use SQLDataExploration;

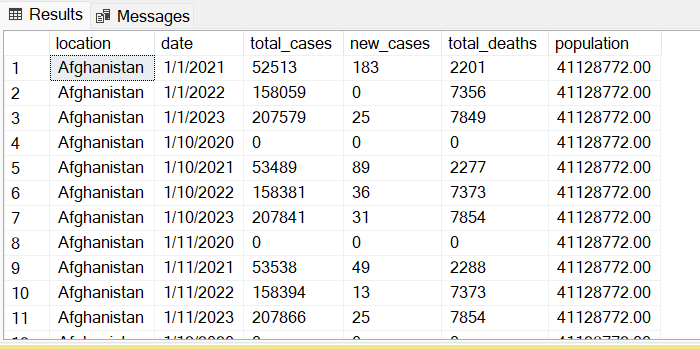
Select \* from CovidDeaths

WHERE continent IS NOT NULL;



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

from CovidDeaths order by 1,2;



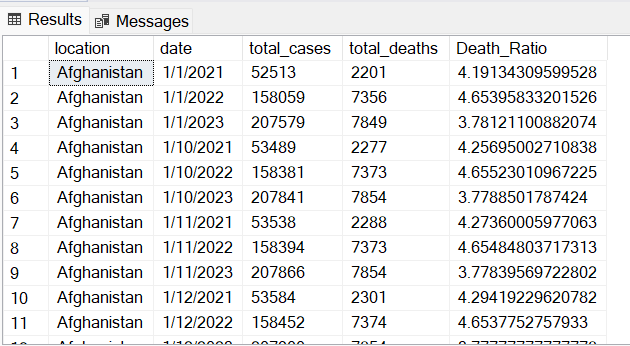
--Death Ratio

select location, date, total\_cases, total\_deaths, (total\_deaths/total\_cases)\*100 as Death\_Ratio

from CovidDeaths

where total\_cases != 0

order by 1,2;



--Death Ratio for India

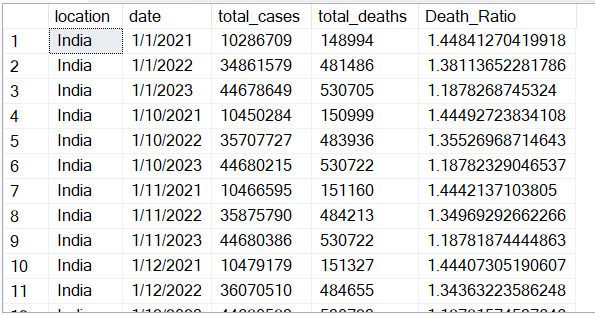
select location, date, total\_cases, total\_deaths, (total\_deaths/total\_cases)\*100 as Death\_Ratio

from CovidDeaths

where total\_cases != 0

and location like '%India%'

order by 1,2;



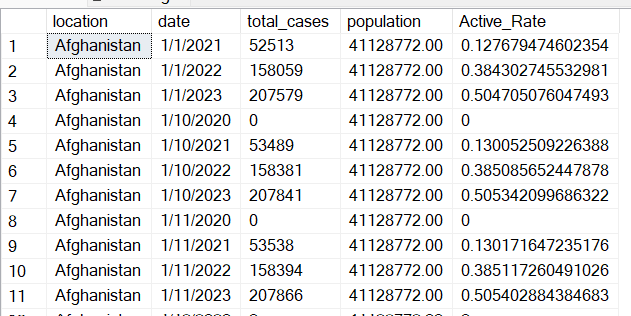
--Cases per population date wise

select location, date, total\_cases, population, (total\_cases/population)\*100 as Active\_Rate

from CovidDeaths

WHERE continent IS NOT NULL

order by 1,2;

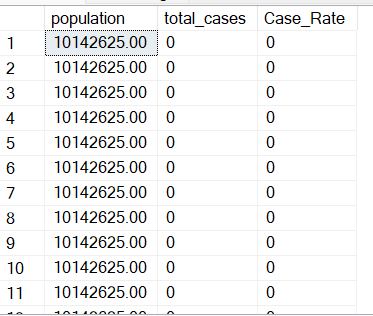


select population, total\_cases, (total\_cases/population)\*100 as Case\_Rate

from CovidDeaths

WHERE continent IS NOT NULL

order by 1,2;



