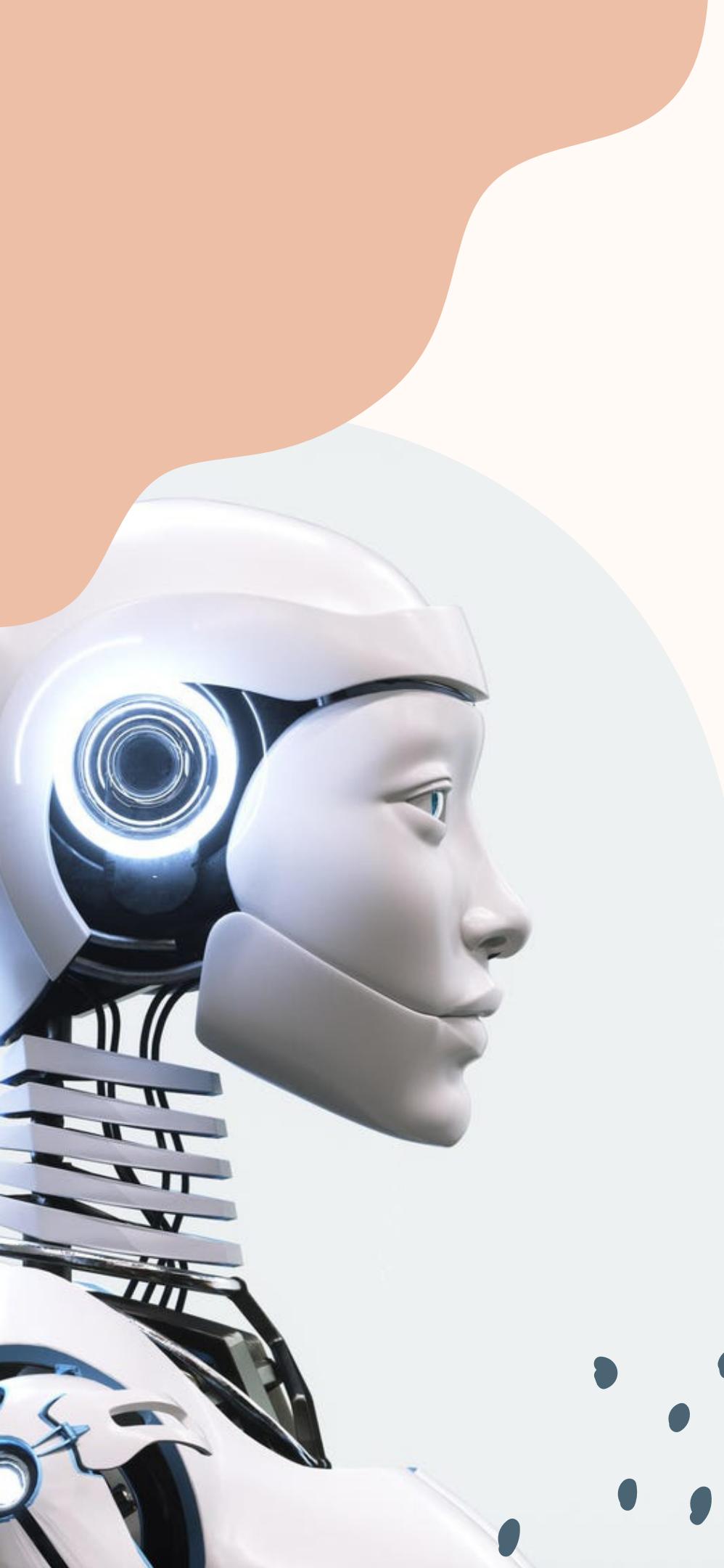


Covid-19 Analysis

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Covid 19



The novel virus was first identified in Wuhan, China, in December 2019. This was not immediately contained, thus the virus spread worldwide.

The World Health Organization (WHO) declared a Public Health Emergency of International Concern on 30 January 2020 and a pandemic on 11 March 2020.

Objective

The objective of this analysis is to be able to get the significant numerical data from people affected of Covid worldwide. This report aims to encourage people especially in the medical field to do some further analysis or study for eradicating Covid-19.

