

AZURE DATA FACTORY

Introduction:

- Big Data Introduction
- Azure Data Factory Introduction
- Azure Data Factory __ Important Concepts in Azure Data Factory
- Azure Data Factory __ Create Azure Free Account for Azure Data Factory

Integration Runtime and Types:

- Azure Data Factory __ Integration runtime in azure data factory __ Azure IR

Azure Data Factory - Real Time Use case1:

- ADF Lab1__ Create Your First Azure Data Factory
- ADF Lab2__ Create Your First Pipeline in Azure Data Factory

Azure Storage Account Integration with Azure Data Factory:

- ADF Lab3__ Copy multiple files from blob to blob
- ADF Lab4_ Filter activity __ Dynamic Copy Activity
- ADF Lab5__ Get File Names from Folder Dynamically

Deep dive into Copy Activity in Azure Data Factory:

- ADF Lab6__ Copy Activity Behaviour in Azure Data Factory
- ADF Lab7__ Copy Activity Performance Tuning in Azure Data Factory

Validation in Azure Data Factory:

- ADF Lab8__ Get Count of files from folder in azure data factory
- ADF Lab9__ Validate copied data between source and sink in Azure Data Factory

Azure SQL Database integration with Azure Data Factory:

- Azure SQL Databases - Introduction __ Relational databases in Azure
- Creating Your First Azure SQL Database _Deployment Models __Purchasing Modes
- ADF Lab10__ Overwrite and Append Modes in Copy Activity in Azure Data Factory

Full Load to Azure Synapse in Azure Data Factory:

- ADF Lab11__ Copy Data from Azure SQL Database to Azure Synapse in Azure Data Factory
- ADF Lab12__ Copy multiple tables to Azure Synapse in Bulk with Lookup & ForEach in Data Factory

Logging and Notification __ Azure Logic Apps:

- ADF Lab13__ Log Pipeline Executions to SQL Table using Azure Data Factory
- ADF Lab14 _ Custom Email Notifications _ Send Error notification with logic app
- ADF Lab15 __ Use Foreach loop activity to copy multiple Tables- Step by Step Explanation

Incremental Load to Azure Synapse in Azure Data Factory:

- ADF Lab16 __Incremental Load or Delta load from SQL to blob Storage in Azure Data factory
- ADF Lab17 __ Multi Table Incremental Load or Delta load from SQL to to Azure Synapse
- ADF Lab18 __Incrementally copy new and changed files based on Last Modified Date

Azure Key Vault integration with Azure Data Factory:

- Lecture 26: ADF Lab19 __ Azure Key Vault, Secure secrets, keys & certificates in Azure Data

Azure Data Factory Triggers:

- Azure Data Factory __ Event Based Trigger in Azure Data Factory
- ADF Lab21 __ Tumbling window trigger dependency & parameters
- ADF Lab22 __ Schedule Trigger in Azure Data Factory

Self Hosted Integration Runtime:

- ADF Lab23- Copying On Premise data using Azure Self Hosted integration Runtime

Data Migration from On premise SQL Server to Azure Synapse using Azure Data Factory:

- ADF Lab24 - Load data from on premise sql server to Azure Synapse

Data Migration to Azure Synapse with polybase and Bulk insert:

- ADF Lab25 -Copy Data from sql server to to Azure Synapse with polybase & Bulk Insert

Data Migration from On premise File System to Azure Synapse using Azure Data Factory:

- ADF Lab26 - Copy Data from on-premise File System to Azure Synapse

Copying data from REST API using Azure Data Factory:

- ADF Lab27 -Loop through REST API copy data 2 ADLS Gen2 Linked Service Parameters

Salesforce Integration with Azure Data Factory:

- ADF Lab28 _Copy data from Salesforce to ADLS Gen2 using ForEach & Copy in ADF V2

AWS S3 integration with Azure Data Factory:

