1.What is the overall Complaint Ratio for each insurance company?

SELECT

Company\_Name,

sum(Ratio) as Ratio,

sum(Upheld\_Complaints)as up\_held\_Complaints,

SUM(Question\_of\_Fact\_Complaints) as Question\_of\_Fact,

SUM(Not\_Upheld\_Complaints) as Not\_Upheld,

sum(Premiums\_Written\_in\_Millions) as Preminums\_Written

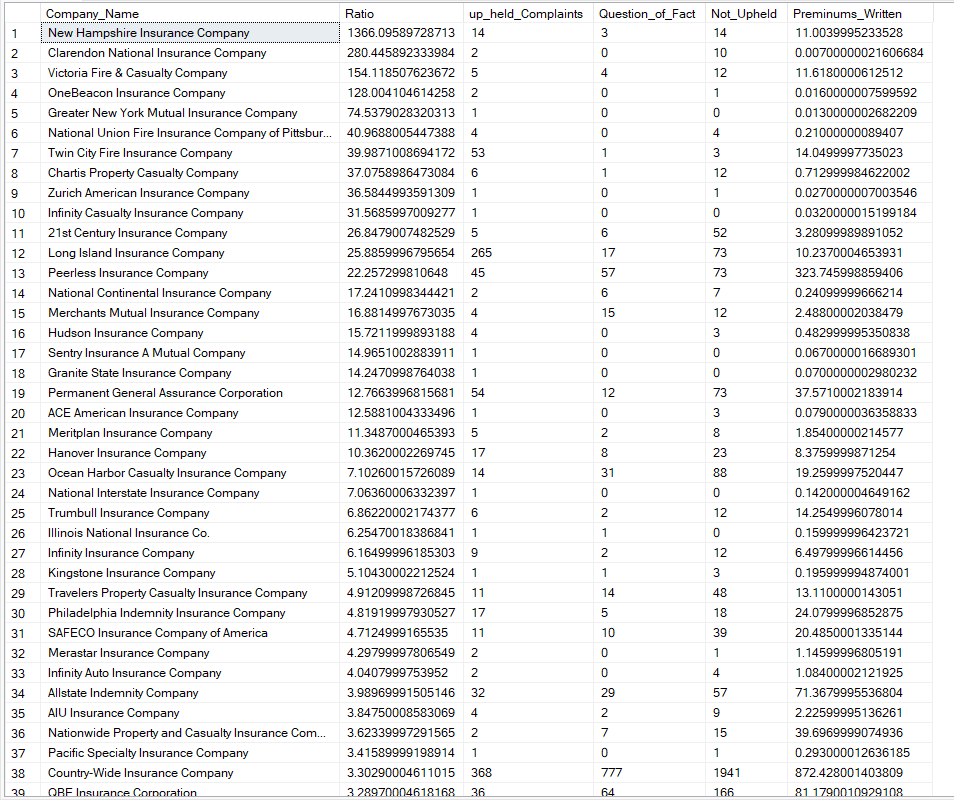
FROM

Automobile\_Insurance\_data

GROUP BY

Company\_Name

order by Ratio DESC;



2. Which insurance companies have the highest and lowest Complaint Ratios?

Highest Complaint Ratios ->

SELECT TOP(1)

Company\_Name,

SUM(Ratio) as Total\_Ratio,

SUM(Upheld\_Complaints) as Total\_Upheld\_Complaints,

SUM(Premiums\_Written\_in\_Millions) as Total\_Premiums\_Written

FROM

Automobile\_Insurance\_data

GROUP BY

Company\_Name

ORDER BY

Total\_Ratio DESC ;



Lower Complaint Ratio ->

SELECT TOP(1)

Company\_Name,

SUM(Ratio) as Total\_Ratio,

SUM(Upheld\_Complaints) as Total\_Upheld\_Complaints,

SUM(Premiums\_Written\_in\_Millions) as Total\_Premiums\_Written

FROM

Automobile\_Insurance\_data

GROUP BY

Company\_Name

ORDER BY

Total\_Ratio ;



3. What types of complaints are most common?

SELECT

SUM(CASE WHEN Upheld\_Complaints > 0 THEN 1 ELSE 0 END) AS Total\_Upheld\_Complaints,

