Covid SQL Data Analysis

India COVID Situation

1. Total Deaths till 2024 in India Due to Covid

```
select location,SUM(cast(total_deaths as bigint)) AS Total_deaths
from coviddeaths
where location = 'India'
group by location;
```

	location	Total_deaths
1	India	547014827

2. Total % Loss of Population in India

```
select location,
       CAST(SUM(CAST(total_deaths as bigint))*100.00/SUM(CAST(population as bigint)) AS decimal
       (10,4)) AS PCT_Loss
from coviddeaths
where location = 'India'
group by location;
```

	location	PCT_Loss
1	India	0.0255

3. Total Percentage Infected in India

```
select location,
       CAST(sum(cast(total_cases as bigint))*100.00/SUM(population) as decimal (10,2)) as
PCT_Infected
from coviddeaths
where location = 'India'
group by location
```

	location	PCT_Infected
1	India	2.07

4. Total Cases, Total Deaths & Death Percentage against cases in India yearly

```
select year(date) as Year,
       location,
       sum(population) as Total_Population,
       sum(cast(total_cases as bigint)) As Total_Cases,
       sum(cast(total_deaths as bigint)) as Total_Deaths,
       cast(sum(cast(total_deaths as bigint))*100.00/sum(cast(total_cases as bigint)) AS
       DECIMAL(10,2))AS DeathPercentage
from coviddeaths
where location = 'India'
group by year(date), location
order by year(date) desc;order by year(date) desc;
```

	Year	location	Total_Population	Total_Cases	Total_Deaths	DeathPercentage
1	2024	India	82196040960	2206101148	26137845	1.18
2	2023	India	517268188800	16389526791	194117430	1.18
3	2022	India	517268188800	15754923052	190088017	1.21
4	2021	India	517268188800	9118579303	120086370	1.32
5	2020	India	513016669440	1044159443	16585165	1.59

5. Percentage Loss of Life in India by World

```
select 'India' as location,
       (select SUM(population) from coviddeaths where location = 'India') as Total_India_Deaths,
       (select SUM(population) from coviddeaths where location = 'World') as Total_world_Deaths,
       cast((select SUM(population) from coviddeaths where location = 'India')*100.00/
            (select SUM(population) from coviddeaths where location = 'world') as decimal (10,2)) as
Percentage_Deaths_In_India;
```

	location	Total_India_Deaths	Total_world_Deaths	Percentage_Deaths_In_India
1	India	2147017276800	12082284111360	17.77

6. Infection rate against Population over the Year in India

```
select location,
              year(date) as Year,
              population,
              sum(cast(total_cases as bigint)) as Total_Cases,
              CAST(sum(cast(total_cases as bigint))*100.00/SUM(population) as decimal (10,2)) as
              Infection_Rate
from coviddeaths
where location = 'India'
group by location, population, year(date);
```

	location	Year	population	Total_Cases	Infection_Rate
1	India	2024	1417173120	2206101148	2.68
2	India	2020	1417173120	1044159443	0.20
3	India	2021	1417173120	9118579303	1.76
4	India	2022	1417173120	15754923052	3.05
5	India	2023	1417173120	16389526791	3.17

WORLD COVID Situation

1. Total Deaths in World during Covid

```
select sum(total_deaths) AS Total_Deaths
from coviddeaths
where continent is not null;
```

	Total_Deaths
1	6825958399

2.Looking at the Highest Infection Rate compared to population

```
select location, population,
       Max(total_cases) as Highest_Infection_Count, Max((total_cases*100.0/population)) as
       PCT_POP_INFC
from coviddeaths
Group by location,population
order by PCT_POP_INFC DESC;
```

	location	population	Highest_Infection_Count	PCT_POP_INFC
1	Brunei	449002	343199	76.435962423329962895488
2	Cyprus	896007	681110	76.016147195278608314443
3	San Marino	33690	25292	75.072721875927574948055
4	Austria	8939617	6081287	68.026258843080190124476
5	South Korea	51815808	34571873	66.720706159788148049336
6	Faeroe Islands	53117	34658	65.248413878795865730368
7	Slovenia	2119843	1355698	63.952754991761182313973
8	Gibraltar	32677	20550	62.888270037029103038834
9	Martinique	367512	230354	62.679313872744291342867
10	Luxembourg	647601	391093	60.391043250396463254380
11	Andorra	79843	48015	60.136768408000701376451
12	Jersey	110796	66391	59.921838333513845265172
13	Denmark	5882259	3434162	58.381686355531097831632

soon on

3.Showing the Top 10 Highest Death Count Per Population

```
select top 10 location, Max(total_deaths) as Total_Death_Count
from coviddeaths
where continent is not null
Group by location
Order by Total_Death_Count desc;
```

	location	Total_Death_Count
1	United States	1174676
2	Brazil	702116
3	India	533472
4	Russia	402097
5	Mexico	334958
6	United Kingdom	232112
7	Peru	221583
8	Italy	196495
9	Germany	174979
10	France	167985

4. Total Death in Each Continent

```
select location, Max(total_deaths) as Total_Death_Count
from coviddeaths
where continent is null
group by location
order by Total_Death_Count Desc;
```

	location	Total_Death_Count
1	Europe	2098323
2	North America	1651943
3	Asia	1636648
4	South America	1353468
5	European Union	1259953
6	Africa	259084
7	Oceania	31911

5. Looking at Total Population Vs vaccination

```
SELECT  dea.continent, dea.location, dea.date, dea.population,vac.new_vaccinations,
sum(new_vaccinations) over (Partition by dea.location order by dea.location, dea.Date) as RPV
FROM Protfoliodb..coviddeaths dea
join Protfoliodb..covidvacs vac
on dea.location=vac.location and
       dea.date= vac.date
where dea.continent is not null
order by vac.new_vaccinations desc;
```

USE CTE

```
with popvsvac (Continent, Location, Date, Population, New_Vaccination, RPV)
as
(
SELECT  dea.continent, dea.location, dea.date, dea.population,vac.new_vaccinations,
sum(new_vaccinations) over (Partition by dea.location order by dea.location, dea.Date) as RPV
FROM Protfoliodb..coviddeaths dea
join Protfoliodb..covidvacs vac
on dea.location=vac.location and
       dea.date= vac.date
where dea.continent is not null
)

select * , (RPV*100.0/Population)
from popvsvac;
```

Temp Table

```
Drop TABLE IF Exists PCTPOPVAC
create table PCTPOPVAC
(
Continent nvarchar(225),
Location nvarchar(225),
Date datetime,
Population bigint,
New_Vaccination numeric,
RPV numeric
)

insert into PCTPOPVAC
SELECT  dea.continent, dea.location, dea.date, dea.population,vac.new_vaccinations,
sum(new_vaccinations) over (Partition by dea.location order by dea.location, dea.Date) as RPV
FROM Protfoliodb..coviddeaths dea
join Protfoliodb..covidvacs vac
on dea.location=vac.location and
       dea.date= vac.date
-- where dea.continent is not null

select * , (RPV*100.0/Population)
from PCTPOPVAC;
```

creating view

```
create view PCTPOPVAC1 as
SELECT  dea.continent, dea.location, dea.date, dea.population,vac.new_vaccinations,
sum(new_vaccinations) over (Partition by dea.location order by dea.location, dea.Date) as RPV
FROM Protfoliodb..coviddeaths dea
join Protfoliodb..covidvacs vac
on dea.location=vac.location and
       dea.date= vac.date
where dea.continent is not null

select * from PCTPOPVAC1;
```