SNOWFLAKE DATA ENGINEER ADVANCED IN 2 DAYS

Prerequisites: Snowflake data engineer in 2 days course completion

Duration: 2 Days (8 Hrs./Day)

Course Objective: This two-day, role-specific course presents additional topics and a deep dive into select subjects for the Data Engineer through the lens of the data engineering lifecycle. The course covers Snowflake concepts, features, considerations, and best practices intended for stakeholders who will be accessing, developing, and querying datasets for analytic tasks, and building data pipelines in Snowflake. This course consists of data engineering concepts delivered through lectures, demos, labs, and discussions.

Lab Requirement: Koenig DC/Linux.

Module 1 - Snowflake Overview and Architecture

Overview and Architecture Recap

Module 2 - Data Storage

Table Formats and Iceberg Tables

Iceberg Tables in Snowflake

Hybrid Tables in Snowflake

Define and Implement Hybrid Tables

Cost Analysis and Limitations

Module 3 - Ingestion

Schema Detection

Schema Evolution

Visualizing Data Ingestion

Module 4 - Transformation

Developing for Snowflake Overview

User Defined Functions (Java and Python)

User Defined Table Functions (Java and Python)

Snowpark Stored Procedures (Java, Scala, and Python)

Working With Snowpark

Module 5 - Data Platform Architecture

Data Modelling

Data Vault Introduction

Module 6 - Supporting Platform Features

Data Governance Overview

Classification and Object Tagging

Object Dependencies

Access History

Snowflake Policies

Tag-based Masking Policies

External Tokenization

Module 7 - Performance Optimization

Search Optimization Service

Query Acceleration Service

Module 8 - Delivery

Snowflake Python API

Snowflake SQL API

Streamlit in Snowflake

Module 9 - Orchestration

Scheduling Workflows with Airflow

Snowflake Python Task API

Module 10 - Management and Observability

Observability on Snowflake

No-code Pipeline Observability Within Snowsight

Cost Governance Framework

Logging and Tracing