SUM(CASE WHEN Question\_of\_Fact\_Complaints > 0 THEN 1 ELSE 0 END) AS Total\_Question\_of\_Fact\_Complaints,

SUM(CASE WHEN Not\_Upheld\_Complaints > 0 THEN 1 ELSE 0 END) AS Total\_Not\_Upheld\_Complaints

FROM

Automobile\_Insurance\_data;



4. Is there a correlation between premiums written and Complaint Ratios?

WITH PremiumsAndComplaints AS (

SELECT

Company\_Name,

SUM(Premiums\_Written\_in\_Millions) AS Total\_Premiums\_Written,

SUM(Upheld\_Complaints) AS Total\_Upheld\_Complaints,

SUM(Ratio) AS Complaint\_Ratio

FROM

Automobile\_Insurance\_data

GROUP BY

Company\_Name

)

SELECT

(COUNT(\*) \* SUM(Total\_Premiums\_Written \* Complaint\_Ratio) - SUM(Total\_Premiums\_Written) \* SUM(Complaint\_Ratio)) /

(SQRT((COUNT(\*) \* SUM(Total\_Premiums\_Written \* Total\_Premiums\_Written)) - (SUM(Total\_Premiums\_Written) \* SUM(Total\_Premiums\_Written))) \*

SQRT((COUNT(\*) \* SUM(Complaint\_Ratio \* Complaint\_Ratio)) - (SUM(Complaint\_Ratio) \* SUM(Complaint\_Ratio)))) AS Correlation

FROM

PremiumsAndComplaints;



5. What is the total number of unique insurance companies in the dataset?

SELECT COUNT(DISTINCT Company\_Name) AS Total\_Insurance\_Companies

FROM Automobile\_Insurance\_data;



6. How many complaints were filed in total across all insurance companies?

SELECT SUM(Total\_Complaints) AS Total\_Complaints\_Filed

FROM Automobile\_Insurance\_data;



7. What is the average complaint ratio across all insurance companies?

SELECT AVG(Ratio) AS Average\_Complaint\_Ratio

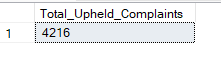
FROM Automobile\_Insurance\_data;



8. How many complaint cases were upheld in total?

SELECT SUM(Upheld\_Complaints) AS Total\_Upheld\_Complaints

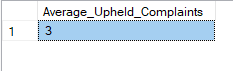
FROM Automobile\_Insurance\_data;



9. What is the average number of upheld complaints per insurance company?

SELECT AVG(Upheld\_Complaints) AS Average\_Upheld\_Complaints

FROM Automobile\_Insurance\_data;



10. Which insurance company had the highest number of upheld complaints?

SELECT TOP(1)Company\_Name, MAX(Upheld\_Complaints) AS Highest\_Upheld\_Complaints

FROM Automobile\_Insurance\_data group by Company\_Name order by Highest\_Upheld\_Complaints desc;



11. How many question of fact complaints were filed in total?

SELECT SUM(Question\_of\_Fact\_Complaints) AS Total\_Question\_of\_Fact\_Complaints

FROM Automobile\_Insurance\_data;



12. What is the average number of question of fact complaints per insurance company?

SELECT AVG(Question\_of\_Fact\_Complaints) AS Average\_Question\_of\_Fact\_Complaints

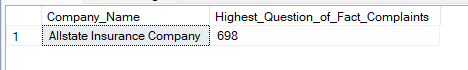
FROM Automobile\_Insurance\_data;



13. Which insurance company had the highest number of question of fact complaints?

SELECT top(1)Company\_Name, MAX(Question\_of\_Fact\_Complaints) AS Highest\_Question\_of\_Fact\_Complaints

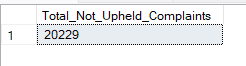
FROM Automobile\_Insurance\_data group by Company\_Name order by Highest\_Question\_of\_Fact\_Complaints desc;



14. How many complaints were not upheld in total?

SELECT SUM(Not\_Upheld\_Complaints) AS Total\_Not\_Upheld\_Complaints

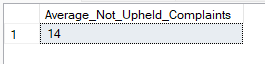
FROM Automobile\_Insurance\_data;



