Sales Insight Case Study

Company XYZ has experienced a decline in its sales performance over the past few months. The company wants to understand the reasons behind this decline and improve its sales performance. The company has a database of sales data transactions and as a data analyst, you are tasked with analysing the data and answering the following business level questions:

- What was the best month for sales? How much was earned that month?
- What city sold the most products?
- What time should we display advertisemens to maximize the likelihood of customer's buying a product?
- What products are most often sold together?
- What product sold the most? Why do you think it sold the most?

Resources:

You are provided with 12 months worth of sales data. The data contains hundreds of thousands of electronics store purchases broken down by month, product type, cost, purchase address, etc.

Working with the Data Provided (Additional research required):

- Merge data from each month into one dataframe
- Clean up the data
    - Drop NaN values from DataFrame
    - Removing rows based on a condition
    - Change the type of columns (to_numeric, to_datetime, astype)
- Create new columns
    - Add month column
    - Add city column
- Answer the questions above (Hint: Use bar graphs and line graphs to visualize your insights)