

Name: Tejas Redkar

PRN: 1032210937

Panel: C, Batch- C2

Roll No: PC-44

DEC Lab Assignment -5

* Problem Statement

ETL using Tableau / Statistical / Power BI

* Objectives:

- The ability to visually analyze data & gain valuable insights
- Aims to simplify the process of data-exploration by providing a user-friendly interface that allows users to interact with data in real-time
- To enables users to create data visualizations, dashboards & reports.

* Input:

- MySQL database - dump.sql
- indiancrime.csv

* Output

Data analysis reports.

* Platform : Windows

* Conclusion

In conclusion, Tableau, Statistica & Power BI are powerful tools that streamline the ETL process & enable organizations to extract, transform, load, & analyze data efficiently. With their user-friendly interfaces, integration capabilities, automation features, & robust data visualization options, these tools empower users to derive valuable insights from large volumes of data. Incorporating Tableau, Statistica, or Power BI into an organization's ETL workflow can significantly enhance data analysis & decision-making process.

* FAQ's

Q1) Differentiate between Tableau & Power BI features

Ans Tableau :

- 1) Ease of use :
 - Known for its intuitive drag-and-drop interface
 - Suitable for both technical & non-technical users.
- 2) Data Connectivity : Offers a variety of data connections & integrations

- 3) Visualization Capabilities :
 - Strong emphasis on advanced & interactive visual visualizations
 - Extensive customization options for visual elements.
- 4) Deployment :
 - Supports on-premises & cloud deployment
- 5) Learning Curve :
 - Might have a steeper learning curve for certain advanced features.

Power BI :

- 1) Integration with Microsoft Stack :
 - Seamlessly integrates with other Microsoft products.
- 2) Data Transformation :
 - Robust ETL (Extract, Transform, Load) capabilities.
- 3) Collaboration :
 - Strong collaboration features with integration into Microsoft Teams.
- 4) Pricing :
 - Often considered more cost-effective, especially for organizations already using Microsoft products.
- 5) Natural Query Language :
 - Features ^{like} Q&A allow users to ask questions in natural language.

- 6) Learning Curve : • Generally considered user-friendly with a shorter learning curve.

Common Features:

- 1) Data Connectivity : • Both support a wide range of data sources
- 2) Dashboards : • Offer interactive & customizable dashboards.
- 3) Mobile Support : • Provide mobile access for analytics on the go
- 4) Security : • Include security features for data protection
- 5) Community & support : - Have active user communities & support resources.
- 6) Updates & Improvements : • Regularly updated with new features & improvements.

Q2) What is the purpose of Tableau dashboard

Ans The purpose of a Tableau dashboard is to visually represent & analyze complex data sets, enabling users to gain actionable insights at a glance. It facilitates interactive exploration, making data-driven decisions accessible to both technical & non-technical users.

Ans ✓