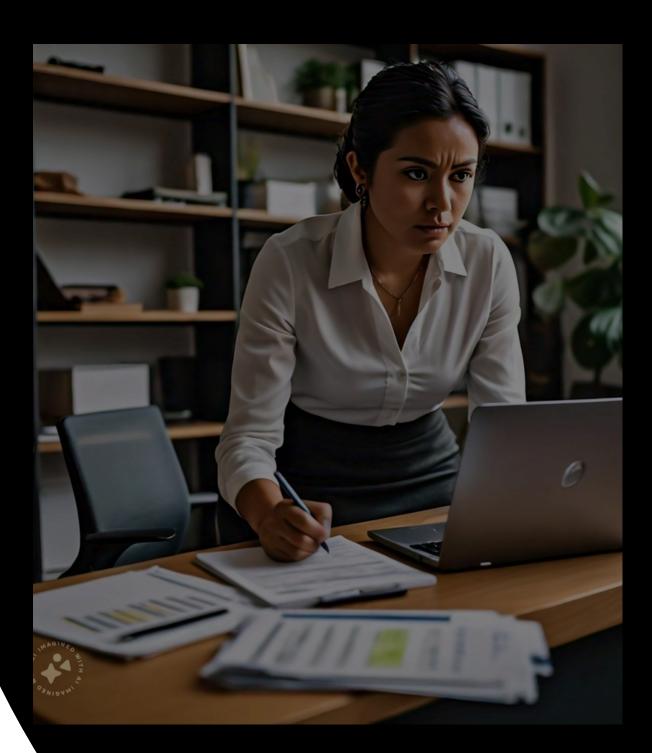# Snowflake

OUR MISSION :

"Our mission is to empower learners worldwide through innovative technology, personalized learning experiences, and accessible educational resources. We strive to cultivate a community where every individual can achieve their full potential, regardless of their background or circumstances."

OUR VALUES :

"To pioneer the future of education by leveraging cutting-edge technology to make learning more engaging, effective, and inclusive. We envision a world where education transcends boundaries, creating opportunities for lifelong learning and fostering a society enriched by knowledge and creativity."

COURSE CURRICULUM:

Week 1: Snowflake Fundamentals Review
- Day 1-2: Introduction to Snowflake
  - Overview of Snowflake architecture and key features.
  - Setting up a Snowflake account and exploring the user interface.
- Day 3-4: Core Snowflake Concepts
  - Understanding Snowflake's data warehousing capabilities.
  - Basic SQL operations in Snowflake.
- Day 5: Data Loading and Unloading
  - Loading data into Snowflake from various sources.
  - Unloading data from Snowflake to external storage.

COURSE CURRICULUM:

Week 2: Advanced Snowflake Architecture
- Day 1-2: Virtual Warehouses
  - Managing virtual warehouses and understanding scaling.
  - Performance tuning and best practices.
- Day 3-4: Snowflake Storage
  - Deep dive into Snowflake's storage architecture.
  - Understanding micro-partitions and data clustering.
- Day 5: Snowflake Query Processing
  - How Snowflake processes queries.
  - Best practices for query optimization.

COURSE CURRICULUM:

Week 3: Data Engineering with Snowflake
- Day 1-2: Advanced SQL Techniques
  - Window functions, common table expressions, and advanced joins.
  - Hands-on: Writing complex SQL queries in Snowflake.
- Day 3-4: Data Transformation
  - Using Snowflake's native transformation capabilities.
  - Hands-on: Implementing data transformation pipelines.
- Day 5: Stream and Task Management
  - Implementing streams and tasks for automated data processing.
  - Hands-on: Setting up and managing streams and tasks.

COURSE CURRICULUM:

Week 4: Data Sharing and Security
- Day 1-2: Data Sharing
  - Secure data sharing in Snowflake.
  - Hands-on: Setting up and managing data shares.
- Day 3-4: Security and Compliance
  - Understanding Snowflake's security model.
  - Implementing role-based access control (RBAC) and network policies.
- Day 5: Data Masking and Encryption
  - Data masking techniques.
  - Managing encryption in Snowflake.

COURSE CURRICULUM:

Week 5: Snowflake Integration
- Day 1-2: Integration with BI Tools
  - Connecting Snowflake to BI tools (Tableau, Power BI, etc.).
  - Hands-on: Creating visualizations with integrated data.
- Day 3-4: Data Integration and ETL
  - Using ETL tools with Snowflake (e.g., Matillion, Talend).
  - Hands-on: Building ETL pipelines.
- Day 5: APIs and Connectors
  - Using Snowflake's APIs and connectors.
  - Hands-on: Integrating Snowflake with external applications.

COURSE CURRICULUM:

Week 6: Advanced Analytics and Data Science
- Day 1-2: Machine Learning Integration
  - Integrating Snowflake with ML platforms (e.g., DataRobot, H2O.ai).
  - Hands-on: Building ML models with Snowflake data.
- Day 3-4: Advanced Analytics
  - Using Snowflake's analytical functions and UDFs (User-Defined Functions).
  - Hands-on: Performing advanced analytics in Snowflake.
- Day 5: Geospatial Data
  - Working with geospatial data in Snowflake.
  - Hands-on: Analyzing geospatial data.

COURSE CURRICULUM:

Week 7: Performance Optimization and Monitoring
- Day 1-2: Performance Tuning
  - Techniques for optimizing Snowflake performance.
  - Hands-on: Tuning queries and optimizing data models.
- Day 3-4: Monitoring and Alerting
  - Setting up monitoring and alerting in Snowflake.
  - Hands-on: Using Snowflake's monitoring tools.
- Day 5: Cost Management
  - Understanding Snowflake's pricing model.
  - Best practices for cost optimization.

COURSE CURRICULUM:

Week 8: Final Project and Presentations
- Day 1-4: Project Development
  - Students work on a comprehensive final project that integrates multiple aspects of the curriculum.
- Day 5: Project Presentation and Evaluation
  - Students present their projects.
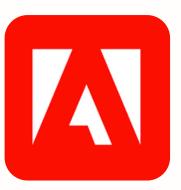 - Feedback and evaluation.

Our Partners Company's

FOR SUPPORT

+91 9652379012

www.techteachedsols.com

tech.ed.sols@gmail.com

THANK YOU

TS
TECH TEACH
EDUCATIONALSOLUTIO

www.techteachedsols.com