Covid 19 Data Exploration

Skills used: Joins, CTE's, Temp Tables, Windows Functions, Aggregate Functions, Creating Views, Converting Data Types

*/

Select *

From PortfolioProject..CovidDeaths

Where continent is not null

order by 3,4

-- Select Data that we are going to be starting with

Select Location, date, total_cases, new_cases, total_deaths, population

From PortfolioProject..CovidDeaths

Where continent is not null

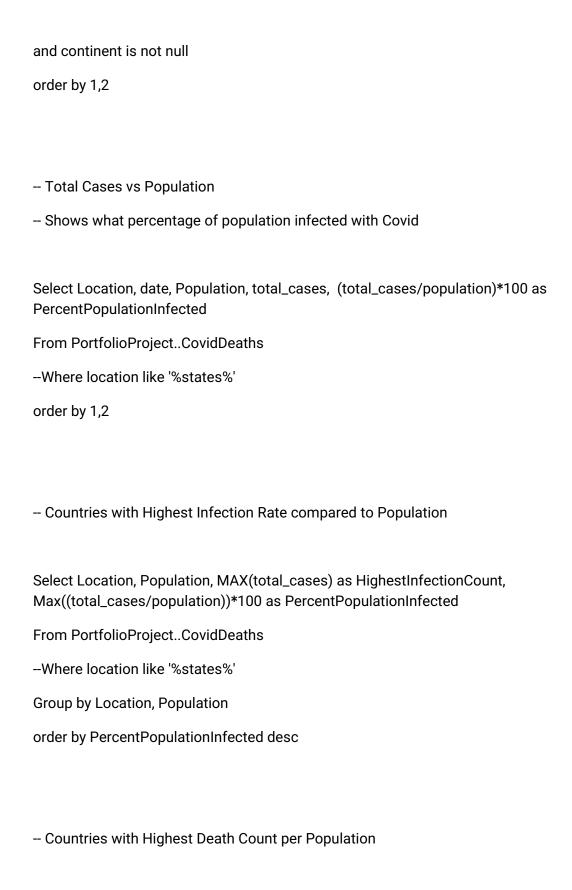
order by 1,2

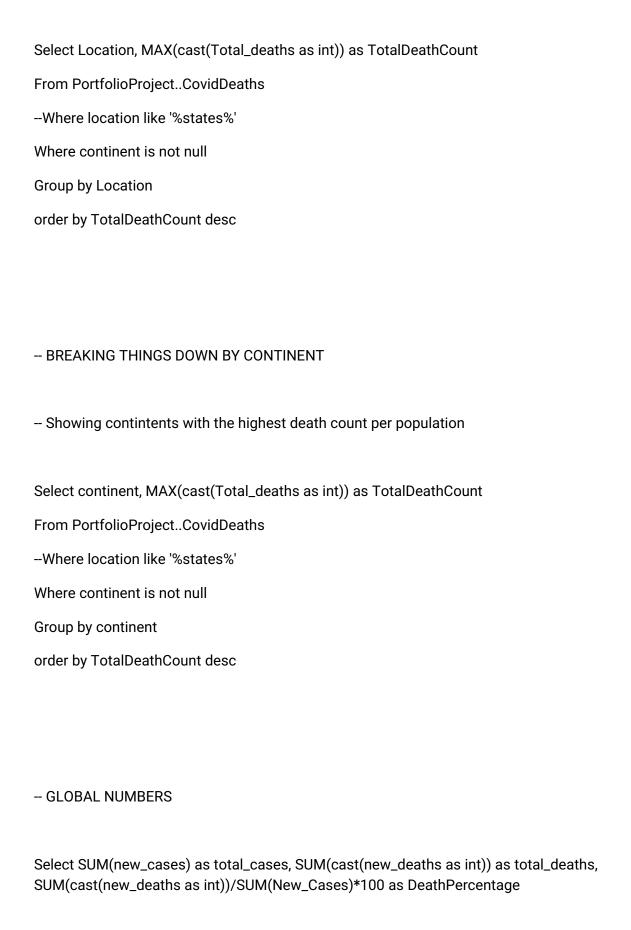
- -- Total Cases vs Total Deaths
- -- Shows likelihood of dying if you contract covid in your country

Select Location, date, total_cases,total_deaths, (total_deaths/total_cases)*100 as DeathPercentage

From PortfolioProject..CovidDeaths

Where location like '%states%'





```
From PortfolioProject..CovidDeaths
--Where location like '%states%'
where continent is not null
--Group By date
order by 1,2
-- Total Population vs Vaccinations
-- Shows Percentage of Population that has recieved at least one Covid Vaccine
Select dea.continent, dea.location, dea.date, dea.population, vac.new_vaccinations
, SUM(CONVERT(int,vac.new_vaccinations)) OVER (Partition by dea.Location Order by
dea.location, dea.Date) as RollingPeopleVaccinated
--, (RollingPeopleVaccinated/population)*100
From PortfolioProject..CovidDeaths dea
Join PortfolioProject..CovidVaccinations vac
       On dea.location = vac.location
       and dea.date = vac.date
where dea.continent is not null
order by 2,3
-- Using CTE to perform Calculation on Partition By in previous query
```

With PopvsVac (Continent, Location, Date, Population, New_Vaccinations,

```
RollingPeopleVaccinated)
as
Select dea.continent, dea.location, dea.date, dea.population, vac.new_vaccinations
, SUM(CONVERT(int,vac.new_vaccinations)) OVER (Partition by dea.Location Order by
dea.location, dea.Date) as RollingPeopleVaccinated
--, (RollingPeopleVaccinated/population)*100
From PortfolioProject..CovidDeaths dea
Join PortfolioProject..CovidVaccinations vac
       On dea.location = vac.location
       and dea.date = vac.date
where dea.continent is not null
--order by 2,3
)
Select *, (RollingPeopleVaccinated/Population)*100
From PopvsVac
-- Using Temp Table to perform Calculation on Partition By in previous query
DROP Table if exists #PercentPopulationVaccinated
Create Table #PercentPopulationVaccinated
Continent nvarchar(255),
Location nvarchar(255),
```

```
Date datetime.
Population numeric,
New_vaccinations numeric,
RollingPeopleVaccinated numeric
)
Insert into #PercentPopulationVaccinated
Select dea.continent, dea.location, dea.date, dea.population, vac.new_vaccinations
, SUM(CONVERT(int,vac.new_vaccinations)) OVER (Partition by dea.Location Order by
dea.location, dea.Date) as RollingPeopleVaccinated
--, (RollingPeopleVaccinated/population)*100
From PortfolioProject..CovidDeaths dea
Join PortfolioProject..CovidVaccinations vac
       On dea.location = vac.location
       and dea.date = vac.date
--where dea.continent is not null
-order by 2,3
Select *, (RollingPeopleVaccinated/Population)*100
From #PercentPopulationVaccinated
```

-- Creating View to store data for later visualizations

Create View PercentPopulationVaccinated as

Select dea.continent, dea.location, dea.date, dea.population, vac.new_vaccinations

, SUM(CONVERT(int,vac.new_vaccinations)) OVER (Partition by dea.Location Order by dea.location, dea.Date) as RollingPeopleVaccinated

--, (RollingPeopleVaccinated/population)*100

From PortfolioProject..CovidDeaths dea

Join PortfolioProject..CovidVaccinations vac

On dea.location = vac.location

and dea.date = vac.date

where dea.continent is not null