1. List down the top 5 districts that showed the highest document registration revenue growth between FY 2019 and FY 2022?

```
WITH CTE AS
(
SELECT  district,ROUND(1.0*SUM(documents_registered_rev)/10000000,2) Tot_rev
FROM dbo.dim_date$ dm_date
INNER JOIN   dbo.fact_stamps$ ft_stamps
ON  dm_date.month = ft_stamps.month
INNER JOIN dbo.dim_districts$  dm_dist
ON dm_dist.dist_code= ft_stamps.dist_code
GROUP BY district
),


CTE2 AS

(
SELECT  district,ROUND(1.0*SUM(documents_registered_rev)/10000000,2) Tot_rev_till_2021
FROM dbo.dim_date$ dm_date
INNER JOIN   dbo.fact_stamps$ ft_stamps
ON  dm_date.month = ft_stamps.month
INNER JOIN dbo.dim_districts$  dm_dist
ON dm_dist.dist_code= ft_stamps.dist_code
WHERE fiscal_year BETWEEN 2019 AND 2021
GROUP BY district

)


SELECT Top 5 CTE.district,FORMAT(Round((1.0*Tot_rev-Tot_rev_till_2021)/Tot_rev_till_2021,3),'0.0%')  YOY_change FROM
CTE
INNER JOIN   CTE2
ON CTE.district=CTE2.district
ORDER BY YOY_change  DESC
```

	district	YOY_change
1	Mulugu	73.1
2	Medak	64.8
3	Mancherial	63.7
4	Wanaparthy	63.4
5	Rajanna Sircilla	63.2

2. List down the top 5 districts where estamps revenue contributes more to the revenue than documents in year 2022

```
WITH CTE AS
(
SELECT  district,Round((1.0*SUM(documents_registered_rev)/10000000 ),2) Tot_doc_rev_in_cr,
Round((1.0*SUM(estamps_challans_rev)/10000000 ),2)  Tot_estamp_rev_in_cr
FROM dbo.dim_date$ dm_date
INNER JOIN   dbo.fact_stamps$ ft_stamps
ON dm_date.month=ft_stamps.month
INNER JOIN dbo.dim_districts$  dm_dist
ON dm_dist.dist_code= ft_stamps.dist_code
WHERE fiscal_year=2022
GROUP BY district
)

SELECT Top 5 district,Round((Tot_estamp_rev_in_cr-Tot_doc_rev_in_cr),2)Diff_in_cr
FROM CTE
ORDER BY Diff_in_cr Desc
```

	district	Diff_in_cr
1	Rangareddy	65.16
2	Hyderabad	10.83
3	Khammam	3.06
4	Hanumakonda	2.97
5	Yadadri Bhuvanagiri	1.78

3. Is there any alteration of e-stamp challan count and docs registration count pattern since the implementation of e-stamp challan ?

```
WITH CTE AS
(
SELECT fiscal_year,Mmm,Round((1.0*SUM(documents_registered_cnt)/100000),2)Tot_docs_registered_in_lacs,
Round((1.0*Sum(estamps_challans_cnt)/100000),2)Tot_estamps_registered_in_lacs
FROM dbo.dim_date$ dm_date
INNER JOIN   dbo.fact_stamps$ ft_stamps
ON dm_date.month=ft_stamps.month
INNER JOIN dbo.dim_districts$  dm_dist
ON dm_dist.dist_code= ft_stamps.dist_code

GROUP BY fiscal_year,Mmm

)

SELECT fiscal_year,Mmm,Tot_docs_registered_in_lacs,Tot_estamps_registered_in_lacs,
ROUND((Tot_estamps_registered_in_lacs-Tot_docs_registered_in_lacs),2)diff_in_lacs
FROM CTE
WHERE Tot_estamps_registered_in_lacs >0
ORDER BY fiscal_year,
CASE
      WHEN Mmm = 'Jan' THEN 10
      WHEN Mmm = 'Feb' THEN 11
      WHEN Mmm = 'Mar' THEN 12
      WHEN Mmm = 'Apr' THEN 1
      WHEN Mmm = 'May' THEN 2
      WHEN Mmm = 'Jun' THEN 3
      WHEN Mmm = 'Jul' THEN 4
      WHEN Mmm = 'Aug' THEN 5
      WHEN Mmm = 'Sep' THEN 6
```

```
WHEN Mmm = 'Oct' THEN 7
WHEN Mmm= 'Nov' THEN  8
WHEN Mmm = 'Dec' THEN 9
END
```

