ADHOC - REQUESTS

Q.1 - As a product owner I want to generate a report of individual product sales (aggregated on a monthly basis at the product level) for Amazon India customers for FY=2021 so that I can track individual product sales and run further product analytics on it in excel
Croma India Product-wise Sales Report for Fiscal Year 2021
- Generate a report that includes the following fields:
  1. Month
  2. Product Name & Variant
  3. Sold Quantity
  4. Gross Price Per Item
  5. Gross Price Total
  6. Variant Id

Q. 2- As a product owner I need an aggregate monthly gross sales report for Croma India customer so that I can track how much sales this particular customer is generating for AtliQ and manage our relationships accordingly.
The report should have the following field
  1. Month
  2. Total gross sales amount to Croma India in this month.

Q. 3- Generate a yearly report for Croma India where there are two columns
  1. Fiscal Year
  2. Total Gross sales amount in that year from Croma

Q. 4 - As a DA I want to create a stored proc for monthly gross sales report so that I don't have to manually modify the query every time.
Stored proc can be run by other users to (who have limited access to database) and they can generate this report without having
to involve data analytics team
The report should have following columns:
  1. Month
  2. Total gross sales in that month from a given customer

Q. 5 - Stored procedure for market badge
Create a store proc that can determine the market badge based on the following logic-
If **total sold qty>5million** that market is considered **Gold** else it is **Silver**
My input will be - Market , fiscal year
Output should be - Market badge

Top markets , products , customers for a given financial year

Q. 6 - As a product owner I want a report for top markets , products , customers by net sales for a given financial year so that I can a holistic view of our financial performance and can take appropriate actions to address any potential issues.

Q. 7 - Create a view for gross sales . It should have the following columns -
Date , fiscal_year, customer_code, customer_market, product_code, product, variant, sold_quantity , gross_price_per_item, gross_price_total
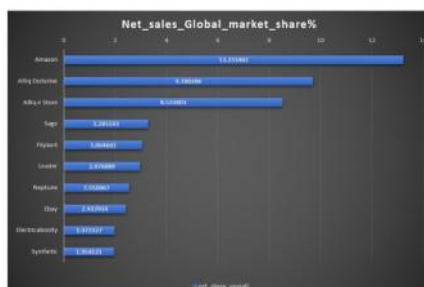
Stored procedures -
Q. 8 - Top N markets by Net sales in millions in a given fiscal year.

Q. 9 - Top N customers by Net sales marketwise.

Q. 10 - Top N products by net sales for a given year.

Q. 11- As a product owner, I want to see a bar chart that shows the top 10 markets with the highest percentage of net sales for the financial year 2021. The chart should display each market and its percentage share of total net sales, like the example shown in the image.

Q.12- As a product owner, I want to see region wise (APAC, EU, LATAM etc) % net sales breakdown by customers in a respective region so that I can perform my regional analysis on financial performance of the company.
The end results should be bar charts in the following format for FY =2021 Build a reusable asset that we can use to conduct analysis for any financial Year.

Q13. Retrieve the top 2 markets in every region by their gross sales amount in FY=2021 with using view and without.
 i.e result should look something like this.

market	region	gross_sales_mln	rnk
India	APAC	455.05	1
South Korea	APAC	131.86	2
United Kingdom	EU	78.11	1
France	EU	67.62	2
Mexico	LATAM	2.30	1
Brazil	LATAM	2.14	2
USA	NA	264.46	1
Canada	NA	89.78	2

SUPPLY CHAIN ANALYTICS

Q14. As a product owner , I need an aggregate forecast accuracy report for all the customers for a given fiscal year so that I can track the accuracy of the forecast we make for these customers.
The report should have fields-
 1. **Customer code , name market**
 2. **Total Sold Quantity**
 3. **Total Forecast Quantity**
 4. **Net Error**
 5. **Absolute Error**
 6. **Forecast Accuracy%**

Concepts covered - Triggers , views , joins , group by , CTE, temporary table, window function, stored procedure ,
 User defined Sql functions, Subqueries, Query Optimization, Helper Table