Tools/Language Used

PostgreSQL / MySQL

Source Website

[Our World in Data](#)



Codes Repository

[Github](#)

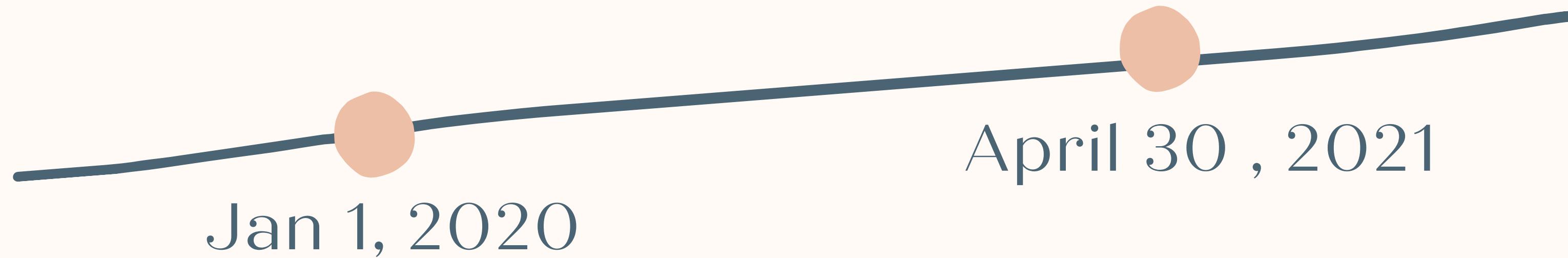


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Data Overview



The data contained on these files started from January 1, 2020 and ended in April 30, 2021.

Data Overview

The iso_code is unique for each location.

iso_code character varying	continent character varying	location character varying
COG	Africa	Congo
UGA	Africa	Uganda
ZAF	Africa	South Africa
RWA	Africa	Rwanda
DZA	Africa	Algeria
NGA	Africa	Nigeria
CPV	Africa	Cape Verde
SDN	Africa	Sudan
KEN	Africa	Kenya

This can be used for data aggregation or
in joining with other tables.

Data Overview

The numbers on total_cases and total_deaths columns are in cumulative order

iso_code character varying	continent character varying	date character varying	location character varying	total_cases numeric	total_deaths numeric	maxpopulation numeric
AGO	Africa	2020-03-20	Angola	1	[null]	32866268
AGO	Africa	2020-03-21	Angola	2	[null]	32866268
AGO	Africa	2020-03-22	Angola	2	[null]	32866268
AGO	Africa	2020-03-23	Angola	3	[null]	32866268
AGO	Africa	2020-03-24	Angola	3	[null]	32866268
AGO	Africa	2020-03-25	Angola	3	[null]	32866268
AGO	Africa	2020-03-26	Angola	4	[null]	32866268
AGO	Africa	2020-03-27	Angola	4	[null]	32866268
AGO	Africa	2020-03-28	Angola	5	[null]	32866268
AGO	Africa	2020-03-29	Angola	7	2	32866268
AGO	Africa	2020-03-30	Angola	7	2	32866268

Population is also unique for each location.

Covid Death Counts Per Continent



	Data Output	Messages	Notifications	Explain
1	continent character varying	sumpopulation numeric	sumcases numeric	totaldeaths numeric
2	Europe	335992153485	5919959519	160813747
3	North America	271764390703	5899998157	153596231
4	South America	188042852928	3726070926	105595385
5	Asia	2079375256193	5245253476	87116891
6	Africa	562166478243	755614426	19064924
7	Oceania	18117821003	9855237	256504

Europe has the highest number of covid deaths.

Covid Death Counts Per Location



Data Output Messages Notifications Explain

	iso_code character varying	continent character varying	location character varying	maxpopulation numeric	maxtotalcases numeric	totalinfected numeric	totaldeaths numeric
1	USA	North America	United States	331002647	32346971	10.00	576232
2	BRA	South America	Brazil	212559409	14659011	7.00	403781
3	MEX	North America	Mexico	128932753	2344755	2.00	216907
4	IND	Asia	India	1380004385	19164969	1.00	211853
5	GBR	Europe	United Kingdom	67886004	4432246	7.00	127775
6	ITA	Europe	Italy	60461828	4022653	7.00	120807
7	RUS	Europe	Russia	145934460	4750755	3.00	108290
8	FRA	Europe	France	68147687	5677835	8.00	104675
9	DEU	Europe	Germany	83783945	3405365	4.00	83097
10	ESP	Europe	Spain	46754783	3524077	8.00	78216

United States got the highest number of covid death that reaches 576,232 in total.

