|  |  |
| --- | --- |
|  | Select \* FROM PortfolioProject..CovidDeaths |
|  | ORDER BY location, date |
|  |  |
|  | Select \* |
|  | FROM PortfolioProject..CovidVaccinations |
|  | ORDER BY location, date |
|  |  |
|  | -- Data we need for the analysis |
|  | Select location, date, total\_cases, new\_cases, total\_deaths, population |
|  | FROM PortfolioProject..CovidDeaths |
|  | ORDER BY Location, date |
|  |  |
|  | -- Total Cases vs Total Deaths |
|  | -- Shows likelihood of dying if you get covid in United States |
|  | Select Location, date, total\_cases, total\_deaths, (Total\_deaths/total\_cases)\*100 AS death\_percentage |
|  | FROM PortfolioProject..CovidDeaths |
|  | WHERE location like '%states%' |
|  | ORDER BY Location, date |
|  |  |
|  | -- Shows likelihood of dying if you get covid in China |
|  | -- China actually has a higher precentage of death, but their total deaths of 4632 has not changed since 2020-05-16. US total deaths on the same date is 92073. |
|  | Select Location, date, total\_cases, total\_deaths, (Total\_deaths/total\_cases)\*100 AS death\_percentage |
|  | FROM PortfolioProject..CovidDeaths |
|  | WHERE location like '%china%' |
|  | ORDER BY Location, date |
|  |  |
|  | -- Total Cases vs Population |
|  | -- Shows percentage of population got Covid in United States |
|  | Select Location, date, total\_cases, population, (total\_cases/population)\*100 AS population\_percentage |
|  | FROM PortfolioProject..CovidDeaths |
|  | WHERE location like '%states%' |
|  | ORDER BY Location, date |
|  |  |
|  | -- Shows percentage of population got Covid in China |
|  | Select Location, date, total\_cases, population, (total\_cases/population)\*100 AS population\_percentage |
|  | FROM PortfolioProject..CovidDeaths |
|  | WHERE location like '%china%' |
|  | ORDER BY Location, date |
|  |  |
|  | -- Shows percentage of population got Covid for other countries |
|  | Select Location, date, total\_cases, population, (total\_cases/population)\*100 AS population\_percentage |
|  | FROM PortfolioProject..CovidDeaths |
|  | ORDER BY Location, date |
|  |  |
|  | -- Countries with highest infection rate |
|  | Select Location, population, MAX(total\_cases) as highest\_infection\_count, MAX((total\_cases/population))\*100 AS percentage\_population\_infected |
|  | FROM PortfolioProject..CovidDeaths |
|  | GROUP BY Location, Population |
|  | ORDER BY percentage\_population\_infected desc |
|  |  |
|  | -- Countries with highest death rate per population |
|  | Select Location, population, MAX(cast(total\_deaths as int)) as deaths, MAX((cast(total\_deaths as int)/population))\*100 AS percentage\_population\_died |
|  | FROM PortfolioProject..CovidDeaths |
|  | GROUP BY Location, Population |
|  | ORDER BY percentage\_population\_died desc |
|  |  |
|  | -- Continent with highest death toll |
|  | Select location, MAX(cast(total\_deaths as int)) as total\_deaths\_count |
|  | FROM PortfolioProject..CovidDeaths |
|  | WHERE continent is null |
|  | GROUP BY location |
|  | ORDER BY total\_deaths\_count desc |
|  |  |
|  | -- Countries with highest death toll |
|  | Select Location, MAX(cast(total\_deaths as int)) as total\_deaths\_count |
|  | FROM PortfolioProject..CovidDeaths |
|  | WHERE continent is not null |
|  | GROUP BY Location |
|  | ORDER BY total\_deaths\_count desc |
|  |  |
|  | -- Global percentage death |
|  | SELECT sum(total\_cases) as sum\_of\_cases, sum(cast(total\_deaths as int)) as sum\_of\_deaths, sum(cast(new\_deaths as int))/sum(new\_cases)\*100 as global\_death\_percentage |