15. What is the average number of not upheld complaints per insurance company?

SELECT AVG(Not\_Upheld\_Complaints) AS Average\_Not\_Upheld\_Complaints

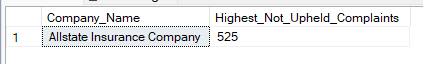
FROM Automobile\_Insurance\_data;



16. Which insurance company had the highest number of not upheld complaints?

SELECT top(1)Company\_Name, MAX(Not\_Upheld\_Complaints) AS Highest\_Not\_Upheld\_Complaints

FROM Automobile\_Insurance\_data group by Company\_Name order by Highest\_Not\_Upheld\_Complaints desc;



17. What is the total amount of premiums written across all insurance companies?

SELECT SUM(Premiums\_Written\_in\_Millions) AS Total\_Premiums\_Written

FROM Automobile\_Insurance\_data;



18. What is the average premiums written per insurance company?

SELECT AVG(Premiums\_Written\_in\_Millions) AS Average\_Premiums\_Written

FROM Automobile\_Insurance\_data;



19. Which insurance company had the highest premiums written?

SELECT top(1)Company\_Name, MAX(Premiums\_Written\_in\_Millions) AS Highest\_Premiums\_Written

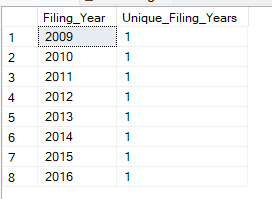
FROM Automobile\_Insurance\_data group by Company\_Name order by Highest\_Premiums\_Written desc;



20. How many unique filing years are present in the dataset?

SELECT Filing\_Year,COUNT(DISTINCT Filing\_Year) AS Unique\_Filing\_Years

FROM Automobile\_Insurance\_data group by Filing\_Year;

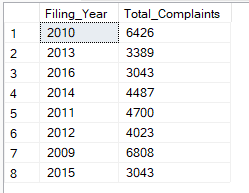


21. How many complaints were filed in each filing year?

SELECT Filing\_Year, SUM(Total\_Complaints) AS Total\_Complaints

FROM Automobile\_Insurance\_data

GROUP BY Filing\_Year;

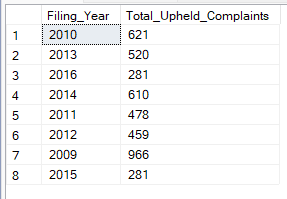


22. What is the trend of upheld complaints over the filing years?

SELECT Filing\_Year, SUM(Upheld\_Complaints) AS Total\_Upheld\_Complaints

FROM Automobile\_Insurance\_data

GROUP BY Filing\_Year;

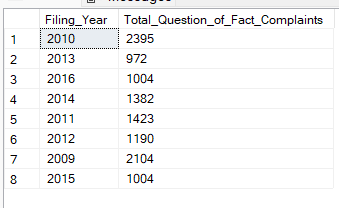


23. What is the trend of question of fact complaints over the filing years?

SELECT Filing\_Year, SUM(Question\_of\_Fact\_Complaints) AS Total\_Question\_of\_Fact\_Complaints

FROM Automobile\_Insurance\_data

GROUP BY Filing\_Year;

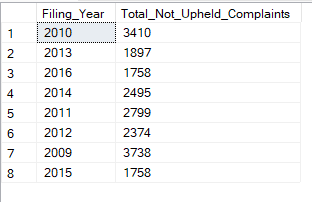


24. What is the trend of not upheld complaints over the filing years?

SELECT Filing\_Year, SUM(Not\_Upheld\_Complaints) AS Total\_Not\_Upheld\_Complaints

FROM Automobile\_Insurance\_data

GROUP BY Filing\_Year;

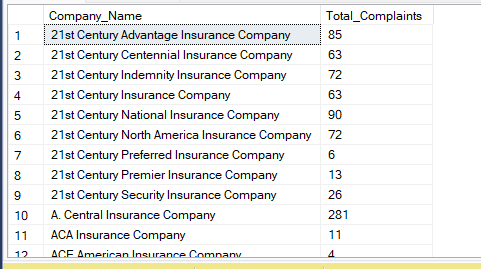


25. How many complaints were filed for each company?

SELECT Company\_Name, SUM(Total\_Complaints) AS Total\_Complaints

FROM Automobile\_Insurance\_data

GROUP BY Company\_Name;