	fiscal_year	Mmm	Tot_docs_registered_in_lacs	Tot_estamps_registered_in_lacs	diff_in_lacs
1	2020	Dec	0.47	0.54	0.07
2	2020	Jan	1.48	1.53	0.05
3	2020	Feb	1.37	1.4	0.03
4	2020	Mar	1.43	1.49	0.06
5	2021	Apr	1.07	1.11	0.04
6	2021	May	0.28	0.27	-0.01
7	2021	Jun	0.94	1.06	0.12
8	2021	Jul	1.24	1.34	0.1
9	2021	Aug	0.96	1.02	0.06
10	2021	Oct	0.96	1	0.04
11	2021	Nov	0.96	1.01	0.05
12	2021	Dec	1.18	1.22	0.04
13	2021	Jan	1.24	1.4	0.16
14	2021	Feb	1.01	1.01	0
15	2021	Mar	1.21	1.28	0.07
16	2022	Apr	1.06	1.1	0.04
17	2022	May	1.05	1.1	0.05
18	2022	Jun	1.02	1.06	0.04
19	2022	Jul	0.96	0.99	0.03
20	2022	Aug	0.92	0.97	0.05
21	2022	Sep	0.98	1.02	0.04
22	2022	Oct	0.83	0.87	0.04
23	2022	Nov	1.01	1.06	0.05
24	2022	Dec	1.1	1.12	0.02
25	2022	Jan	0.96	1.03	0.07
26	2022	Feb	1.02	1.04	0.02
27	2022	Mar	1.16	1.21	0.05

4. Categorize districts into three segments based on their stamp registration revenue generation during the year 2021 to 2022.

Large-sized cities

```
WITH CTE AS
(
SELECT  district,Round((1.0*SUM(estamps_challans_rev)/10000000 ),2)  Tot_estamp_rev_in_cr
FROM dbo.dim_date$ dm_date
INNER JOIN   dbo.fact_stamps$ ft_stamps
ON dm_date.month=ft_stamps.month
INNER JOIN dbo.dim_districts$  dm_dist
ON dm_dist.dist_code= ft_stamps.dist_code
WHERE fiscal_year BETWEEN  2021  AND 2022
GROUP BY district

)

SELECT  district,Tot_estamp_rev_in_cr  FROM CTE
WHERE Tot_estamp_rev_in_cr >1000
ORDER BY Tot_estamp_rev_in_cr  DESC;
```

	district	Tot_estamp_rev_in_cr
1	Rangareddy	7068.23
2	Medchal_Malkajgiri	4234.41
3	Hyderabad	2526.8
4	Sangareddy	1478.2

Medium-sized cities

```
WITH CTE AS

(
SELECT  district,Round((1.0*SUM(estamps_challans_rev)/10000000 ),2)  Tot_estamp_rev_in_cr
FROM dbo.dim_date$ dm_date
INNER JOIN   dbo.fact_stamps$ ft_stamps
ON dm_date.month=ft_stamps.month
INNER JOIN dbo.dim_districts$  dm_dist
ON dm_dist.dist_code= ft_stamps.dist_code
WHERE fiscal_year BETWEEN  2021  AND 2022
GROUP BY district
)



SELECT  district,Tot_estamp_rev_in_cr  FROM CTE
WHERE Tot_estamp_rev_in_cr BETWEEN 100 AND 1000
ORDER BY Tot_estamp_rev_in_cr  DESC
```

	district	Tot_estamp_rev_in_cr
1	Hanumakonda	495.97
2	Yadadri Bhuvanagiri	380.19
3	Khammam	364.68
4	Karimnagar	263.4
5	Nizamabad	261.47
6	Nalgonda	260.01
7	Mahabubnagar	198.14
8	Suryapet	181.81
9	Siddipet	176.29
10	Medak	114.61
11	Peddapalli	112.67
12	Mancherial	110.6
13	Jagtial	107.93