- ADF Lab29 -Migrate Data from AWS S3 Buckets to ADLS Gen2 using ADF (v2)

Activities in Azure Data Factory:

- ADF Lab30 -Switch Activity In Azure Data Factory __Copy, Move and delete data
- ADF Lab31 _Until Activity in Azure Data Factory __ Parameters & Variables
- ADF Lab32 -Copy Recent Files From Blob input to Blob Output folder without LPV

Snowflake integration with Azure Data Factory:

- ADF Lab33 -Copy data from Azure Snowflake to Azure Synapse

Azure CosmosDB integration with Azure Data Factory:

- ADF Lab34-Copy data from Azure SQLDB to CosmosDB_Copy data from blob to cosmosDB

Advanced Concepts in Azure Data Factory:

- ADF Lab35 -Nested ForEach in ADF _ pass parameters from Master to child pipeline
- ADF Lab36 -High Availability of Self Hosted IR &Sharing IR with other ADF

Data Flows Introduction:

- Azure Data Flows Introduction __ Setup Integration Runtime for Data Flows
- Azure Data Flows __ Basics of SQL Joins for Azure Data Flows

Joins in Data Flows:

- ADF Lab37 -Aggregations and Derive Column Transformations
- ADF Lab38 _Joins in Azure DataFlows
- ADF Lab39 -Advanced Join Transformations with filter and Conditional Split

Data Flows - Data processing use case1:

- ADF Lab40 -Restart data processing from failure
- ADF Lab41 -Remove Duplicate Rows &Store Summary Credit Stats __ Azure Data Flows
- ADF Lab42 -Difference Between Join vs.Lookup Transformation& Merge Functionality

Dimensions in Data Flows:

- ADF Lab43 -Slowly Changing Dimension Type1 (SCD1) with HashKey Function and Load to Azure Synapse
- ADF Lab44 -Slowly Changing Dimension Type(SCD1) with SurrogateKey Transformation and Load to Azure Synapse
- ADF Lab45 -Slowly Changing Dimension Type2 (SCD2) and Load to Azure Synapse

Data Flows - Data processing use case2:

- ADF Lab46 - Flatten Transformation and Rank, Dense_Rank Transformations
- ADF Lab47 -Data Flows Performance Metrics and Data Flow Parameters
- ADF Lab48 -How to use pivot and unpivot Transformations
- ADF Lab49 -Data Quality Checks and Logging using Data Flows

Batch Account Integration with Azure Data Factory:

- ADF Lab50 - Custom Activity in Azure Data Factory

Azure Functions Integration with Azure Data Factory:

- ADF Lab51 - Azure Functions Integration with Azure Data Factory

Azure HDInsight Integration with Azure Data Factory:

- ADF Lab52 - Azure HDInsight with Spark Cluster

Azure Databricks Integration with Azure Data Factory:

- ADF Lab53 - Azure Data Factory Integration with Azure Databricks

Azure Data Lake Analytics with Azure Data Factory:

- ADF Lab54 - Azure Data Lake Analytics integration with Azure Data Factory

Azure Machine Learning:

- ADF Lab55 - Azure Machine Learning

Azure Automation Integration with Azure Data Factory:

- Auto Termination of server with Automation Account

Azure Devops - CICD

- ADF Lab56 - Azure Data Factory CICD Pipeline

Azure Data Factory Projects:

- ADF Lab57 - Azure Data Factory project-1
- ADF Lab58 - Azure Data Factory project-2

Azure Data Factory Interview Question and Answers:

- BI Master Program Interview Question and Answers

Synapse Analytics:

- Lab59 : External Tables creation in Azure Synapse
- Lab60 : Project on Azure Synapse Workspace

Additional Content:

- Python Basics
- Python Data Types
- Python Functions
- Python Modules and packages

Additional Content:

- Spark Architecture
- Spark RDD
- Spark SQL
- Spark SQL Functions
- Spark SQL Advanced