**Create columns profit margin, shipping cost in categories**

**Sales and Profit Analysis**

1. **Total Sales and Profit by Category**:
   * What are the total sales and total profit for each product category (Technology, Furniture, Office Supplies)?
2. **Top 5 Best-Selling Products**:
   * Which products have the highest sales? List the top 10 best-selling products.
3. **Profit by Sub Category**:
   * What is the profit for each sub -category? Identify products with the highest and lowest profit .

**Customer and Segment Analysis**

1. **Sales by Customer Segment**: Contributions
   * What are the total sales for each customer segment (Consumer, Corporate, Home Office)?
2. **Profit by Customer Segment**:
   * How does profit vary across different customer segments?

**Order and Shipping Analysis**

1. **Ship Mode Analysis**:
   * How do sales and profits vary across different shipping mode?
2. **Shipping Cost vs. Profit**:
   * What is the relationship between shipping costs and profit? Are higher shipping costs associated with higher or lower profits?

**Time-Based Analysis**

1. **Monthly Sales Trend**:
   * What is the monthly trend in sales over the given period? Are there any noticeable peaks or troughs?
   * **Yearly Sales and Profit Growth**:
   * How have sales and profits grown year-over-year?

**Product Performance**

1. **Discount Impact on Profit**:
   * How do different discount levels affect the overall profit?

**Example Dashboard Elements:**

1. **Bar Chart**: Showing total sales and profit by category.
2. **Pie Chart**: Illustrating the proportion of sales across different customer segments.
3. **Line Graph**: Depicting monthly sales trends over the years.
4. **Pivot Table**: Summarizing sales and profit by product, category, and segment.
5. **Scatter Plot**: Analyzing the relationship between shipping cost and profit.
6. **Heatmap**: Showing profit margins by product and discount levels.

To create a pivot table:

1. **Select the data range**: Include all columns.
2. **Insert Pivot Table**: Go to the "Insert" tab and select "Pivot Table".
3. **Drag Fields**:
   * Rows: Category, Product Name
   * Columns: Year (from Order Date)
   * Values: Sales, Profit
   * Filters: Customer Segment, Order Priority

**Example Practice Questions to Explore with Pivot Tables and Charts:**

1. **Which customer segment generates the most sales for each category?**
2. **What is the average profit per product in each category?**
3. **How do sales and profits compare across different shipping modes?**
4. **What are the top 5 products with the highest shipping costs, and how do they affect overall profitability?**
5. **How do sales and profits vary by order priority for different segments?**

These questions and corresponding visualizations will provide valuable insights for making data-driven business decisions.