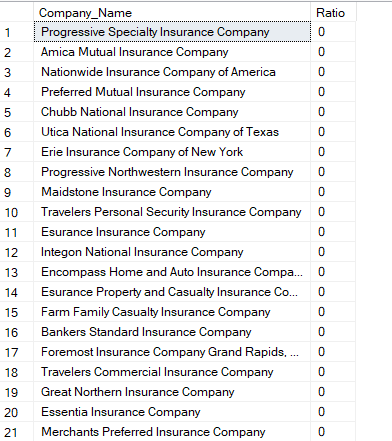


26. What is the distribution of complaint ratios across all companies?

SELECT Company\_Name, Ratio

FROM Automobile\_Insurance\_data

ORDER BY Ratio;



(TOTAL 1358 ROWS FETCHED)

27. How many companies have a complaint ratio higher than 1?

SELECT COUNT(Company\_Name) AS Companies\_With\_High\_Ratio FROM Automobile\_Insurance\_data

WHERE Ratio > 1;



28. How many companies have a complaint ratio less than or equal to 1?

SELECT COUNT(Company\_Name) AS Companies\_With\_Low\_Ratio

FROM Automobile\_Insurance\_data

WHERE Ratio <= 1;

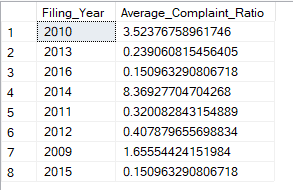


29. What is the average complaint ratio per filing year?

SELECT Filing\_Year, AVG(Ratio) AS Average\_Complaint\_Ratio

FROM Automobile\_Insurance\_data

GROUP BY Filing\_Year;



30. Which filing year had the highest average complaint ratio?

SELECT TOP(1)Filing\_Year, AVG(Ratio) AS Average\_Complaint\_Ratio

FROM Automobile\_Insurance\_data

GROUP BY Filing\_Year

ORDER BY Average\_Complaint\_Ratio DESC ;



31.Which filing year had the lowest average complaint ratio?

SELECT TOP(1)Filing\_Year, AVG(Ratio) AS Average\_Complaint\_Ratio

FROM Automobile\_Insurance\_data

GROUP BY Filing\_Year

ORDER BY Average\_Complaint\_Ratio ASC;

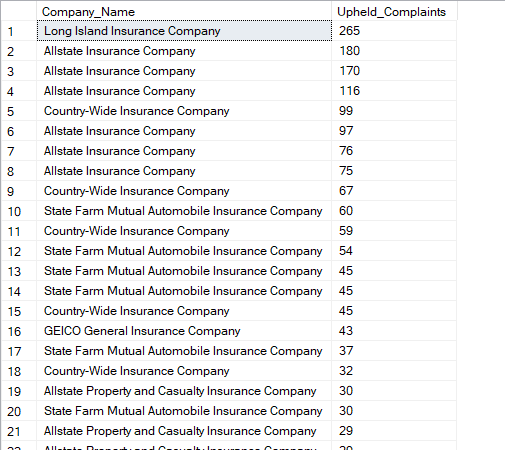


32. What is the distribution of upheld complaints across all companies?

SELECT Company\_Name, Upheld\_Complaints

FROM Automobile\_Insurance\_data

ORDER BY Upheld\_Complaints DESC;



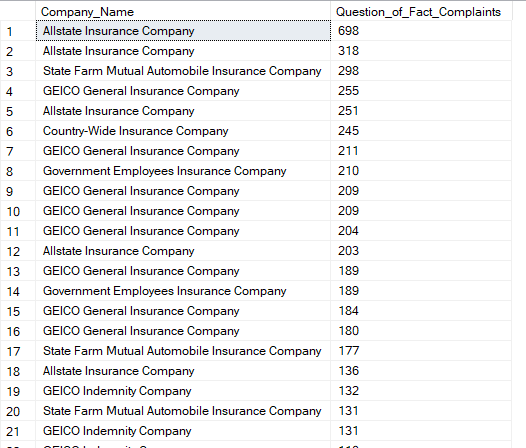
(TOTAL RETURN ROWS = 1358)