Small -sized cities

```
WITH CTE AS
(
SELECT  district,Round((1.0*SUM(estamps_challans_rev)/10000000 ),2)  Tot_estamp_rev_in_cr
FROM dbo.dim_date$ dm_date
INNER JOIN   dbo.fact_stamps$ ft_stamps
ON dm_date.month=ft_stamps.month
INNER JOIN dbo.dim_districts$  dm_dist
ON dm_dist.dist_code= ft_stamps.dist_code
WHERE fiscal_year BETWEEN  2021  AND 2022
GROUP BY district

)

SELECT  district,Tot_estamp_rev_in_cr  FROM CTE
WHERE Tot_estamp_rev_in_cr < 100
ORDER BY Tot_estamp_rev_in_cr  DESC
```

	district	Tot_estamp_rev_in_cr
1	Vikarabad	90.62
2	Nagarkurnool	88.16
3	Kamareddy	85.97
4	Rajanna Sircilla	75.02
5	Jangoan	74.74
6	Wanaparthy	74.63
7	Adilabad	72.3
8	Mahabubabad	66.66
9	Nirmal	63.96
10	Jogulamba Gadwal	60.4
11	Bhadradri Kothagudem	54.07
12	Narayanpet	46.85
13	Warangal	42.48
14	Mulugu	36.93
15	Kumurambheem Asifabad	13.34

5. Investigate whether there is any correlation between vehicle sales and specific months or seasons in different districts.
Are there any months or seasons that consistently show higher or lower sales rate, and if yes, what could be the driving factors? (Consider Fuel-Type category only)

```
 WITH CTE AS
(
SELECT district, Mmm, Round( (SUM(fuel_type_petrol)/100000),3)+Round((SUM(fuel_type_diesel)/100000),3)
+Round( (SUM(fuel_type_electric)/100000),3)+Round( (SUM(fuel_type_others)/100000),3) Tot_sales,
Dense_Rank() OVER( PARTITION BY district ORDER BY Round(
(SUM(fuel_type_petrol)/100000),3)+Round((SUM(fuel_type_diesel)/100000),3)
+Round( (SUM(fuel_type_electric)/100000),3)+Round( (SUM(fuel_type_others)/100000),3)DESC
)Rnk
FROM  dbo.dim_date$ dt
INNER JOIN   dbo.fact_transport$  tr
ON dt.month=tr.month
INNER JOIN   dbo.dim_districts$  dis
ON tr.dist_code=dis.dist_code
GROUP BY district,Mmm
)

 SELECT  district ,Mmm,Tot_sales
FROM CTE
WHERE Rnk=1
ORDER BY district,Tot_sales DESC
```

	district	Mmm	Tot_sales
1	Adilabad	Oct	0.098
2	Bhadradri Kothagudem	Oct	0.171
3	Hyderabad	Oct	1.247
4	Jagtial	Oct	0.147
5	Jangoan	Oct	0.075
6	Jayashankar Bhupalpally	Jun	0.093
7	Jogulamba Gadwal	Oct	0.088
8	Kamareddy	Oct	0.145
9	Karimnagar	Oct	0.187
10	Khammam	Oct	0.251
11	Kumurambheem Asifabad	Oct	0.055
12	Mahabubabad	Jun	0.11
13	Mahabubnagar	Oct	0.199
14	Mancherial	Oct	0.106
15	Medak	Jun	0.101
16	Medchal_Malkajgiri	Oct	1.106
17	Nagarkurnool	Oct	0.114
18	Nalgonda	Oct	0.284
19	Nirmal	Oct	0.111
20	Nizamabad	Oct	0.289
21	Peddapalli	Oct	0.104
22	Rajanna Sircilla	Oct	0.094
23	Rangareddy	Oct	1.022
24	Sangareddy	Oct	0.298
25	Siddipet	Jun	0.153
26	Suryapet	Oct	0.203
27	Vikarabad	Oct	0.186
28	Wanaparthy	Oct	0.092
29	Warangal	Oct	0.256
30	Yadadri Bhuvanagiri	Oct	0.129

6. How does the distribution of vehicles vary by vehicle class (MotorCycle,MotorCar,AutoRickshaw, Agriculture) across different districts?

```
SELECT Round((1.0*Sum(vehicleClass_MotorCycle))/
(SUM(vehicleClass_MotorCycle)+Sum(vehicleClass_MotorCar)+Sum(vehicleClass_AutoRickshaw)+
Sum(vehicleClass_Agriculture)),2)Motorcycle ,Round((1.0*Sum(vehicleClass_MotorCar))/
(SUM(vehicleClass_MotorCycle)+Sum(vehicleClass_MotorCar)
+Sum(vehicleClass_AutoRickshaw)+Sum(vehicleClass_Agriculture)),2)Motorcar,Round((1.0*Sum(vehicleClass_AutoRickshaw)
)/ (SUM(vehicleClass_MotorCycle)
+Sum(vehicleClass_MotorCar)+Sum(vehicleClass_AutoRickshaw)+Sum(vehicleClass_Agriculture)),2)AutoRickshaw,Round((1.
0*Sum(vehicleClass_Agriculture))/
(SUM(vehicleClass_MotorCycle)+Sum(vehicleClass_MotorCar)+Sum(vehicleClass_AutoRickshaw)+Sum(vehicleClass_Agricult
ure)),2)Agriculture
FROM  dbo.fact_transport$ tr
```