--Infection Rate of each country

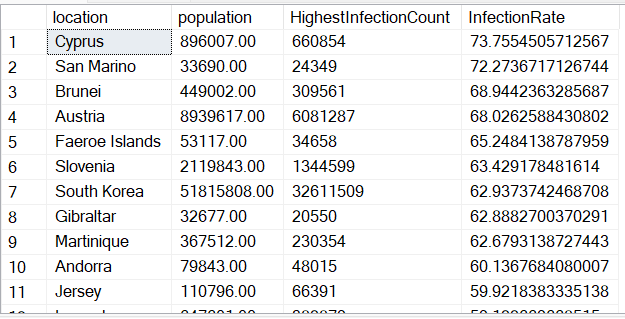
select location, population, MAX(total\_cases) as HighestInfectionCount, MAX(total\_cases/population)\*100 as InfectionRate

from CovidDeaths

WHERE continent IS NOT NULL

Group by location, population

order by InfectionRate desc;



--Death count of each country

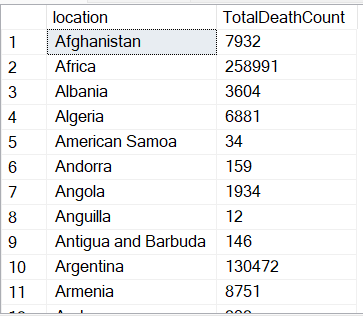
select location, MAX(CAST(total\_deaths as int)) as TotalDeathCount

from CovidDeaths

WHERE continent IS NOT NULL

Group by location, population

order by 1;



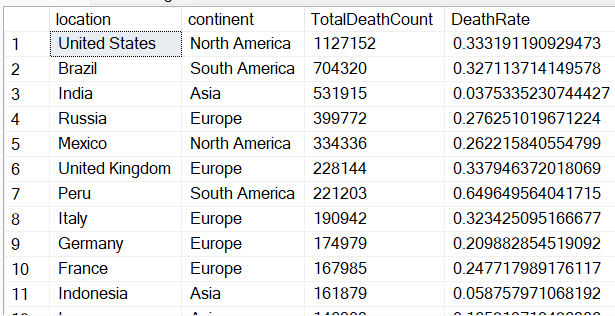
select location,continent, max(CAST(total\_deaths as int)) as TotalDeathCount, MAX(total\_deaths/population)\*100 as DeathRate

from CovidDeaths

WHERE continent != ''

Group by location, continent

order by TotalDeathCount desc;



--Death count by continent

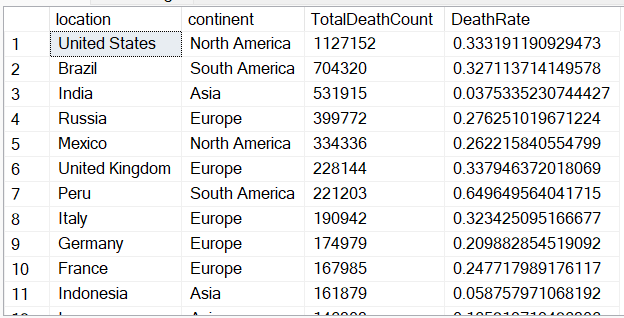
select continent, max(cast(total\_deaths as int)) as TotalDeathCount

from CovidDeaths

where continent != '' and continent not in ('High%', 'Upper%', 'Lower%')

Group by continent

order by TotalDeathCount desc;



--Global Numbers

select date, SUM(total\_cases) as PerDayCases, SUM(cast(new\_deaths as float)) as NewDeaths, SUM(cast(new\_deaths as float))\*100/SUM(new\_cases) as NewDeathPercentage

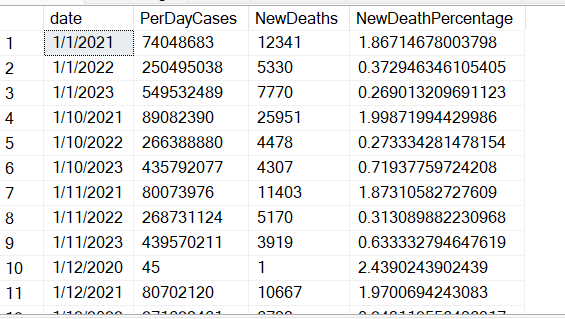
--,total\_deaths,(total\_deaths), (total\_deaths/total\_cases)\*100 as DeathPercent

from CovidDeaths

where continent != '' and new\_cases != 0

Group by date

order by 1,2;



-- Total Deaths and Cases

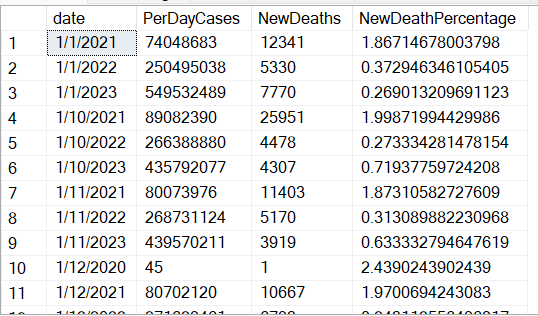
select SUM(new\_cases) as Total\_Cases, SUM(cast(new\_deaths as float)) as NewDeaths, SUM(cast(new\_deaths as float))/SUM(new\_cases)\*100 as NewDeathPercentage