33. What is the distribution of question of fact complaints across all companies?

SELECT Company\_Name, Question\_of\_Fact\_Complaints

FROM Automobile\_Insurance\_data

ORDER BY Question\_of\_Fact\_Complaints DESC;



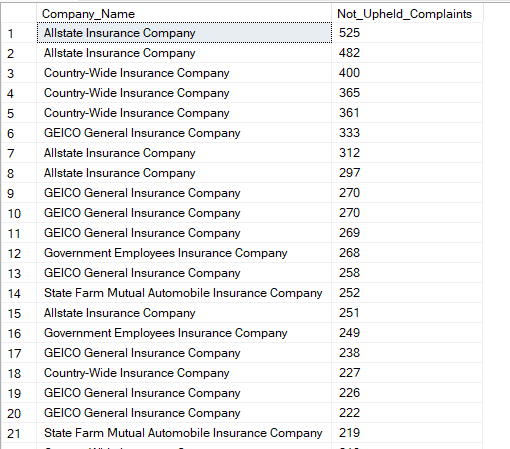
(TOTAL ROWS RETURNED = 1358)

34. What is the distribution of not upheld complaints across all companies?

SELECT Company\_Name, Not\_Upheld\_Complaints

FROM Automobile\_Insurance\_data

ORDER BY Not\_Upheld\_Complaints DESC;



(TOTAL ROWS RETURNED = 1358)

35. How many companies have a higher number of upheld complaints than question of fact complaints?

SELECT COUNT(Company\_Name) AS Companies\_With\_More\_Upheld

FROM Automobile\_Insurance\_data

WHERE Upheld\_Complaints > Question\_of\_Fact\_Complaints;



36. How many companies have a higher number of question of fact complaints than upheld complaints?

SELECT COUNT(Company\_Name) AS Companies\_With\_More\_Question\_of\_Fact

FROM Automobile\_Insurance\_data

WHERE Upheld\_Complaints < Question\_of\_Fact\_Complaints;



38. What is the average ratio for companies with more upheld complaints than question of fact complaints?

SELECT AVG(Ratio) AS Average\_Ratio\_For\_More\_Upheld FROM Automobile\_Insurance\_data

WHERE Upheld\_Complaints > Question\_of\_Fact\_Complaints;



39.What is the average ratio for companies with more question of fact complaints than upheld complaints?

SELECT AVG(Ratio) AS Average\_Ratio\_For\_More\_Question\_of\_Fact

FROM Automobile\_Insurance\_data

WHERE Upheld\_Complaints < Question\_of\_Fact\_Complaints;

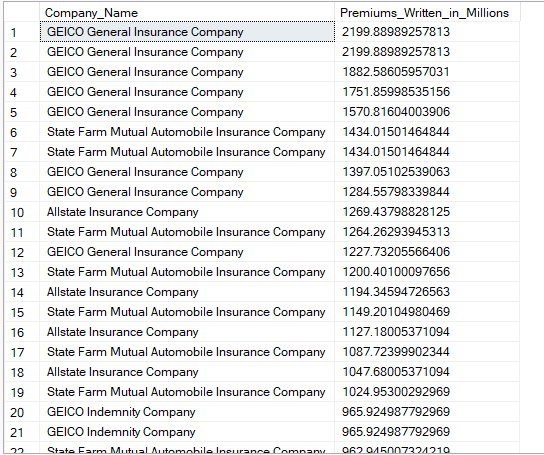


40. What is the distribution of premiums written across all companies?

SELECT Company\_Name, Premiums\_Written\_in\_Millions

FROM Automobile\_Insurance\_data

ORDER BY Premiums\_Written\_in\_Millions DESC;



(TOTAL ROWS RETURNED = 1358)

41. How many companies have premiums written exceeding $100 million?

SELECT COUNT(Company\_Name) AS Companies\_With\_High\_Premiums

FROM Automobile\_Insurance\_data

WHERE Premiums\_Written\_in\_Millions > 100;



42. How many companies have premiums written less than or equal to $100 million?

SELECT COUNT(Company\_Name) AS Companies\_With\_Low\_Premiums FROM Automobile\_Insurance\_data WHERE Premiums\_Written\_in\_Millions <= 100;

