The goal of the case study:

Work with data sets using the Power BI Tool. You should be able to analyze data and answer key business questions with the help of dashboards and reports and derive insights. Also, you should document & communicate the insights and findings from the data

Business Case:

As an analyst, you are working for a leading e-commerce client. The client asked you to create analytical dashboards below themes.

Overview of various KPIs

- Pricing & Promotion
- Search & Recommendations etc.
- While building dashboards, you are expected to clean the data if required. Once you clean the data, you need to answer the below questions as part of the documentation
  - What variables can be derived from the data which can be helpful?
  - Who can use this dashboard?
  - What value would be generated by using this dashboard?
  - What additional data can be helpful to add more insights & value to the team?

About Data:

- The below data sets were provided by our client (one of the leading eCommerce company). This data is about customer behavior which contains data of multiple user events—the duration of the data for two months.
- Sales_Data_Ecommerce : The entire customer behaviour data
- Promotion: This is a promotion data set of special promotions for that day. One product will be promoted on the first page of the app/website. In addition to that many promotions are running however the data is limited to special promotions.

Business Questions:

Below are a few Sample business questions to be addressed as part of this analysis. However, this is not an

exhaustive list, and you can add as many as analysis to the dashboards.

1. How does the price vary by brand/category/time/channel?
2. Is traffic varied by day/time/channel?
3. Define & calculate high-level metrics like (Revenue, potential revenue, products, categories etc...) by month, time, state, channel etc...
4. What is Activity by Brand or category, brand preference, Brand activity by various parameters etc...?
5. How is the search behaviour like Brand Search by Category/Category Search by Brand?
6. What is the effect of Special Promotions?
7. How do Pricing fluctuations affect sales?

Data Dictionary:
"Sales_Data_Ecommerce " Data Set:
user_id: Unique ID of customer
event_date: Date of event
Day_of_Week: Day of week of the event
Channel: Which channel used (App/Browser)
event_time: Time of event
event_hour: Hour of event
event_timezone: Time zone
event_type: Type of event (view, cart, purchased)
product_id: Unique id of product
category_id: Unique id of category
category: Category description
sub_category1: Sub category description-level1
sub_category2: Sub category description-level2
brand: Brand name

price: Price of the product

user_session: Unique ID of user session

State: State

User_Score: Segmentation of customer

Data Dictionary:

"Promotions" Data Set:

Promotion Id: Promotion Type Date: Date of promotion

Discount: Discount%

ProductId: Unique id of product

In the files of Data I have I file named Sales_Data_Ecommerece where (columns and 1st value input of each column are (user_id   event_date   Day_of_Week   Channel   event_time   event_hour   event_timezone event_type   product_idcategory_id   category   sub_category1 sub_category2   brand   price user_session   State User_Score 21342   10/25/2019   Friday   Browser   14:11:00   14   UTC View 18680   111   Electronics smartphone   smartphone   Apple   64.33   8472453   WA   3) now tolta I have records 160001 including headers.

In the next data file named Table 1(promotion dataset).csv i have column labels and first row input values as (Promotion Id   Date Discount   ProductId NzjwLJ201610/1/2019 5%   10566) with total records of 248 including headers.

Now First, add more relevant 10 questions to the **Business Questions**

Then

I want you to help me complete the above case study using the Power BI desktop expansively

By doing the following;

1. create a dashboard with clean and presentable formatting
2. give and explain all relevant Dax measures or columns and meaningful analysis of the given data to solve the problem I have shared above
3. document the whole case study in Notepad all the eda steps, data cleaning steps, data processing and visualizations + questions I should ask at each step + my approach and logic
4. **Final Deliverables:**
1. Analytics Dashboard using Power BI Tool
2. Detailed document summarising the insights

Also, ask me first my logic and approach at each step then proceed with your answer for the same.