Problem Statement

1. Create visuals to show general information such as ,
    - Total customers
    - Total orders
    - Total sales
    - Average order Value[total sales/total orders]
    - Count of Customers who have not purchased in the last 12 months.

2. We need to analyze the contribution of each product category to overall sales by calculating its percentage share. Categories should be color-coded for clarity: green if contribution > 5%, cream if between 3%–5%, and yellow if < 3%. The percentage values must be displayed with a blue gradient to make comparisons more visually intuitive.

3. We need to identify customers who churned in each year by checking those who made purchases in the past but did not place any orders in the following year. The report should highlight churned customers year by year, helping us track customer retention trends over time.

4. We need to analyze whether there is a relationship between the quantity of products sold (where each order row counts as one quantity) and the number of product photos available on the website. The goal is to determine if products with more photos tend to sell in higher quantities, providing insights into the impact of product visuals on sales performance.

5. We need to perform a market basket analysis to identify which products are frequently purchased together in the same order. The objective is to uncover product pairings or combinations that customers commonly buy, so we can use these insights for cross-selling, bundling, and targeted marketing strategies.

6. We need to evaluate the performance of each category based on recently launched products (introduced within the last 6 months from the latest date in the dataset). The analysis should include both total sales and total orders for these new products, allowing us to measure how well each category is performing with fresh launches.

7. We need to identify products that exhibit seasonality in their sales, meaning their sales show recurring patterns or fluctuations at specific times of the year (monthly). This analysis will help in inventory planning, promotions, and marketing strategies for products with predictable demand cycles.

8. We need to calculate the average change in product prices over the last year for each category and analyze its impact on sales. The goal is to understand whether price increases or decreases influenced customer purchasing behavior and overall category performance, helping guide future pricing strategies.

9. Considering a "buy one, get one free" promotion on certain products. Simulate the potential impact on our profit margin if we had run this promotion last year on our top 10 selling products (by quantity). Assume that the promotion would have doubled the quantity sold for these products, but every second item sold would be at zero price.

10. We need to analyze payments made by customers grouped by payment type. The goal is to understand the distribution of sales across different payment methods, helping identify the most preferred payment options and inform financial or promotional strategies.

11. Compare the average review score for orders delivered on time versus orders delivered late.

12. Calculate the average time, in hours, for each stage of the order fulfillment process.

13. For product categories compare their total revenue from their first 90 days on the platform to their revenue in the most recent 90 days. This helps identify which product lines are maturing successfully.

14. We want to identify sellers who are highly rated (average review score > 4.5) but seem to be underperforming in their local market. An "underperforming" seller is one where less than 10% of their total sales come from customers within their own state. This could indicate a missed local marketing opportunity.