**General Questions for All The Groups**

**1. Data Cleaning and Preparation**

**Question 1:** How many missing values are present in the dataset, and what strategies can be used to handle them? **(Group 1,2 and 3)**

* **Task:** Identify missing values and decide whether to impute, remove, or flag them.

**2. Data Exploration**

**Question 2:** What are the summary statistics (mean, median, minimum, maximum, and standard deviation) for the prices and volumes of each produce variety? **(Group 1,2 and 3)**

* **Task:** Calculate and present summary statistics for each produce type.

**Question 3:** Are there any outliers in the prices and volumes of the produce varieties? If so, which ones and how do you identify them? **(Group 1,2 and 3)**

* **Task:** Use techniques like the IQR method or Z-scores to identify outliers.

**3. Trend Analysis**

**Question 4:** How have the prices of the top 5 most sold produce varieties changed over time from January to June 2012? **(Group 1,2 and 3)**

* **Task:** Create line charts to visualize price trends over the specified period.

**Question 5:** How have the volumes of the top 5 most sold produce varieties changed over time from January to June 2012? **(Group 1,2 and 3)**

* **Task:** Create line charts to visualize volume trends over the specified period.

**4. Seasonality Analysis**

**Question 6:** Are there any observable seasonal patterns in the prices of the produce varieties? **(Group 1,2 and 3)**

* **Task:** Analyze month-over-month price changes and visualize any seasonal trends.

**Question 7:** Are there any observable seasonal patterns in the volumes of the produce varieties? **(Group 1,2 and 3)**

* **Task:** Analyze month-over-month volume changes and visualize any seasonal trends.

**5. Correlation Analysis**

**Question 8:** What is the correlation between the prices and volumes of each produce variety? Is there a significant relationship? **(Group 1,2 and 3)**

* **Task:** Calculate correlation coefficients and create scatter plots to visualize the relationship.

**6. Insights and Recommendations**

**Question 9:** Based on the trends and patterns identified, what are the key insights regarding the pricing strategies for the top 5 produce varieties? **(Group 1,2 and 3)**

* **Task:** Summarize findings and provide strategic recommendations for pricing.

**Question 10:** Based on the trends and patterns identified, what are the key insights regarding the supply and demand dynamics for the top 5 produce varieties? **(Group 1,2 and 3)**

* **Task:** Summarize findings and provide strategic recommendations for managing supply and demand.

**Bonus Question:**

**Question 11:** How do external factors (e.g., weather conditions, holidays) potentially influence the prices and volumes of the produce varieties? **(Group 1,2 and 3)**

* **Task:** Hypothesize potential external factors and suggest additional data sources for further analysis.

NB :

**For visualization on team using SQL , you can leverage on any tool that fits you to draw that charts**