Covid Death Percentage Per Continent

	Data Output	Messages	Notifications	Explain							
	continent character varying	totalpopulation numeric	totalcases numeric	totalinfected numeric	totaldeaths numeric	percentinfected numeric	percentdeath numeric				
1	South America	430457607	24878216	51.00	672415	0.000200	2.702800				
2	Africa	1338826591	4557699	31.00	121784	0.000700	2.672100				
3	Oceania	40472735	43542	0.00	1046	0.000000	2.402300				
4	Europe	751043863	44863451	333.00	1016750	0.000700	2.266300				
5	North America	587538337	37529270	50.00	847942	0.000100	2.259400				
6	Asia	4592615537	39525551	111.00	520286	0.000300	1.316300				

South America got the highest death percentage of 2.70%

Covid Death Percentage Per Location

	Data Output	Messages	Notifications	Explain			
	iso_code	continent	location	deathpercentage	deathrank		
1	VUT	Oceania	Vanuatu	25.00	1		
2	YEM	Asia	Yemen	19.00	2		
3	MEX	North America	Mexico	9.00	3		
4	SYR	Asia	Syria	7.00	4		
5	SDN	Africa	Sudan	7.00	5		
6	EGY	Africa	Egypt	6.00	6		
7	SOM	Africa	Somalia	5.00	7		
8	ECU	South America	Ecuador	5.00	8		
9	CHN	Asia	China	5.00	9		
10	AFG	Asia	Afghanistan	4.00	10		

Vanuatu has the highest deathpercentage or it is the first in death rank.

Philippine Covid Death Count Rank

Data Output	Messages	Notifications	Explain
	iso_code character varying	continent character varying	location character varying
1	PHL	Asia	Philippines
			maxdeathcount numeric
			deathcountrank bigint
			17234
			29

Philippine is 29th on Death Count Rank among countries
in the world that are affected with Covid.

Philippine Covid Death Percentage Rank

Data Output	Messages	Notifications	Explain		
	iso_code character varying	continent character varying	location character varying	deathpercentage numeric	deathrank bigint
1	PHL	Asia	Philippines	2.00	101

Philippine is 101st on Death Rate Rank among countries
in the world that are affected with Covid.

Thank You!



Please see source codes on the next page...

Data Overview

```
-- DATA OVERVIEW | PAGE 6 ON PORTFOLIO --
-- CHECK THE UNIQUENESS OF PRIMARY KEY (ISO_CODE) --
-- WE CAN SEE THAT THE ISO_CODE IS UNIQUE TO THE LOCATION
```

```
SELECT DISTINCT(iso_code), continent, location
FROM "CovidDeaths"
ORDER BY 2
```

iso_code character varying	continent character varying	location character varying
COG	Africa	Congo
UGA	Africa	Uganda
ZAF	Africa	South Africa
RWA	Africa	Rwanda
DZA	Africa	Algeria
NGA	Africa	Nigeria
CPV	Africa	Cape Verde
SDN	Africa	Sudan
KEN	Africa	Kenya

Data Overview

-- DATA OVERVIEW | PAGE 7 ON PORTFOLIO
-- CHECK THE WAY OF RECORDING OF NUMERICAL DATA
-- IN THIS CASE, TOTAL CASES AND TOTAL DEATHS ARE RECORDED IN CUMULATIVE ORDER
-- POPULATION IS UNIQUE FOR EACH LOCATION
-- THEREFORE WE CAN USE MAX FOR COMPUTATION OF PERCENTAGE OF TOTAL_CASES AND TOTAL_DEATHS COLUMNS

```
SELECT iso_code, continent, date, location, total_cases, total_deaths,  
       MAX(population) as MaxPopulation  
FROM "CovidDeaths"  
GROUP BY iso_code, continent, date, location, total_cases, total_deaths  
ORDER BY continent
```

