```sql
select * from Farm_Analysis

--Q1:which states had the highest production of crops in 2020?

select
state,
crop_Name,
yield_kgPerHec,
season,
production_intonns
FROM
Farm_Analysis
where year='Agriculture Year (Jul - Jun), 2020'
group by state
order by production_intonns DESC
limit 5

--Q2what are the top 5 crops with the highest yield across all years?
select
crop_Name,
yield_kgPerHec
FROM
Farm_Analysis
group by crop_Name
--Q3:How does crop production differ between kharif and rabi seasons across states?
select
Season,
sum(production_intonns)as totalproduction
from
Farm_Analysis
where season='Kharif'or season ='Rabi'
group by Season
order by totalproduction desc

--Q4:which crop category contributes the most to the total productuion?
select
crop_category,
sum(production_intonns) as totalproduction
FROM
Farm_Analysis
group by crop_category
order by totalproduction desc
limit 1

--Q5:what is the average yield of a wheat over the years?

select sum(yield_kgPerHec)/count(distinct year) as Avgtotalyield,
crop_name
FROM
Farm_Analysis
where crop_name='Wheat'
group by crop_name

--....STATE LEVEL ANALYSIS....

--Q6:what is the total area under cultivation for each crop category in each state?

select
state,
crop_category,
sum(Area_in_hectars) as totalarea_inhectars
FROM
```

```sql
Farm_Analysis
group by state,crop_category
order by totalarea_inhectars desc

--Q7:find top 5 states has the most diverse crop production ?
select
state,
count(distinct crop_name) as countofcrops
FROM
crop_prediction
group by state
order by countofcrops DESC
limit 5

--Q8:what is the trend of agricultural production in telangana state over the years?

select
Year,
sum(production_intonns) as totalproduction
FROM
Farm_Analysis
where
state='Telangana'
group by year

--...YEARLY TRENDS...
--Q:9How has the yield of crops changed over the years for a oilseeds and commercial crop category?
select
year,
round(avg(yield_kgPerHec),0) as total_avgyield
FROM
Farm_Analysis
where crop_category='Oilseeds and Commercial Crops'
group by year
order by year asc

--Q10:Identify the top 5 states with the highest yield for  "Groundnut"?
select
state,
round(yield_kgPerHec,0)
FROM
Farm_Analysis
where crop_name='Groundnut'
group by state
order by yield_kgPerHec DESC
limit 5
--
```

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126
127
128
129
130
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