

# COVID – 19 PROJECT

## Exploring the data ?

```
select *  
from covid.deaths  
limit 5;
```

```
select *  
from covid.vaccinations  
limit 5;
```

## Selecting the data required for our analysis ?

```
select continent  
, location  
, date  
, population  
, total_cases, new_cases  
, total_deaths  
from covid.deaths  
order by 2;
```

## Number of cases in each location ?

```
select location  
, max(total_cases) as no_of_cases  
from covid.deaths  
where location = 'india'(can refer required location)  
group by location  
order by no_of_cases desc;
```

## Number of cases in each continent ?

```
select continent  
, sum( total_cases_by_loc) as total_cases_by_continent  
from  
(  
select continent  
, location  
, max(total_cases) as total_cases_by_loc  
from covid.deaths  
group by location, continent  
) as temp  
where continent like 'a__a'  
group by continent  
order by total_cases_by_continent desc;
```

# COVID – 19 PROJECT

## Number of deaths in each location ?

```
select location
, max(cast(total_deaths as float)) as no_of_deaths
from covid.deaths
where location like 'i%a'
group by location
order by no_of_deaths desc;
```

## Number of deaths in each continent ?

```
select loc.continent as continent
, sum(deaths_by_loc) as no_of_deaths
from (
select continent
,location
,max(cast(total_deaths as float)) as deaths_by_loc
from covid.deaths
group by location
) as loc
where continent = 'asia'
group by continent
order by no_of_deaths desc;
```

## Total cases in the world ?

```
select sum(new_cases) as no_of_cases_in_world
from covid.deaths;
```

## infected death percentage in the world ?

```
select sum(new_cases) as cases
,sum(cast(new_deaths as float)) as deaths
,sum(cast(new_deaths as float))/sum(new_cases)*100 as death_percentage
from covid.deaths;
```

## population infected percentage in each location by date ?

```
select location
,date
,population
,total_cases, (total_cases/population)*100 as infection_percentage
from covid.deaths;
```

## population death percentage in each location by date ?

```
select location
,date
,population
,total_deaths
,(total_deaths/population)*100 as death_percentage
from covid.deaths;
```

# COVID – 19 PROJECT

## death percentage by location ?

```
select location
,sum(new_cases) as cases
,sum(new_deaths) as deaths
,sum(new_deaths)/sum(new_cases)*100 as death_percentage
from covid.deaths
where location = 'India' (can refer required location)
group by location
order by death_percentage desc,location;
```

## population vs vaccinations ?

```
select d.continent
,d.location
,d.date
,d.population
,v.people_vaccinated,
max(cast(v.people_vaccinated as float)) over (partition by d.location) as total_people_vaccinated
from covid.deaths d
inner join covid.vaccinations v
on d.date = v.date and d.location = v.location
order by 2,5 ;
```

## percentage of people vaccinated

### by using Common Table Expression [CTE]

```
with dcte (location, date, population, people_vaccinated, total_people_vaccinated)
as
(
select d.location
, d.date
, d.population
, v.people_vaccinated
,max(cast(v.people_vaccinated as float)) over (partition by d.location) as total_people_vaccinated
from covid.deaths d
inner join covid.vaccinations v
on d.date = v.date and d.location = v.location
)
select *
, total_people_vaccinated/population*100 as 'percent of people vaccinated'
from dcte;
```

# COVID – 19 PROJECT

## by using temp tables

```
drop table if exists temp_table;
create temporary table temp_table
(
location text,
date text,
population text,
people_vaccinated text,
total_people_vaccinated text
);
```

## insert into temp\_table

```
select d.location
, d.date
, d.population
, v.people_vaccinated
,max(cast(v.people_vaccinated as float)) over (partition by d.location) as total_people_vaccinated
from covid.deaths d
inner join covid.vaccinations v
on d.date = v.date and d.location = v.location;
```

```
select *
, total_people_vaccinated/population*100 as 'percentage of people vaccinated'
from temp_table;
```

## creating views

```
create view ppv as
select d.location
, d.date
, d.population
, v.people_vaccinated
,max(cast(v.people_vaccinated as float)) over (partition by d.location) as total_people_vaccinated
from covid.deaths d
inner join covid.vaccinations v
on d.date = v.date and d.location = v.location;
```

## calling view ppv

```
select * from ppv;
```