|  | FROM PortfolioProject..CovidDeaths |
|  | WHERE continent is not null |
|  |  |
|  |  |
|  | -- Total population vs vaccinations in rolling basis for countries. |
|  | -- Issue encounter: vaccinated people are more than the population, say for Canada  and United States. Could it be it count each dose as one vaccination? |
|  | SELECT deaths.continent, deaths.location, deaths.date, deaths.population, vacc.new\_vaccinations, |
|  | SUM(CAST(vacc.new\_vaccinations as int)) OVER (Partition by deaths.location ORDER BY deaths.location, deaths.date ) AS rolling\_people\_vaccinated |
|  | -- (rolling\_people\_vaccinated/population)\*100 |
|  | FROM PortfolioProject..CovidDeaths deaths |
|  | JOIN PortfolioProject..CovidVaccinations vacc |
|  | ON deaths.location = vacc.location |
|  | AND deaths.date = vacc.date |
|  | WHERE deaths.continent is not null |
|  | ORDER BY Location, date, population |
|  |  |
|  | -- CTE |
|  | WITH popVSvacc (continent, location, date, population, new\_vaccinations, rolling\_people\_vaccinated) |
|  | AS ( |
|  | SELECT deaths.continent, deaths.location, deaths.date, deaths.population, vacc.new\_vaccinations, |
|  | SUM(CAST(vacc.new\_vaccinations as int)) OVER (Partition by deaths.location ORDER BY deaths.location, |
|  | deaths.date ) AS rolling\_people\_vaccinated |
|  | FROM PortfolioProject..CovidDeaths deaths |
|  | JOIN PortfolioProject..CovidVaccinations vacc |
|  | ON deaths.location = vacc.location |
|  | AND deaths.date = vacc.date |
|  | WHERE deaths.continent is not null |
|  | ) |
|  | SELECT \*, (rolling\_people\_vaccinated/population)\*100 as rolling\_vacc\_percentage |
|  | From popVSvacc |
|  |  |
|  |  |
|  | -- Temp Table |
|  | DROP TABLE IF EXISTS #percent\_pop\_vaccinated |
|  | CREATE TABLE #percent\_pop\_vaccinated |
|  | ( |
|  | continent nvarchar(225), |
|  | location nvarchar(225), |
|  | date datetime, |
|  | population numeric, |
|  | new\_vaccinations numeric, |
|  | rolling\_people\_vaccinated numeric |
|  | ) |
|  | INSERT INTO #percent\_pop\_vaccinated |
|  | SELECT deaths.continent, deaths.location, deaths.date, deaths.population, vacc.new\_vaccinations, |
|  | SUM(CAST(vacc.new\_vaccinations as int)) OVER (Partition by deaths.location ORDER BY deaths.location, |
|  | deaths.date ) AS rolling\_people\_vaccinated |
|  | FROM PortfolioProject..CovidDeaths deaths |
|  | JOIN PortfolioProject..CovidVaccinations vacc |
|  | ON deaths.location = vacc.location |
|  | AND deaths.date = vacc.date |
|  | WHERE deaths.continent is not null |
|  | SELECT\*, (rolling\_people\_vaccinated/population)\*100 AS rolling\_vacc\_percentage |
|  | FROM #percent\_pop\_vaccinated |
|  |  |
|  |  |
|  | -- Create View to store data for later visualization |
|  | CREATE VIEW percent\_pop\_vaccinated\_global AS |
|  | SELECT deaths.continent, deaths.location, deaths.date, deaths.population, vacc.new\_vaccinations, |
|  | SUM(CAST(vacc.new\_vaccinations as int)) OVER (Partition by deaths.location ORDER BY deaths.location, |
|  | deaths.date ) AS rolling\_people\_vaccinated |
|  | -- (rolling\_people\_vaccinated/population)\*100 |
|  | FROM PortfolioProject..CovidDeaths deaths |
|  | JOIN PortfolioProject..CovidVaccinations vacc |
|  | ON deaths.location = vacc.location |
|  | AND deaths.date = vacc.date |
|  | WHERE deaths.continent is not null |
|  |  |
|  |  |
|  | SELECT \* |
|  | FROM percent\_pop\_vaccinated\_global |