--,total\_deaths,(total\_deaths), (total\_deaths/total\_cases)\*100 as DeathPercent

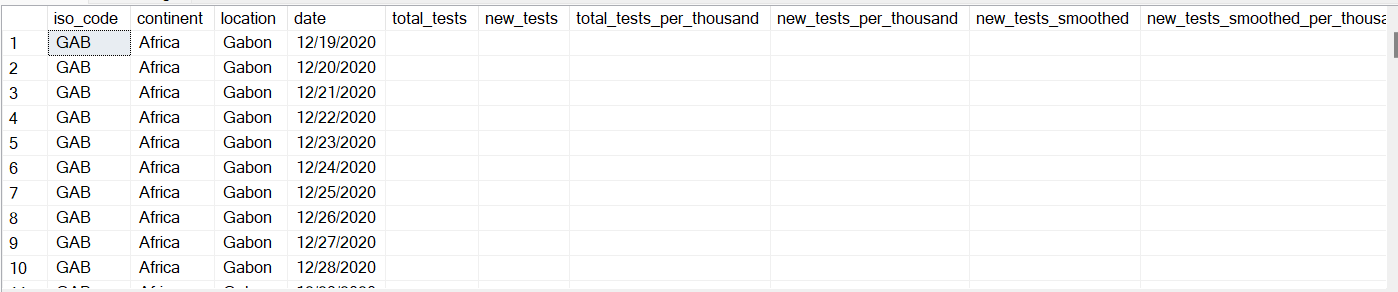
from CovidDeaths

where continent != '' and new\_cases != 0

order by 1,2;



select \* from CovidVccinations;



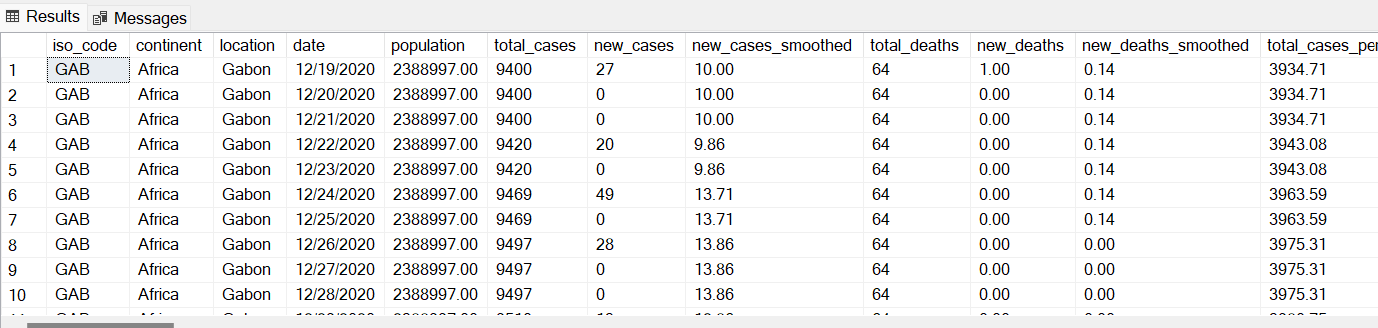
--Joining Tables on date and location

select \* from CovidDeaths D

join CovidVccinations V

on d.location = v.location

and d.date = v.date;



-- Total population vs Vaccinations

Select d.continent , d.location , d.date, d.population, v.new\_vaccinations

from CovidDeaths D

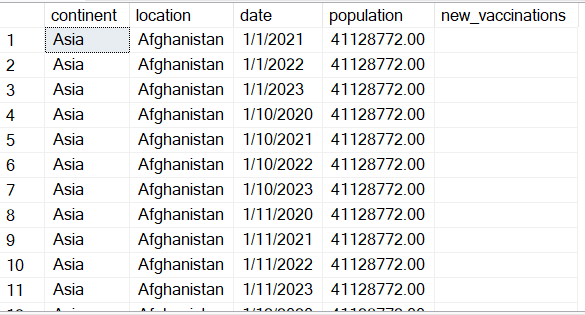
join CovidVccinations V

on d.date = v.date

and d.location = v.location

where d.continent != ''

order by 2,3;



select d.continent, d.location, d.date, d.population, v.new\_vaccinations,

Sum(cast(v.new\_vaccinations as float)) over (partition by d.location order by d.location, d.date) as RollingPeopleVaccinated