	Motorcycle	Motorcar	AutoRickshaw	Agriculture
1	0.78	0.17	0.02	0.03

Are there any districts with a predominant preference for a specific vehicle class? Consider FY 2022 for analysis.

```
SELECT Top 1 district,Format(Round(1.0*Sum(vehicleClass_MotorCycle)/100000,2),'#,0.00L')Motorcycle_sales  FROM
dbo.fact_transport$ tr
INNER JOIN dbo.dim_districts$ dist
ON tr.dist_code=dist.dist_code
INNER JOIN dbo.dim_date$ dt
ON tr.month=dt.month
WHERE fiscal_year=2022
GROUP BY district
ORDER BY Motorcycle_sales DESC
```

	district	Motorcycle_sales
1	Hyderabad	2.07L

```
SELECT Top 1 district,Format(Round(1.0*Sum(vehicleClass_MotorCar)/1000,2),'#,0.00K') Motorcar_sales  FROM
dbo.fact_transport$ tr
INNER JOIN dbo.dim_districts$ dist
ON tr.dist_code=dist.dist_code
INNER JOIN dbo.dim_date$ dt
ON tr.month=dt.month
WHERE fiscal_year=2022
GROUP BY district
ORDER BY Motorcar_sales DESC
```

	district	Motorcar_sales
1	Rangareddy	71.83K

```
SELECT Top 1 district,Format(Round(1.0*Sum(vehicleClass_AutoRickshaw)/1000,2),'#,0.00K') Autorickshaw_sales  FROM
dbo.fact_transport$ tr
INNER JOIN dbo.dim_districts$ dist
ON tr.dist_code=dist.dist_code
INNER JOIN dbo.dim_date$ dt
ON tr.month=dt.month
WHERE fiscal_year=2022
GROUP BY district
ORDER BY Autorickshaw_sales DESC
```

	district	Autorickshaw_sales
1	Hyderabad	8.40K

```
SELECT Top 1 district,Format(Round(1.0*Sum(vehicleClass_Agriculture)/1000,2),'#,0.00K') Agriculture_sales  FROM
dbo.fact_transport$ tr
INNER JOIN dbo.dim_districts$ dist
ON tr.dist_code=dist.dist_code
INNER JOIN dbo.dim_date$ dt
ON tr.month=dt.month
WHERE fiscal_year=2022
GROUP BY district
ORDER BY Agriculture_sales DESC
```

	district	Agriculture_sales
1	Nalgonda	2.60K

7. List down the top 3 and bottom 3 districts that have shown the highest and lowest vehicle sales growth during FY 2022 compared to FY 2021?
(Consider and compare categories: Petrol, Diesel and Electric)

Top_ 3 _district_petrol

```
WITH prev_sales AS
(
SELECT district,Sum(fuel_type_petrol)Prev_sales FROM  dbo.dim_date$ dt
INNER JOIN  dbo.fact_transport$   tr
ON dt.month=tr.month
INNER JOIN dbo.dim_districts$ dist
ON tr.dist_code=dist.dist_code
WHERE fiscal_year=2021
GROUP BY district
),

 Current_sales AS
(
SELECT district,Sum(fuel_type_petrol)Current_sales FROM  dbo.dim_date$ dt
INNER JOIN  dbo.fact_transport$   tr
ON dt.month=tr.month
INNER JOIN dbo.dim_districts$ dist
ON tr.dist_code=dist.dist_code
WHERE fiscal_year=2022
GROUP BY district
)

 SELECT Top 3  pv.district,Round((1.0*cu.Current_sales-pv.Prev_sales)/Prev_sales ,4)*100 sales_growth FROM Prev_sales
pv
INNER JOIN  Current_sales cu
ON  pv.district=cu.district
ORDER BY sales_growth  DESC
```

	district	sales_growth
1	Rangareddy	8.73
2	Hyderabad	1.03
3	Medchal_Malkajgiri	-0.9

