# CORONA VIRUS ANALYSIS

SQL Queries and Key Findings

#### **Overview of the Dataset**

The dataset used for this analysis is the corona virus dataset, which contains information about COVID-19 cases, including confirmed, deaths, and recovered cases across various regions and dates.

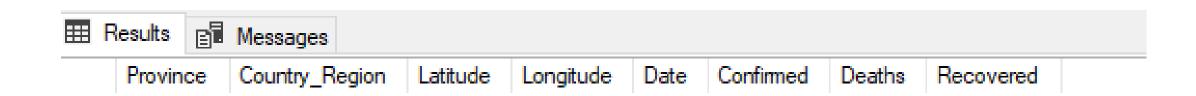
## **Objectives:**

- 1. To ensure data quality by identifying and handling NULL values.
- 2. To analyze the spread of COVID-19 over time and across different regions.
- 3. To identify key trends and patterns in the data.

## Handling NULL Values

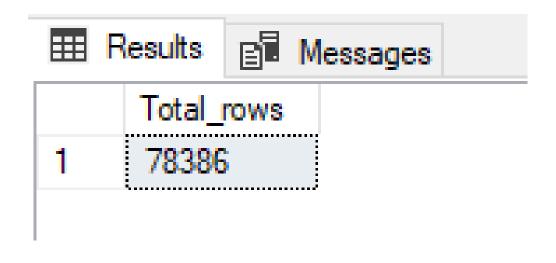
#### Check for NULL Values:

- There are no NULL values
- There is no need to update NULL to zero value

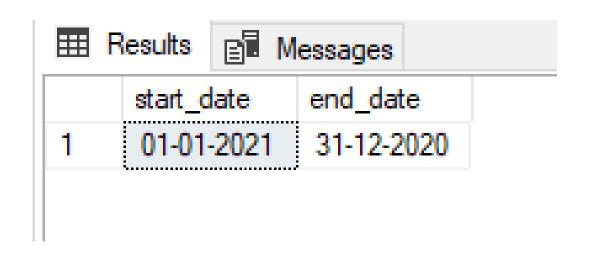


## **Descriptive Analysis**

Total number of rows



Start and End Date



# Date Range Analysis

Monthly Average of whole data. this goes on

<b>Ⅲ</b> F	Results Messages					
	monthly	average_confirmed	average_deaths	average_recovered		
1	01-01-2	3301	61	1675		
2	01-02-2	1415	33	821		
3	01-03-2	949	24	662		
4	01-04-2	2436	57	1094		
5	01-05-2	2783	58	2237		
6	01-06-2	1748	59	1994		
7	01-07-2	1330	32	698		
8	01-08-2	1569	38	1152		
9	01-09-2	1678	42	1636		
10	01-10-2	1982	55	1387		
11	01-11-2	2877	30	1472		

## Most Frequent Values per Month

## Findings

<b>=</b>	Results [	Messa	ages		
	Year	Month	Confirmed	Deaths	Recovered
1	NULL	NULL	0	0	0
2	2020	1	0	0	0
3	2020	2	0	0	0
4	2020	3	0	0	0
5	2020	4	0	0	0
6	2020	5	0	0	0
7	2020	6	0	0	0
8	2020	7	0	0	0
9	2020	8	0	0	0
10	2020	9	0	0	0
11	2020	10	0	0	0

# Minimum and Maximum Values per Year

III I	Results	■ Messages		
	Year	MinConfirmed	MinDeaths	MinRecovered
1	2021	0	0	0
2	2020	0	0	0

	Year	MaxConfirmed	MaxDeaths	MaxRecovered
1	2021	414188	7374	386404
2	2020	823225	3410	1123456

# Total Number of cases per month yearly

Ⅲ F	Results	e Mess	ages		
	Year	Month	TotalConfirmed	TotalDeaths	TotalRecovered
1	2020	3	2445188	57518	1508499
2	2020	11	2624064	58965	1803809
3	2021	7	3347823	64456	2286558
4	2021	1	3126561	66780	2250527
5	2021	4	3128264	63355	2216803
6	2021	2	3138304	64185	2298336
7	2020	9	2463796	58759	1524523
8	2020	6	2388639	53382	1423110
9	2020	12	2563361	55521	2674858
10	2021	10	3082334	69799	2052737
11	2020	1	2296241	57475	1539929

## **Spread out of Corona Virus**

Average, Variance and standard deviation

Results				
	TotalConfirmed	AvgConfirmed	VarianceConfirmed	StdDevConfirmed
1	169065144	2156	157290931.698175	12541.5681514783

Snippet of Death case per month

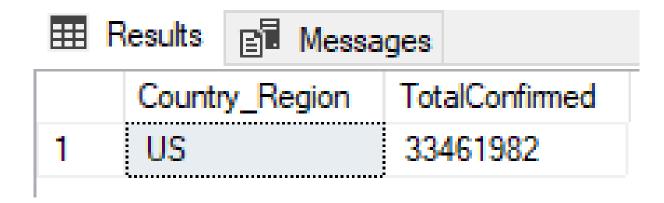
III F	Results [	Messa Messa	ages			
	Year	Month	TotalDeaths	AvgDeaths	VarianceDeaths	StdDevDeaths
1	2020	3	57518	33	23858.6168981102	154.462347833089
2	2020	11	58965	34	25656.3016229059	160.175845940972
3	2021	7	64456	69	90888.2358580387	301.476758404423
4	2021	1	66780	72	98610.5430907121	314.023156933867
5	2021	4	63355	68	80475.8840443594	283.682717211252
6	2021	2	64185	69	80556.935884538	283.825537759621
7	NULL	NULL	2158453	45	43842.7308016703	209.386558311823
8	2020	9	58759	34	25355.3316911569	159.233575891383
9	2020	6	53382	31	18694.1980151621	136.726727508421
10	2020	12	55521	32	20394.4012455621	142.808967665067
11	2021	10	69799	75	132491.503270204	363.993823120948

## Cases

#### Recovered Cases

			Variance Recovered	StdDevRecovered		
1	113089548	1442	107030888.69603	10345.5733865277		

## Country having highest cases



## Highest, Lowest and Top 5 Countries

	■ Results				
	Country_Region	TotalConfirmed			
1	US	33461982			
	Country_Region	TotalDeaths			
1	Marshall Islands	0			
	Country_Region	TotalRecovered			
1	India	28089649			
2	Brazil	15400169			
3	US	6303715			
4	Turkey	5202251			
5	Russia	4745756			