

# SNOWFLAKE FUNDAMENTALS

## Course Content

### **Snowflake Architecture and Overview**

- Snowflake Technical Overview
- Cloud Services Layer
- Compute Layer
- Storage Layer

### **Data Movement**

- Data Loading
- Unloading
- Best Practices

### **Snowflake Objects & Commands**

- Query Constructs
- Data Description Language (DDL)
- Data Manipulation Language (DML)

### **Snowflake SQL Support for Data Analysis**

- SQL Support and Query Best Practices
- SQL Analytic Functions
- High Performing Estimation Functions
- UDF and Stored Procedure
- Demo Query Profile

### **Managing Security**

- Data Encryption
- Authentication
- Role-Based Access Control

### **Semi-structured Data**

- Capabilities and Best Practices for working with semi-structured data in Snowflake
- Caching
- Caching Features in Snowflake
- Best Practices of using caching for performance and cost optimization

### **Snowflake Clients and Ecosystem**

- Snowflake Clients and Connectors Overview
- SnowSQL – Snowflake CLI
- Continuous Data Protection
- Time Travel in Snowflake
- Cloning in Snowflake

### **Data Sharing**

- Snowflake Data Sharing Overview
- Performance & Concurrency
- Query Profile
- Micro-Partitions & Data Clustering
- Scaling a Virtual Warehouse

### **Account and Resource Management and Monitoring**

- System Resource Usage and Billing
- Managing Virtual Warehouses
- Workload independence and segmentation
- Monitoring Tool: Resource Monitors
- Monitoring Tools: Information Schema and Account Usage