SQL Data Warehouse and Analytics Project

Overview:
A complete data warehousing and analytics solution following the Medallion Architecture (Bronze, Silver, Gold
This project demonstrates end-to-end ETL, data modeling, and analytics workflows.

Approach:
• Designed Medallion Architecture: Raw → Cleaned → Analytical layers.
• Developed ETL pipelines in SQL for data ingestion and transformation.
• Built fact and dimension tables for analytical reporting.
• Created SQL-based KPIs and insights for decision support.

Tools Used:
SQL Server, ETL Scripts, Data Modeling, Data Architecture Design

Results:
• Streamlined data integration from multiple systems.
• Optimized queries for analytics and reporting.
• Improved performance through a star schema data model.

GitHub Link: https://github.com/Kahaf-Khaldi/SQL-Data-Warehouse-Project

India General Election 2024 Analysis

Overview:
An end-to-end Power BI + SQL project analyzing the 2024 Indian General Elections using five relational datase
The project models and visualizes alliance, party, and constituency-level performance.

Approach:
• Combined five datasets into a unified model using SQL joins.
• Built Power BI dashboards for national, state, and constituency-level insights.
• Created KPIs such as turnout, seat share, and alliance dominance.

Tools Used:
SQL, Power BI, Data Modeling, DAX, Visualization

Results:
• Delivered an interactive national dashboard with drill-through by state.
• Provided analytical insights into alliance and vote margin trends.

GitHub Link: https://github.com/Kahaf-Khaldi/India-General-Election-Result-Analysis-2024

Spotify Analysis

Overview:
Analyzed Spotify music trends with Power BI, covering 7,000+ albums, 3,800+ artists, and 12,000+ tracks. Explores listening patterns, top artists, and engagement insights.

Approach:
• Data Cleaning and Integration.
• Built measures for engagement and yearly growth.
• Designed visual dashboards with heatmaps and rankings.

Tools Used:
Power BI, DAX, Data Modeling, Excel

Results:
• Identified top artists and tracks across time.
• Discovered listening time peaks between late evenings and midnight.

GitHub Link: https://github.com/Kahaf-Khaldi/Spotify-Analysis

Blinkit Sales Analysis

Overview:
Analyzed Blinkit sales data using Python to derive insights on outlet performance, customer ratings, and sales

Approach:
• Performed EDA using Pandas and Matplotlib.
• Calculated KPIs for total and average sales, outlet size, and location performance.
• Visualized sales trends by outlet and product category.

Tools Used:
Python, Pandas, Matplotlib, Seaborn, Jupyter Notebook

Results:
• Identified top-performing outlets and key product categories.
• Developed data-driven recommendations for business optimization.

GitHub Link: https://github.com/Kahaf-Khaldi/Blinkit-Analysis

Web Scraping Project – MLK Speech

Overview:
Scraped Martin Luther King Jr.'s "I Have a Dream" speech text for natural language analysis.

Approach:
• Used Requests and BeautifulSoup to extract speech content.
• Cleaned HTML text using Regular Expressions.
• Prepared text data for NLP and sentiment analysis.

Tools Used:
Python, Requests, BeautifulSoup, Regex, Jupyter Notebook

Results:
• Generated clean text dataset ready for further NLP applications.

GitHub Link: https://github.com/Kahaf-Khaldi/Web-Scraping-project-MLK_Speech

UFood Data Analyst Case Study (Python)

Overview:
Analyzed UFood delivery data to understand customer behavior and campaign effectiveness.

Approach:
• Performed EDA and segmentation using Python.
• Analyzed relationships between demographics, purchase behavior, and campaign responses.
• Derived actionable marketing recommendations.

Tools Used:
Python, Pandas, Matplotlib, Seaborn

Results:
• Identified key customer clusters.
• Suggested strategies to improve engagement and retention.

GitHub Link: https://github.com/Kahaf-Khaldi/U-Food-Data-Analyst-Case-Study

HR Employee Attrition Analysis

Overview:
SQL project analyzing IBM HR attrition data to identify reasons behind employee turnover.

Approach:
• Created and structured database in MySQL.
• Performed EDA using SQL queries for salary, job role, and department trends.
• Identified patterns leading to high attrition.

Tools Used:
MySQL, SQL Queries, Data Analysis

Results:
• Found correlation between income, role type, and attrition risk.
• Proposed retention strategies based on findings.

GitHub Link: https://github.com/Kahaf-Khaldi/HR-Employee-Attrition-Analysis

Coffee Shop Sales — MySQL

Overview:
Analyzed a coffee shop's transactional sales data using MySQL to uncover business trends.

Approach:
• Built KPI queries for sales, orders, and quantities.
• Compared sales across time periods and outlets.
• Used SQL window functions for trend analysis.

Tools Used:
MySQL, SQL Analytics, Query Optimization

Results:
• Identified top-selling products and peak business hours.
• Delivered insights to improve operations and inventory planning.

GitHub Link: https://github.com/Kahaf-Khaldi/Coffee-shop-sales-mysql