**Supply chain management SQL Analysis**

Objectives:

* Analyse supplier performance and identify opportunities for collaboration.
* Optimize inventory levels to reduce stock outs and improve customer satisfaction.
* Streamline order fulfilment processes to enhance efficiency and reduce costs.
* Identify key trends & patterns in order & shipment data for strategic decision-making.

1. Select all records from the Suppliers table.

2. Select product name and unit price from the Products table

3. Select order IDs and order dates from the Orders table

4. Select shipment IDs and shipment dates from the Shipments table

5. Count the total number of products in stock

6. Calculate the average unit price of products

7. Find the maximum quantity ordered

8. List suppliers along with their contact persons

9. List products with their descriptions

10. Display shipment details including the tracking number

11. List orders along with the associated supplier information

12. Display products that have a unit price greater than $15

13. Count the number of orders per supplier

14. Calculate the total quantity ordered for each product

15. List shipments along with the associated order information

16. Find suppliers with more than 2 contacts

17. Calculate the average quantity ordered per order

18. List products along with the total number of orders they are associated with.

19. Display orders that are in progress (order\_status = 'In Progress')

20. Find the earliest and latest order dates

21. Calculate the total revenue generated from orders

22. List suppliers along with the total quantity ordered from them

23. Find products with the highest unit price

24. List orders along with the associated supplier and product information

25. Display the top 3 products with the highest quantity ordered

26. Find the percentage of completed orders out of total orders

27. Calculate the total number of shipments per shipping company

28. List suppliers who have not yet made any orders

29. Display orders along with the corresponding shipment details, if available.

30. Find the top 5 suppliers with the highest total quantity ordered.

31. Find the total revenue generated by each supplier

32. Calculate the average delivery time for each shipping company.

33. Identify products that have never been ordered

34. Find the top 3 shipping companies with the most shipments

35. Calculate the percentage of orders that were completed for each supplier.

36. Identify products with low inventory levels (less than 50 in stock) that need restocking.

37. Find the top 5 suppliers with the highest total revenue.

38. Calculate the total number of orders made each month.

39. Identify suppliers with declining order trends over the past three months.

40. Calculate the average shipment duration for each supplier.

41. Identify Seasonal Demand Patterns.

42. Product Popularity Trends.

43. Correlation between Order Frequency, Product Categories, and Customer Demographics.

44. Forecast Future Demand.