iso_code character varying	continent character varying	date character varying	location character varying	total_cases numeric	total_deaths numeric	maxpopulation numeric
AGO	Africa	2020-03-20	Angola	1	[null]	32866268
AGO	Africa	2020-03-21	Angola	2	[null]	32866268
AGO	Africa	2020-03-22	Angola	2	[null]	32866268
AGO	Africa	2020-03-23	Angola	3	[null]	32866268
AGO	Africa	2020-03-24	Angola	3	[null]	32866268
AGO	Africa	2020-03-25	Angola	3	[null]	32866268
AGO	Africa	2020-03-26	Angola	4	[null]	32866268
AGO	Africa	2020-03-27	Angola	4	[null]	32866268
AGO	Africa	2020-03-28	Angola	5	[null]	32866268
AGO	Africa	2020-03-29	Angola	7	2	32866268
AGO	Africa	2020-03-30	Angola	7	2	32866268

Covid Death Counts Per Continent

-- COVID DEATH COUNTS PER CONTINENT | PAGE 8 ON PORTFOLIO --

```
SELECT continent, SUM(population) as SumPopulation, SUM(total_cases) as SumCases,  
       SUM(total_deaths) as TotalDeaths  
FROM "CovidDeaths"  
WHERE continent IS NOT NULL  
GROUP BY continent  
ORDER BY 4 DESC
```

	Data Output	Messages	Notifications	Explain
	continent character varying	sumpopulation numeric	sumcases numeric	totaldeaths numeric
1	Europe	335992153485	5919959519	160813747
2	North America	271764390703	5899998157	153596231
3	South America	188042852928	3726070926	105595385
4	Asia	2079375256193	5245253476	87116891
5	Africa	562166478243	755614426	19064924
6	Oceania	18117821003	9855237	256504

Covid Death Counts Per Location

-- COVID DEATH COUNT PER LOCATION | PAGE 9 ON PORTFOLIO--

```
SELECT iso_code, continent, location, MAX(population) as MaxPopulation, MAX(total_cases) as MaxTotalCases,
       ROUND(MAX(total_cases)/MAX(population),2) *100 as TotalInfected,
       MAX(total_deaths) as TotalDeaths
  FROM "CovidDeaths"
 WHERE continent IS NOT NULL
 GROUP BY iso_code, continent, location
 HAVING MAX(total_deaths) IS NOT NULL
 ORDER BY 7 DESC
 LIMIT 10
```

Data Output Messages Notifications Explain

	iso_code character varying	continent character varying	location character varying	maxpopulation numeric	maxtotalcases numeric	totalinfected numeric	totaldeaths numeric
1	USA	North America	United States	331002647	32346971	10.00	576232
2	BRA	South America	Brazil	212559409	14659011	7.00	403781
3	MEX	North America	Mexico	128932753	2344755	2.00	216907
4	IND	Asia	India	1380004385	19164969	1.00	211853
5	GBR	Europe	United Kingdom	67886004	4432246	7.00	127775
6	ITA	Europe	Italy	60461828	4022653	7.00	120807
7	RUS	Europe	Russia	145934460	4750755	3.00	108290
8	FRA	Europe	France	68147687	5677835	8.00	104675
9	DEU	Europe	Germany	83783945	3405365	4.00	83097
10	ESP	Europe	Spain	46754783	3524077	8.00	78216

Covid Death Percentage Per Continent

-- COVID DEATH PERCENTAGE PER CONTINENT | PAGE 10 ON PORTFOLIO

```
WITH DeathPerContinent AS
(
SELECT iso_code, continent, location, MAX(population) AS MaxPopulation, MAX(total_cases) AS MaxTotalCases,
ROUND(MAX(total_cases)/MAX(population),2) *100 AS TotalInfected,
MAX(total_deaths) AS TotalDeaths,
ROUND(MAX(total_deaths)/MAX(total_cases),2) * 100 AS DeathPercentage
FROM "CovidDeaths"
GROUP BY iso_code, continent, location
HAVING ROUND(MAX(total_deaths)/MAX(total_cases),2) * 100 IS NOT NULL
ORDER BY 2, 8 DESC
)
SELECT continent, SUM(MaxPopulation) AS TotalPopulation, SUM(maxtotalcases) AS TotalCases, SUM(totalinfected) AS TotalInfected, SUM(totaldeaths) AS TotalDeaths,
ROUND(SUM(totalinfected)/SUM(maxtotalcases),6)*100 AS PercentInfected,
ROUND(SUM(totaldeaths)/SUM(maxtotalcases),6)*100 AS PercentDeath
FROM DeathPerContinent
WHERE CONTINENT IS NOT NULL
GROUP BY continent
ORDER BY 7 DESC
```