Bottom_3_district_petrol

```
WITH prev_sales AS
(
SELECT district,  Sum(fuel_type_petrol)Prev_sales FROM  dbo.dim_date$ dt
INNER JOIN  dbo.fact_transport$   tr
ON dt.month=tr.month
INNER JOIN dbo.dim_districts$ dist
ON tr.dist_code=dist.dist_code
WHERE fiscal_year=2021
GROUP BY district
),

 Current_sales AS
(
SELECT district,Sum(fuel_type_petrol)Current_sales FROM  dbo.dim_date$ dt
INNER JOIN  dbo.fact_transport$   tr
ON dt.month=tr.month
INNER JOIN dbo.dim_districts$ dist
ON tr.dist_code=dist.dist_code
WHERE fiscal_year=2022
GROUP BY district
)


SELECT  pv.district,Round((1.0*( Current_sales-Prev_sales)/Prev_sales),4)*100 sales_growth FROM Prev_sales pv
INNER JOIN  Current_sales cu
ON  pv.district=cu.district
ORDER BY   sales_growth  DESC
OFFSET ( SELECT COUNT(*)-3  FROM Prev_sales) ROWS
FETCH NEXT 3 ROWS ONLY
```

	district	sales_growth
1	Jagtial	-40.53
2	Nirmal	-41.05
3	Warangal	-45.32

Top_ 3 _district_diesel

```
WITH prev_sales AS

(
SELECT district,Sum(fuel_type_diesel)Prev_sales FROM  dbo.dim_date$ dt
INNER JOIN  dbo.fact_transport$   tr
ON dt.month=tr.month
INNER JOIN dbo.dim_districts$ dist
ON tr.dist_code=dist.dist_code
WHERE fiscal_year=2021
GROUP BY district
),


 Current_sales AS
(
SELECT district,Sum(fuel_type_diesel)Current_sales FROM  dbo.dim_date$ dt
INNER JOIN  dbo.fact_transport$   tr
ON dt.month=tr.month
INNER JOIN dbo.dim_districts$ dist
ON tr.dist_code=dist.dist_code
WHERE fiscal_year=2022
GROUP BY district
)


 SELECT Top 3  pv.district,Round((1.0*cu.Current_sales-pv.Prev_sales)/Prev_sales ,4)*100 sales_growth FROM Prev_sales
pv
INNER JOIN  Current_sales cu
ON  pv.district=cu.district
ORDER BY sales_growth  DESC
```

	district	sales_growth
1	Karimnagar	111.44
2	Sangareddy	13.21
3	Rangareddy	12.67

Bottom_3_district_diesel

```
WITH prev_sales AS

(
SELECT district,  Sum(fuel_type_diesel)Prev_sales FROM  dbo.dim_date$ dt
INNER JOIN  dbo.fact_transport$   tr
ON dt.month=tr.month
INNER JOIN dbo.dim_districts$ dist
ON tr.dist_code=dist.dist_code
WHERE fiscal_year=2021
GROUP BY district
),

 Current_sales AS
(
SELECT district,Sum(fuel_type_diesel)Current_sales FROM  dbo.dim_date$ dt
INNER JOIN  dbo.fact_transport$   tr
ON dt.month=tr.month
INNER JOIN dbo.dim_districts$ dist
ON tr.dist_code=dist.dist_code
WHERE fiscal_year=2022
GROUP BY district
)


SELECT  pv.district,Round((1.0*( Current_sales-Prev_sales)/Prev_sales),4)*100 sales_growth FROM Prev_sales pv
INNER JOIN  Current_sales cu
ON  pv.district=cu.district
ORDER BY   sales_growth  DESC
OFFSET ( SELECT COUNT(*)-3  FROM Prev_sales) ROWS
FETCH NEXT 3 ROWS ONLY
```

