**Resume Challenge by Code Basics - #4**

**Provide Insights to Management in Consumer Goods Domain.**

**Details:**

Atliq Hardwares (imaginary company) is one of the leading computer hardware producers in India and well expanded in other countries too.

However, the management noticed that they do not get enough insights to make quick and smart data-informed decisions. They want to expand their data analytics team by adding several junior data analysts. Tony Sharma, their data analytics director wanted to hire someone who is good at both tech and soft skills. Hence, he decided to conduct a SQL challenge which will help him understand both the skills.

**Task:**

Imagine yourself as the applicant for this role and perform the following task

1. There are 10 ad hoc requests for which the business needs insights.

2. You need to run SQL query to answer these requests.

3. The target audience of this dashboard is top-level management - hence you need to create a presentation to show the insights.

4. Be creative with your presentation, audio/video presentation will have more weightage.

**Ad-Hoc Requests**

1. Provide the list of markets in which customer "Atliq Exclusive" operates its business in the APAC region.

2. What is the percentage of unique product increase in 2021 vs. 2020? The final output contains these fields, unique\_products\_2020, unique\_products\_2021 , percentage\_chg

3. Provide a report with all the unique product counts for each segment and sort them in descending order of product counts. The final output contains 2 fields, segment , product\_count

4. Follow-up: Which segment had the most increase in unique products in 2021 vs 2020? The final output contains these fields, segment, product\_count\_2020, product\_count\_2021 difference

5. Get the products that have the highest and lowest manufacturing costs. The final output should contain these fields, product\_code product manufacturing\_cost

6. Generate a report which contains the top 5 customers who received an average high pre\_invoice\_discount\_pct for the fiscal year 2021 and in the Indian market. The final output contains these fields, customer\_code customer average\_discount\_percentage

7. Get the complete report of the Gross sales amount for the customer “Atliq Exclusive” for each month. This analysis helps to get an idea of low and high-performing months and take strategic decisions. The final report contains these columns: Month Year Gross sales Amount

8. In which quarter of 2020, got the maximum total\_sold\_quantity? The final output contains these fields sorted by the total\_sold\_quantity, Quarter total\_sold\_quantity

9. Which channel helped to bring more gross sales in the fiscal year 2021 and the percentage of contribution? The final output contains these fields, channel gross\_sales\_mln percentage

10. Get the Top 3 products in each division that have a high total\_sold\_quantity in the fiscal\_year 2021? The final output contains these fields, division , product\_code, product ,total\_sold\_quantity, rank\_order