from CovidDeaths D

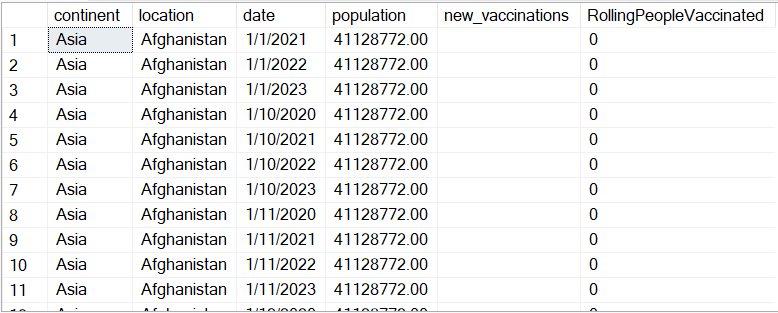
join CovidVccinations V

on d.location = v.location

and d.date = v.date

where d.continent != ''

order by 2,3;



--USE CTE

WITH PopvsVac (Continent, location,date, population, New\_Vaccinations, RollingPeopleVaccinated)

as

(

Select d.continent, d.location, d.date, d.population, v.new\_vaccinations,

Sum(cast(v.new\_vaccinations as float)) over (partition by d.location order by d.location, d.date) as RollingPeopleVaccinated

from CovidDeaths D

join CovidVccinations V

on d.location = v.location

and d.date = v.date

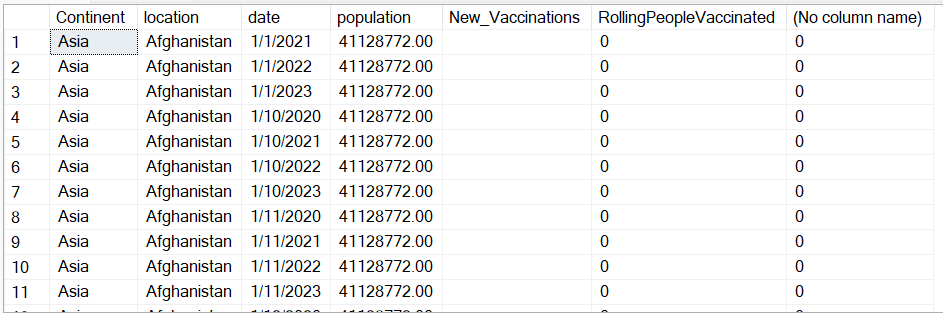
where d.continent != ''

--order by 2,3

)

select \*,(RollingPeopleVaccinated/population)\*100

from PopvsVac;



--Temp Table

Drop table if exists #PercentPopulationVaccinated

Create Table #PercentPopulationVaccinated

(Continet nvarchar(255),

Location nvarchar(255),

Date datetime,

Population float,

New\_Vaccinations float,

RollingPeopleVaccinated float

)

insert into #PercentPopulationVaccinated

Select d.continent, d.location, d.date, d.population, v.new\_vaccinations,

Sum(cast(v.new\_vaccinations as float)) over (partition by d.location order by d.location, d.date) as RollingPeopleVaccinated

from CovidDeaths D

join CovidVccinations V

on d.location = v.location

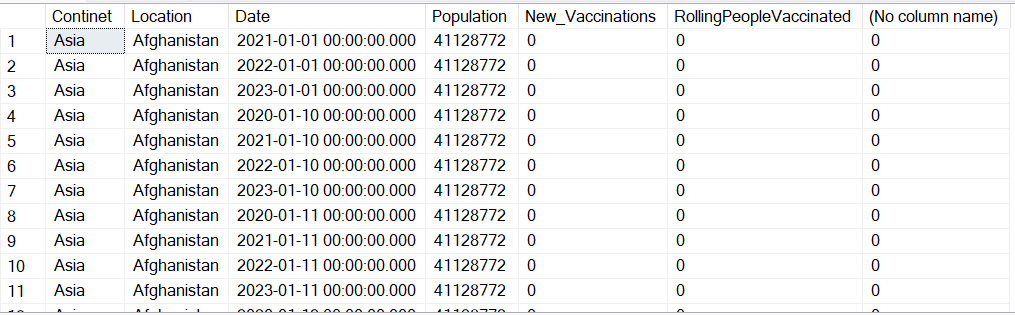
and d.date = v.date

where d.continent != ''

--order by 2,3

select \*, (RollingPeopleVaccinated/population)\*100

from #PercentPopulationVaccinated



--Creating view to store data for visualization

Create view PercentPeopleVaccinated as

Select d.continent, d.location, d.date, d.population, v.new\_vaccinations,

Sum(cast(v.new\_vaccinations as float)) over (partition by d.location order by d.location, d.date) as RollingPeopleVaccinated

from CovidDeaths D

join CovidVccinations V

on d.location = v.location

and d.date = v.date

where d.continent != ''

--order by 2,3

select \* from PercentPeopleVaccinated