	district	sales_growth
1	Karimnagar	111.44
2	Sangareddy	13.21
3	Rangareddy	12.67

Top_ 3 _district_electric

```
WITH prev_sales AS
(
SELECT district,Sum(fuel_type_electric)Prev_sales FROM  dbo.dim_date$ dt
INNER JOIN  dbo.fact_transport$   tr
ON dt.month=tr.month
INNER JOIN dbo.dim_districts$ dist
ON tr.dist_code=dist.dist_code
WHERE fiscal_year=2021
GROUP BY district
),


 Current_sales AS
(
SELECT district,Sum(fuel_type_electric)Current_sales FROM  dbo.dim_date$ dt
INNER JOIN  dbo.fact_transport$   tr
ON dt.month=tr.month
INNER JOIN dbo.dim_districts$ dist
ON tr.dist_code=dist.dist_code
WHERE fiscal_year=2022
GROUP BY district
)


 SELECT Top 3  pv.district,Round((1.0*cu.Current_sales-pv.Prev_sales)/Prev_sales ,4)*100 sales_growth FROM Prev_sales
pv
INNER JOIN  Current_sales cu
ON  pv.district=cu.district
ORDER BY sales_growth  DESC
```

	district	sales_growth
1	Khammam	409.4
2	Bhadradri Kothagudem	281.58
3	Suryapet	247.15

Bottom_ 3 _district_electric

```
WITH prev_sales AS
(
SELECT district,Sum(fuel_type_electric)Prev_sales FROM  dbo.dim_date$ dt
INNER JOIN  dbo.fact_transport$   tr
ON dt.month=tr.month
INNER JOIN dbo.dim_districts$ dist
ON tr.dist_code=dist.dist_code
WHERE fiscal_year=2021
GROUP BY district
),

 Current_sales AS
(
SELECT district,Sum(fuel_type_electric)Current_sales FROM  dbo.dim_date$ dt
INNER JOIN  dbo.fact_transport$   tr
ON dt.month=tr.month
INNER JOIN dbo.dim_districts$ dist
ON tr.dist_code=dist.dist_code
WHERE fiscal_year=2022
GROUP BY district
)


SELECT  pv.district,Round((1.0*( Current_sales-Prev_sales)/Prev_sales),4)*100 sales_growth FROM Prev_sales pv
INNER JOIN  Current_sales cu
ON  pv.district=cu.district
ORDER BY   sales_growth  DESC
OFFSET ( SELECT COUNT(*)-3  FROM Prev_sales) ROWS
FETCH NEXT 3 ROWS ONLY
```

	district	sales_growth
1	Mancherial	19.19
2	Rajanna Sircilla	14.92
3	Wanaparthy	5.48

8. List down the top 5 sectors that have witnessed the most significant investments in FY 2022.

```
SELECT Top 5 Sector,Sum([investment in cr])Tot_investment_cr  FROM dbo.['Ft_ts _Ipass$'] PASS
INNER JOIN dbo.dim_date$  dt
ON  pass.month=dt.month
WHERE fiscal_year=2022
GROUP BY sector
ORDER BY Tot_investment_cr  DESC
```

	Sector	Tot_investment_cr
1	Plastic and Rubber	5855.6095
2	Pharmaceuticals and Chemicals	2181.6342
3	Real Estate,Industrial Parks and IT Buildings	2127.2963
4	Solar and Other Renewable Energy	2052.985
5	Engineering	1877.4533

9. List down the top 3 districts that have attracted the most significant sector investments during FY 2019 to 2022?
What factors could have led to the substantial investments in these particular districts?

```
SELECT Top 3 district,SUM([investment in cr] )Tot_investment_cr FROM dbo.['Ft_ts _Ipass$']    pass
INNER JOIN dbo.dim_districts$ dist
ON  dist.dist_code=pass.dist_code
INNER JOIN  dbo.dim_date$ dt
ON pass.month=dt.month
GROUP BY district
ORDER BY Tot_investment_cr DESC
```

	district	Tot_investment_cr
1	Rangareddy	42706.332
2	Sangareddy	12366.7556
3	Medchal_Malkajgiri	10394.561

10. Is there any relationship between district investments,vehicles sales and stamps revenue within the same district between FY 2021
and 2022?

```
SELECT Top 5  district,ROUND(sum([investment in cr] ),2)Tot_investment_cr FROM  dbo.['Ft_ts _Ipass$']     pass
INNER JOIN  dbo.dim_districts$ ds
ON ds.dist_code=pass.dist_code
INNER JOIN  dbo.dim_date$ dt
ON pass.month=dt.month
WHERE fiscal_year  BETWEEN 2021 AND 2022
GROUP BY district
ORDER BY Tot_investment_cr  DESC
```

