select \* from time\_series

--Vaccination 1 and Vaccination 2

select State\_Code,(total\_vaccinated1\*100.0/meta\_population) Vaccination1\_percentage,

(total\_vaccinated2\*100.0/meta\_population) Vaccination2\_percentage

from State\_covid19

select \*,sum(Vaccinated1) over (order by date) as Total\_vaccination1,

sum(Vaccinated2) over (order by date) as Total\_vaccination2

from (

select Date,sum(delta\_vaccinated1) as Vaccinated1,sum(delta\_vaccinated2) as Vaccinated2 from time\_series

group by Date) as A

where Vaccinated1 is not null

------- Confirmed Cases wrt time

select CONCAT\_WS('-', DATENAME(month,Date),DATENAME(YEAR,Date)) as Date,

SUM(delta\_confirmed) As Confirmed

from time\_series

group by DATENAME(MONTH,Date),DATENAME(YEAR,Date)

order by MIN(date)

--delta\_deceased

select CONCAT\_WS('-', DATENAME(month,Date),DATENAME(YEAR,Date)) as Date,

SUM(delta\_deceased) As deceased

from time\_series

group by DATENAME(MONTH,Date),DATENAME(YEAR,Date)

order by MIN(date)

--testing

select CONCAT\_WS('-', DATENAME(month,Date),DATENAME(YEAR,Date)) as Date,

SUM(delta\_tested) As Testing

from time\_series

group by DATENAME(MONTH,Date),DATENAME(YEAR,Date)

order by MIN(date)

--Vaccination1

select CONCAT\_WS('-', DATENAME(month,Date),DATENAME(YEAR,Date)) as Date,

SUM(delta\_vaccinated1) As Vaccination1

from time\_series

group by DATENAME(MONTH,Date),DATENAME(YEAR,Date)

order by min(date)

--Vaccination2

select CONCAT\_WS('-', DATENAME(month,Date),DATENAME(YEAR,Date)) as Date,

SUM(delta\_vaccinated2) As Vaccination2

from time\_series

group by DATENAME(MONTH,Date),DATENAME(YEAR,Date)

order by min(date)

select \* from #Vaccination1 as A inner join

#Vaccination2 As B on

A.Date=B.Date

---Recovered Cases wrt to time

select CONCAT\_WS('-', DATENAME(month,Date),DATENAME(YEAR,Date)) as Date,

SUM(delta\_recovered) As Recovered

from time\_series

group by DATENAME(MONTH,Date),DATENAME(YEAR,Date)

order by MIN(date)

select \* into #Categories from (

select District, (total\_tested\*100.0/population) as Percentage\_tesing, case when (total\_tested\*100.0/population) between 0 and 10 then 'Category\_A'

when (total\_tested\*100.0/population) between 10 and 30 then 'Category\_B'

when (total\_tested\*100.0/population) between 30 and 50 then 'Category\_C'

when (total\_tested\*100.0/population) between 50 and 76 then 'Category\_D'

when (total\_tested\*100.0/population) between 76 and 100 then 'Category\_E'

else 'Category\_F'

end As Category

from district1

where total\_tested is not null

) as A

select Category,Count(District)as Number\_of\_states from #Categories

group by Category

Select Category,count(District) as Number\_of\_District,Avg(Percentage\_tesing) as Percentage\_tesing,

Avg(Percentage\_decesed) as Percentage\_decesed from

(select A.District,A.Category,A.Percentage\_tesing,(b.total\_deceased\*100.0/B.Population) as Percentage\_decesed

from #Categories as A inner join district1 as b

on A.District=B.District

) as a

group by Category

-- Deaths vs Confirmed cases

select CONCAT\_WS('-', DATENAME(month,Date),DATENAME(YEAR,Date)) as Date,

Avg(total\_deceased\*100.0/total\_confirmed) As Deceased\_Rate

from time\_series

group by CONCAT\_WS('-', DATENAME(month,Date),DATENAME(YEAR,Date))

order by MIN(Date)

-- Deaths vs Recovered cases

select CONCAT\_WS('-', DATENAME(month,Date),DATENAME(YEAR,Date)) as Date,

Avg(total\_recovered\*100.0/total\_confirmed) As Recovered\_Rate

from time\_series

group by DATENAME(month,Date),DATENAME(YEAR,Date)

order by MIN(Date)

--Confirmed vs tested cases

select CONCAT\_WS('-', DATENAME(month,Date),DATENAME(YEAR,Date)) as Date,

Avg(total\_confirmed\*100.0/total\_tested) As Confirmation\_Rate

from time\_series

group by DATENAME(month,Date),DATENAME(YEAR,Date)

order by MIN(Date)

--Most Deaths per population state\_wise

select State\_Code,round((total\_deceased\*100.0/meta\_population),3) as Deceased\_percentage from State\_covid19

order by Deceased\_percentage desc

-- Vaccinated and Death Rates

select State\_Code,round((total\_vaccinated2\*100.0/meta\_population),3) as Vaccination

,round((total\_deceased\*100.0/meta\_population),3) as Deceased from State\_covid19

order by Vaccination desc

--tested vs deaths

select State\_Code,round((total\_tested\*100.0/meta\_population),3) as tested

,round((total\_deceased\*100.0/meta\_population),3) as Deceased from State\_covid19

where meta\_population > 500000

order by tested desc

--statewise Testing

select State\_Code,cast (round((total\_tested\*1.00/meta\_population),3) as float) as tested

from State\_covid19

where meta\_population > 500000

order by State\_Code asc