Snowflake Syllabus

Introduction to Snowflake

- How different from traditional DB like (Oracle ...)
- Quick start to Snowflake and accessing the trial account
- Creating warehouse, DB, Schema, and tables
- Accessing different roles and using it Working with worksheets
- Understanding different types of accounts

Understand Cloud Platforms

- AWS and understanding S3 storage
- Snowflake architecture and caching.
- AZURE and understanding blob storage
- GCP and understanding of Bucket storage

Data Loading and Unloading in Snowflake Cloud Platform

- File formats
- Internal and external storage Copy into usage
- Snowflake internal storage
- Accessing Cloud storage data into Snowflake(GCP, AZURE and AWS) Data unloading

Snowpipe

- Accessing Snowpipe
- PUT and GET commands
- Bulk loading from cloud storage
- Continuous loading

Partner Connect with Snowflake

- Snowflake Connector and use cases Python
- BI connectors use cases.,
- Other connectors hands-on

Handling JSON and Semi structure data in Snowflake Cloud Data Platform

- Variant Datatype
- File format options
- Creating stages
- Loading JSON semi-structured data into SF tables
- Accessing JSON with select statement

Scheduling with Snowflake

- Creating Tasks

- Streams
- Accessing procedures with tasks
- Scheduling as per time with Different time zones Automate loading process Daily and Weekly

Secure Data Sharing

- Usage of sharing data
- Sharing data with different accounts
- Sharing data with non-SF accounts using reader accounts Importance of reader accounts
- Privileges in data sharing
- Challenges with cross-region sharing and understanding replication
- Connecting shared objects with BI tools like POWER BI
- Limitations with Data sharing

Cloning in Snowflake

- Access Control Privileges for Cloned Objects
- Cloning and Snowflake Objects
- Impact of DDL on Cloning
- Impact of DML and Data Retention on Cloning

Time travel & Failsafe in Snowflake

- Introduction to Time Travel
- Querying Historical Data
- Enabling and Disabling Time Travel
- Data Retention Period
- Cloning Using Time Travel (Databases, Schemas, and Tables Only)

Clustering and Performance techniques

- Creating multi clusters on large tables
- Performance techniques