	district	Tot_investment_cr
1	Rangareddy	12480.63
2	Sangareddy	8776.51
3	Medchal_Malkajgiri	5364.15
4	Mahabubnagar	2288.73
5	Medak	2093.95

```
SELECT Top 5 district,ROUND(sum(estamps_challans_rev)/10000000,2)Tot_revenue_cr FROM  dbo.fact_stamps$ st
INNER JOIN  dbo.dim_districts$ ds
ON st.dist_code=ds.dist_code
INNER JOIN  dbo.dim_date$ dt
ON st.month=dt.month
WHERE fiscal_year  BETWEEN 2021 AND 2022
GROUP BY district
ORDER BY Tot_revenue_cr  DESC
```

	district	Tot_revenue_cr
1	Rangareddy	7068.23
2	Medchal_Malkajgiri	4234.41
3	Hyderabad	2526.8
4	Sangareddy	1478.2
5	Hanumakonda	495.97

```
SELECT TOP 5
district,Round((sum(vehicleClass_Motorcycle)+sum(vehicleClass_MotorCar)+sum(vehicleClass_AutoRickshaw)+sum(VehicleC
lass_Agriculture)
+sum(vehicleClass_others))/100000,2)Tot_sales_lacs   FROM  dbo.fact_transport$  tr
INNER JOIN  dbo.dim_districts$ dist
ON tr.dist_code=dist.dist_code
INNER JOIN  dbo.dim_date$ dt
ON dt.month=tr.month
WHERE fiscal_year  BETWEEN 2021 AND 2022
GROUP BY district
ORDER BY  Tot_sales_lacs  DESC
```

	district	Tot_sales_lacs
1	Hyderabad	5.49
2	Medchal_Malkajgiri	4.83
3	Rangareddy	4.63
4	Sangareddy	1.31
5	Nizamabad	0.94

11. Are there any particular sectors that have shown substantial investment in multiple districts between FY 2021 and 2022?

```
SELECT Top 5 sector,sum([investment in cr])Tot_investment  FROM  dbo.['Ft_ts _Ipass$']    pass
INNER JOIN dbo.dim_districts$  ds
ON pass.dist_code=ds.dist_code
INNER JOIN  dbo.dim_date$ dt
ON pass.month=dt.month
WHERE fiscal_year BETWEEN 2021 AND 2022
AND  district IN
(
SELECT district FROM ( SELECT Top 5 district ,sum([investment in cr]) Tot_invest FROM  dbo.['Ft_ts _Ipass$']   pass
INNER JOIN dbo.dim_districts$  ds
ON pass.dist_code=ds.dist_code
INNER JOIN  dbo.dim_date$ dt
ON pass.month=dt.month
WHERE fiscal_year BETWEEN 2021 AND 2022
GROUP BY district
ORDER BY Tot_invest DESC
) tb
)
GROUP BY sector
ORDER BY Tot_investment DESC;
```

	sector	Tot_investment
1	Plastic and Rubber	7805.222
2	Pharmaceuticals and Chemicals	5761.7508
3	Real Estate,Industrial Parks and IT Buildings	4132.106
4	Engineering	2355.2392
5	R&D	2294.622

12. Can we identify any seasonal patterns or cyclicality in the investment trends for specific sectors? Do certain sectors experience higher investments during particular months?

```
WITH CTE AS
(
SELECT sector,Mmm,rank() OVER(PARTITION BY  sector ORDER BY sum([investment in cr]) DESC )rnk FROM dbo.['Ft_ts
_Ipass$'] pass
INNER JOIN dbo.dim_date$ dt
ON pass.month=dt.month
GROUP BY Mmm,sector

)

SELECT sector,Mmm  FROM CTE
WHERE rnk=1
ORDER BY sector
```

	sector	Mmm
1	Agro based Incl Cold Storages	Jun
2	Automobile	Jan
3	Beverages	Jan
4	Cement, Cement & Concrete Products, Fly Ash Bricks	Aug
5	Electrical and Electronic Products	Jan
6	Engineering	Feb
7	Fertilizers Organic and Inorganic,Pesticides,Insecticides, and Other Related	Dec
8	Food Processing	Mar
9	Granite and Stone Crushing	Oct
10	Industrial Parks and IT Buildings	Feb
11	Others	Jul
12	Paper and Printing	Jul
13	Pharmaceuticals and Chemicals	Jul
14	Plastic and Rubber	Dec
15	R&D	Apr
16	Real Estate,Industrial Parks and IT Buildings	Feb
17	Solar and Other Renewable Energy	Nov
18	Textiles	Sep
19	Thermal Power Plant	Aug
20	Wood and Leather	Sep