

Instructions

The deadline is Oct 11, 2025 (03:55 PM).

Firstly, please read the “1) Case Study.pdf” file thoroughly to understand what you must do for this case study.

The dataset contains records of several items being sold to different customers by various stores over several years.

- 1) Each trainee has been assigned two items randomly. Also, each trainee has been assigned a random store. You can find your items and store in the “**assigned.xlsx**” file.

Your task is to perform **descriptive, predictive, and prescriptive** analysis on both these items, compare them to each other and also compare them to the overall market if possible. Also, do the same for your store.

You can read more about these 3 types of analysis in the “Case Study.pdf” file.

- 2) You must use the “**case-study-data.xlsx**” file as your dataset. Please note that, you might have to do some data cleaning on the “unit” column in the Fact_table and the Item_dim sheets. This is completely optional but might help out your results.

- 3) Secondly, you should perform some analysis on the whole system in general. Try to find interesting patterns, try to analyze the items, stores, customer base, transaction methods etc. You can try to do some predictive analysis such as assessing the viability of opening a new store, offering discounts to some groups of customers, offering discounts on payments by a certain method etc. Finally, based on your analysis, offer some recommendations for the company.

Please note that, these are all suggestions. You are free to explore in anyway you want. Your results are not important. The effort you put into all three types of analysis are what's important.

- 4) You need to perform all your work on a single notebook if possible.

- 5) You will have to present your work on Oct 11.