Covid Data Project 2/2024

--Select data that will be used

SELECT location, date, total\_cases, total\_deaths, new\_cases, population

FROM `lithe-vent-411619.PortfolioProjectA.covid\_deaths`

WHERE continent is NOT NULL

ORDER BY 1, 2

--Looking at Total Cases vs. Total Deaths

SELECT location, date, total\_cases, (total\_deaths/total\_cases)\*100 AS death\_percentage

FROM `lithe-vent-411619.PortfolioProjectA.covid\_deaths`

WHERE location LIKE 'United States'

WHERE continent is not null

ORDER BY 1, 2

-- By 04/2021 people in the US had a 1.75 - 2% chance of dying from Covid-19

--Looking at Total Cases vs. Population

SELECT location, date, total\_cases, population, (total\_cases/population)\*100 AS confirmed\_cases

FROM `lithe-vent-411619.PortfolioProjectA.covid\_deaths`

WHERE location LIKE 'United States'

WHERE continent is not null

ORDER BY 1, 2

--By 04/2021, nearly 10% of people had been confirmed Covid+

--Looking at countries with highest infection rate compared to population

SELECT location, population, MAX(total\_cases) AS highest\_infection\_rate, MAX(total\_cases/population)\*100 AS percent\_population\_infected

FROM `lithe-vent-411619.PortfolioProjectA.covid\_deaths`

WHERE continent is not null

GROUP BY location, population

ORDER BY percent\_population\_infected DESC

--Showing countries with highest death count per population

SELECT location, MAX(CAST (total\_deaths as INT)) AS total\_death\_count

FROM `lithe-vent-411619.PortfolioProjectA.covid\_deaths`

WHERE continent is not null

GROUP BY location

ORDER BY total\_death\_count DESC

--As of 4/2021, the US had the highest death count per population, followed by Brazil

--Now looking at a breakdown by continent

SELECT continent, MAX(CAST (total\_deaths as INT)) AS total\_death\_count

FROM `lithe-vent-411619.PortfolioProjectA.covid\_deaths`

WHERE continent is not null

GROUP BY continent

ORDER BY total\_death\_count DESC

--Global numbers:

SELECT date, SUM(new\_cases) AS total\_cases, SUM(CAST(new\_deaths as INT)) AS total\_deaths,SUM(CAST(new\_deaths as INT))/SUM(new\_cases)\*100 AS death\_percentage

FROM `lithe-vent-411619.PortfolioProjectA.covid\_deaths`

--WHERE location LIKE 'United States'

WHERE continent is not null

GROUP BY date

ORDER BY 1, 2

--and then the total number of new cases, deaths, and percentage of deaths worldwide:

SELECT SUM(new\_cases) AS total\_cases, SUM(CAST(new\_deaths as INT)) AS total\_deaths,SUM(CAST(new\_deaths as INT))/SUM(new\_cases)\*100 AS death\_percentage

FROM `lithe-vent-411619.PortfolioProjectA.covid\_deaths`

--WHERE location LIKE 'United States'

WHERE continent is not null

--GROUP BY date

ORDER BY 1, 2

--Now going over to Covid Vaccinations

SELECT \*

FROM `lithe-vent-411619.PortfolioProjectA.covid\_vaccinations`

LIMIT 10

--Looking at total population vs. vaccinations

SELECT dea.continent, dea.location, dea.date, dea.population, vac.new\_vaccinations

, SUM(vac.new\_vaccinations) OVER (PARTITION BY dea.location ORDER BY dea.location, dea.date) AS rolling\_people\_vaccinated

, (rolling\_people\_vaccinated/population)\*100

FROM `lithe-vent-411619.PortfolioProjectA.covid\_deaths` dea

JOIN `lithe-vent-411619.PortfolioProjectA.covid\_vaccinations` vac

ON dea.location = vac.location

AND dea.date = vac.date

WHERE dea.continent is not null

ORDER BY 2, 3

--Use CTE

WITH PopvsVac (continent, location, date, population, new\_vaccinations, rolling\_people\_vaccinated)

as

(

SELECT dea.continent, dea.location, dea.date, dea.population, vac.new\_vaccinations

, SUM(vac.new\_vaccinations) OVER (PARTITION BY dea.location ORDER BY dea.location, dea.date) AS rolling\_people\_vaccinated

, (rolling\_people\_vaccinated/population)\*100

FROM `lithe-vent-411619.PortfolioProjectA.covid\_deaths` dea

JOIN `lithe-vent-411619.PortfolioProjectA.covid\_vaccinations` vac

ON dea.location = vac.location

AND dea.date = vac.date

WHERE dea.continent is not null

)

SELECT \*

FROM PopvsVac

--Temp Table

CREATE TABLE #PercentPopulationVaccinated

(

  Continent nvarchar(255),

  Location nvarchar(255),

  Date datetime,

  Population numeric,

  New\_vaccinations numeric,

  rolling\_people\_vaccinated numeric

)

INSERT INTO #PercentPopulationVaccinated

SELECT dea.continent, dea.location, dea.date, dea.population, vac.new\_vaccinations

, SUM(vac.new\_vaccinations) OVER (PARTITION BY dea.location ORDER BY dea.location, dea.date) AS rolling\_people\_vaccinated

, (rolling\_people\_vaccinated/population)\*100

FROM `lithe-vent-411619.PortfolioProjectA.covid\_deaths` dea

JOIN `lithe-vent-411619.PortfolioProjectA.covid\_vaccinations` vac

ON dea.location = vac.location

AND dea.date = vac.date

WHERE dea.continent is not null

SELECT \*, (rolling\_people\_vaccinated/population)\*100

FROM #PercentPopulationVaccinated