

Ad Hoc Analysis Long Test Approach

1. Identify the goals or end results
 - a. Breakdown of count of each item sold per month
 - b. Breakdown of total sale value per item per month
 - c. Data Representation of Repeater, Inactive, and Engaged Customers
2. Observation of Provided Data
 - a. Columns provided data for the customers' address, birthdate, mail, name, sex, username, transaction item, transaction value, and transaction date
3. Solution for Goal a and b
 - a. Filter the information by taking only the needed data such as transaction items, transaction values, and quantity while also disregarding the information that's not needed.
 - b. Reorganize the data by splitting up the transaction items string, defining the required variables for representation such as quantity, transaction value, transaction months and transaction sales properly.
 - c. Create pivot tables representing the quantity of transaction items sold per transaction month in order to provide what is asked in Goal a and the total sales of the transaction items per transaction month for Goal b.
4. Solution for Goal c
 - a. Set the transaction dates as transaction months for better representation
 - b. Create pivot table displaying the customer names and their corresponding transaction month
 - c. Utilize lambda functions to create formulas defining customers who are considered as repeaters, inactive, and engaged and display the amount of each type of customer per transaction month