	continent character varying	totalpopulation numeric	totalcases numeric	totalinfected numeric	totaldeaths numeric	percentinfected numeric	percentdeath numeric
1	South America	430457607	24878216	51.00	672415	0.000200	2.702800
2	Africa	1338826591	4557699	31.00	121784	0.000700	2.672100
3	Oceania	40472735	43542	0.00	1046	0.000000	2.402300
4	Europe	751043863	44863451	333.00	1016750	0.000700	2.266300
5	North America	587538337	37529270	50.00	847942	0.000100	2.259400
6	Asia	4592615537	39525551	111.00	520286	0.000300	1.316300

Covid Death Percentage Per Location

-- COVID DEATH PERCENTAGE RANK PER LOCATION | PAGE 11 ON PORTFOLIO

```
SELECT iso_code, continent, location,
       ROUND(MAX(total_deaths)/MAX(total_cases),2)*100 AS DeathPercentage,
       RANK() OVER(ORDER BY MAX(total_deaths)/MAX(total_cases) DESC) AS DeathRank
FROM "CovidDeaths"
GROUP BY iso_code, continent, location
HAVING ROUND(MAX(total_deaths)/MAX(total_cases),2) * 100 IS NOT NULL
LIMIT 10
```

	Data Output	Messages	Notifications	Explain			
	iso_code character varying	continent character varying	location character varying	deathpercentage numeric	deathrank bigint		
1	VUT	Oceania	Vanuatu	25.00	1		
2	YEM	Asia	Yemen	19.00	2		
3	MEX	North America	Mexico	9.00	3		
4	SYR	Asia	Syria	7.00	4		
5	SDN	Africa	Sudan	7.00	5		
6	EGY	Africa	Egypt	6.00	6		
7	SOM	Africa	Somalia	5.00	7		
8	ECU	South America	Ecuador	5.00	8		
9	CHN	Asia	China	5.00	9		
10	AFG	Asia	Afghanistan	4.00	10		

Philippine Covid Death Count Rank

```
-- PHILIPPINE COVID DEATH COUNT RANK | PAGE 12 ON PORTFOLIO

WITH DeathCountRank AS
(
    SELECT iso_code, continent, location,
        MAX(total_deaths) as MaxDeathCount,
        RANK() OVER(ORDER BY MAX(total_deaths) DESC) AS DeathCountRank
    FROM "CovidDeaths"
    WHERE continent IS NOT NULL
    GROUP BY iso_code, continent, location
    HAVING MAX(total_deaths) IS NOT NULL
)
SELECT * FROM DeathCountRank
WHERE location = 'Philippines'

-- PHILIPPINE COVID DEATH PERCENTAGE RANK | PAGE 13 ON PORTFOLIO
```

Data Output		Messages	Notifications	Explain
#	Column Name	Type	Type	Type
1	iso_code	character varying	character varying	character varying

#	iso_code	continent	location	maxdeathcount	deathcountrank
1	PHL	Asia	Philippines	17234	29

Philippine Covid Death Percentage Rank

```
-- PHILIPPINE COVID DEATH PERCENTAGE RANK | PAGE 13 ON PORTFOLIO

WITH DeathRank AS
(
    SELECT iso_code, continent, location,
        ROUND(MAX(total_deaths)/MAX(total_cases),2)*100 AS DeathPercentage,
        RANK() OVER(ORDER BY MAX(total_deaths)/MAX(total_cases) DESC) AS DeathRank
    FROM "CovidDeaths"
    GROUP BY iso_code, continent, location
    HAVING ROUND(MAX(total_deaths)/MAX(total_cases),2) * 100 IS NOT NULL
)
SELECT * FROM DeathRank
WHERE location = 'Philippines'
```

Data Output		Messages	Notifications	Explain		
	iso_code	continent	location	deathpercentage	deathrank	
1	PHL	Asia	Philippines	2.00	101	

End



Thank you for viewing my SQL Portfolio