In [ ]:

```
DataF.Country
```

In [ ]:

```
DataF.loc[1:4, "Country"]
```

In [ ]:

```
DataF.loc[1:8, ["Country", "New_cases"]]
```

In [ ]:

```
DataF.Country == "India"
```

In [ ]:

```
DataF[DataF.Country == "India"]
```

In [ ]:

```
DataF[DataF.New_deaths > 1000]
```

In [ ]:

```
DataF.loc[(DataF.New_deaths > 1000) & (DataF.Country_code=="IN"), ["Date_reported", "Country_
```



In [ ]:

```
DataF.loc[DataF.Country_code == "IN", ["New_cases"]].max()
```

In [ ]:

```
DataF.loc[DataF.Country_code == "IN", ["New_deaths"]].max()
```

In [ ]:

```
DataF.loc[DataF.Country_code == "IN", ["New_deaths"]].sum()
```

In [ ]:

```
DataC = pd.read_csv("c:\\Users\\yurik\\data\\covid\\WHO-COVID-19-Data.csv")
```

In [ ]:

```
DataC = pd.DataFrame(DataC)
```

In [ ]:

```
# Plotting Data
DataCountry = DataC["Country"]
DataNCases = DataC["New_cases"]
DataCCases = DataC["Cumulative_cases"]
DataNDeaths = DataC["New_deaths"]
DataCDeaths = DataC["Cumulative_deaths"]
```