Query 1

-- comments: Simple query extracting key information such as location. total case etc and ordering the resultrs by location (1) and date (2)

select

location,

date,

total\_cases,

new\_cases,

total\_deaths,

population

from chrome-folio-405910.Portfolio\_Giammi.Covid\_Deaths

order by 1, 2

Quey 2

-- comments: Simple query extracting key information and using calculations to calculate death percentage as a new column and formating the new column using the round() syntax to two decimals places and again ordering by location (1) and date (2). This new table showes the likelihood of dying if contracting covid

select

location,

date,

total\_cases,

total\_deaths,

round((total\_deaths/total\_cases)\*100,2) as Death\_Percentage

from chrome-folio-405910.Portfolio\_Giammi.Covid\_Deaths

order by 1, 2

Query 3

-- comments: Simple query looking tital cases vs population, show what % of population has gotten COVID. In this example population is defined in the schema as a string. Therefore to make the calculation work for Big Query we use the CAST() syntax to convert it into an integer

select

location,

date,

population,

total\_cases,

round((total\_cases/cast(population as INT64))\*100,2) as COVID\_Percentage

from chrome-folio-405910.Portfolio\_Giammi.Covid\_Deaths

where location like 'United Kingdom'

order by 1, 2

Query 4

-- comments: Coubtry with highest infection rate compared to population. The population field is a string, and some events (for reasons unknown) contain an empty string, which cannot be cast to an integer.SAFE\_CAST in SQL is a function that attempts to cast a value to a specified data type, and returns NULL if the cast is not possible.

select

location,

population,

Max(total\_cases) as Highest\_infection\_Count,

round(max((total\_cases/safe\_cast(population as INT64)))\*100,2) as Percentage\_Population\_Infected

from chrome-folio-405910.Portfolio\_Giammi.Covid\_Deaths

group by location, population

order by Percentage\_Population\_Infected desc

Query 5

-- comments: Country with the highest death count per population. The where clause is used as the data groups contitents as location tehrefore where is not nul it'll elimate duplicate

select

location,

max(total\_deaths) as total\_deaths\_count

from chrome-folio-405910.Portfolio\_Giammi.Covid\_Deaths

where continent is not null

group by location

order by total\_deaths\_count desc

Query 6

-- comments: global breakdown by date of total cases and deaths per day. By aggregating new\_cases and new\_death we can group by date, previosuly the query would have use total\_cases which would have resulted in an error due to the need of aggeregate function. sum(new\_cases) allows us to have the total\_cases per date.

select

date,

sum(new\_cases) as Total\_Cases,

sum(new\_deaths) as Total\_Deaths,

round(sum(new\_deaths)/sum(new\_cases)\*100,2) as Death\_Percentage

from chrome-folio-405910.Portfolio\_Giammi.Covid\_Deaths

where continent is not null

group by date

order by 1, 2

Query 7

-- comments: total population vs vaccination. we use a sum() over to show the cumulative vaccinations and partition by location allows us to split the cumulative by location. Order by allows the numbers to have more clarity as w/o it it'd just show the full total of vaccinations rather than a rolling number

select

A.continent,

a.location,

a.date,

a.population,

b.new\_vaccinations,

sum(new\_vaccinations) over (partition by a.location order by a.location, a.date) as Cumulative\_Vaccinations

from chrome-folio-405910.Portfolio\_Giammi.Covid\_Deaths A

join chrome-folio-405910.Portfolio\_Giammi.Covid\_Vaccinations B

on A.location = b.location and a.date = b.date

where a.continent is not null

order by 2 ,3

Query 8

-- comments: usig a CTE we can calculate the vaccination rate per location and per date. Only issue stands with the population data type. Population is a String data type therefore safe\_cast is used to convert it into an integer. as a result the aggregation and cte works perfectly. However, it makes the table less impactful as loads of popluatons are missing as a result of the safe\_cast

with Table1 as

(

select

A.continent,

a.location,

a.date,

safe\_cast(a.population as int64) as population,

b.new\_vaccinations,

sum(new\_vaccinations) over (partition by a.location order by a.location, a.date) as Cumulative\_Vaccinations

from chrome-folio-405910.Portfolio\_Giammi.Covid\_Deaths A

join chrome-folio-405910.Portfolio\_Giammi.Covid\_Vaccinations B

on A.location = b.location and a.date = b.date

where a.continent is not null

order by 2 ,3

)

select \*,

(Cumulative\_Vaccinations/population)\*100 as Vaccination\_Percentage

from table1

Query 9

-- comments: WIP

CREATE TABLE chrome-folio-405910.Portfolio\_Giammi.percentpopulationvaccinated (

continent STRING,

location STRING,

date TIMESTAMP,

population NUMERIC,

new\_vaccinations NUMERIC,

Cumulative\_Vaccinations NUMERIC

);

INSERT INTO chrome-folio-405910.Portfolio\_Giammi.percentpopulationvaccinated

SELECT

A.continent,

A.location,

A.date,

SAFE\_CAST(A.population AS INT64) AS population,

B.new\_vaccinations,

SUM(B.new\_vaccinations) OVER (PARTITION BY A.location ORDER BY A.location, A.date) AS Cumulative\_Vaccinations

FROM

chrome-folio-405910.Portfolio\_Giammi.Covid\_Deaths A

JOIN

chrome-folio-405910.Portfolio\_Giammi.Covid\_Vaccinations B

ON

A.location = B.location

AND A.date = B.date

WHERE

A.continent IS NOT NULL

ORDER BY

2, 3;

SELECT

\*,

(Cumulative\_Vaccinations / population) \* 100 AS Vaccination\_Percentage

FROM

chrome-folio-405910.Portfolio\_Giammi.percentpopulationvaccinated;

Query 10

--Comments: create a view which can then be used for data visualisation

Create view chrome-folio-405910.Portfolio\_Giammi.percentpopulationvaccinated1 as

select

A.continent,

a.location,

a.date,

a.population,

b.new\_vaccinations,

sum(new\_vaccinations) over (partition by a.location order by a.location, a.date) as Cumulative\_Vaccinations

from chrome-folio-405910.Portfolio\_Giammi.Covid\_Deaths A

join chrome-folio-405910.Portfolio\_Giammi.Covid\_Vaccinations B

on A.location = b.location and a.date = b.date

where a.continent is not null