**TASKS**

1. Get the primary key of the table at hand.
2. Consider Quantity as the Target column. Identify the type of machine learning problem at hand
3. Comment on the distribution of the Target column. Will it affect your final goal of predicting the Target column adversely? Are there outliners for this column?
4. Generate datetime features - day, month and year - from the ‘Date’ column.
5. Check the correlation between price and quantity numerical features. Comment on the correlation.
6. Generate histograms for price and comment on whether it seem Gaussian, or have severe skews. Visualise the relationship between this numeric variables and the target variable. Also, comment on the presence of outliers on this variable.
7. If skewed, perform suitable transformations on these numerical variables. Check the relationship of each of these numeric variables with the target variable using bar charts. Visualize the relationship between each of these numeric variables and the target variable. Also, comment on the presence of outliers on each variable.
8. Check cardinality and rare values of at least two categorical features. Discuss whether each of them is ordinal or nominal.
9. FEATURE ENGINEERING: Generate at least one text based feature from the Product Name column (eg - length of the text, no of words).
10. Handle NaNs. State in your notebook how you dealt with the NaN values with a justification backing the approach taken to deal with NaNs.
11. Develop an ML model to predict the quantity sold.
12. Report model performance on test data

**SUBMISSION**

.ipynb notebook containing both code and text responses to the above