**DP-900**

* [Cloud Computing Services | Microsoft Azure](https://azure.microsoft.com/en-in/)
* [Exam DP-900: Microsoft Azure Data Fundamentals - Learn | Microsoft Docs](https://docs.microsoft.com/en-us/learn/certifications/exams/dp-900)
* [MicrosoftLearning/DP-900T00A-Azure-Data-Fundamentals: DP-900 ILT lab instructions (github.com)](https://github.com/MicrosoftLearning/DP-900T00A-Azure-Data-Fundamentals)

**DP-203**

* [Exam DP-203: Data Engineering on Microsoft Azure - Learn | Microsoft Docs](https://docs.microsoft.com/en-us/learn/certifications/exams/dp-203)
* [MicrosoftLearning/DP-203T00-Data-Engineering-on-Microsoft-Azure (github.com)](https://github.com/MicrosoftLearning/DP-203T00-Data-Engineering-on-Microsoft-Azure)

**Azure Data Factory**

* [Create an Azure data factory using the Azure Data Factory UI - Azure Data Factory | Microsoft Docs](https://docs.microsoft.com/en-us/azure/data-factory/quickstart-create-data-factory-portal#debug-the-pipeline)
* [Copy Data tool Azure Data Factory - Azure Data Factory | Microsoft Docs](https://docs.microsoft.com/en-us/azure/data-factory/copy-data-tool)
* [Linked services in Azure Data Factory - Azure Data Factory | Microsoft Docs](https://docs.microsoft.com/en-us/azure/data-factory/concepts-linked-services)
* [Datasets - Azure Data Factory | Microsoft Docs](https://docs.microsoft.com/en-us/azure/data-factory/concepts-datasets-linked-services)
* [Pipeline execution and triggers in Azure Data Factory - Azure Data Factory | Microsoft Docs](https://docs.microsoft.com/en-us/azure/data-factory/concepts-pipeline-execution-triggers)
* [Integration runtime - Azure Data Factory | Microsoft Docs](https://docs.microsoft.com/en-us/azure/data-factory/concepts-integration-runtime)
* [Mapping data flows - Azure Data Factory | Microsoft Docs](https://docs.microsoft.com/en-us/azure/data-factory/concepts-data-flow-overview)
* [Mapping data flow Debug Mode - Azure Data Factory | Microsoft Docs](https://docs.microsoft.com/en-us/azure/data-factory/concepts-data-flow-debug-mode)
* [Schema drift in mapping data flow - Azure Data Factory | Microsoft Docs](https://docs.microsoft.com/en-us/azure/data-factory/concepts-data-flow-schema-drift)
* [Expression builder in mapping data flow - Azure Data Factory | Microsoft Docs](https://docs.microsoft.com/en-us/azure/data-factory/concepts-data-flow-expression-builder)
* [Expression functions in the mapping data flow - Azure Data Factory | Microsoft Docs](https://docs.microsoft.com/en-us/azure/data-factory/data-flow-expression-functions)
* [How to use parameters and expressions in Azure Data Factory - Azure Data Factory | Microsoft Docs](https://docs.microsoft.com/en-us/azure/data-factory/how-to-expression-language-functions)
* [Mapping data flow transformation overview - Azure Data Factory | Microsoft Docs](https://docs.microsoft.com/en-us/azure/data-factory/data-flow-transformation-overview)
* [Append Variable Activity in Azure Data Factory - Azure Data Factory | Microsoft Docs](https://docs.microsoft.com/en-us/azure/data-factory/control-flow-append-variable-activity)
* [Azure Data Factory connector overview - Azure Data Factory | Microsoft Docs](https://docs.microsoft.com/en-us/azure/data-factory/connector-overview)
* [Cost of Ownership Calculator | Microsoft Azure](https://azure.microsoft.com/en-in/pricing/tco/)

Module:

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| --- | --- | --- |
| Sr. No | Concept | Link |
| 1 | ADF Pipeline Triggers | https://docs.microsoft.com/en-us/azure/data-factory/concepts-pipeline-execution-triggers |
| 2 | Choose between slowly changing dimension types | https://docs.microsoft.com/en-us/learn/modules/populate-slowly-changing-dimensions-azure-synapse-analytics-pipelines/3-choose-between-dimension-types |
| 3 | Azure Stream Analytics Windowing Functions | https://docs.microsoft.com/en-us/azure/stream-analytics/stream-analytics-window-functions |
| 4 | Guidance for designing distributed tables using dedicated SQL pool in Azure Synapse Analytics | 1. <https://docs.microsoft.com/en-us/azure/synapse-analytics/sql-data-warehouse/sql-data-warehouse-tables-distribute>. 2. https://docs.microsoft.com/en-us/azure/synapse-analytics/sql-data-warehouse/design-guidance-for-replicated-tables |
| 5 | Integration runtime in Azure Data Factory | https://docs.microsoft.com/en-us/azure/data-factory/concepts-integration-runtime |
| 6 | Guidelines for Folder structure in ADLSG2 | https://www.mssqltips.com/sqlservertip/6807/design-azure-data-lake-store-gen2/ |
| 7 | Query storage files with serverless SQL pool in Azure Synapse Analytics | <https://docs.microsoft.com/en-us/azure/synapse-analytics/sql/query-data-storage#query-multiple-files-or-folders> |
| 8 | Supported file formats | <https://docs.microsoft.com/en-us/azure/data-factory/supported-file-formats-and-compression-codecs> |
| 9 | Copy Behaviour in ADF | <https://docs.microsoft.com/en-us/azure/data-factory/connector-file-system> |
| 10 | Access tiers for Azure Blob Storage - hot, cool, and archive | <https://docs.microsoft.com/en-us/azure/storage/blobs/storage-blob-storage-tiers> |
| 11 | Partitioning tables in dedicated SQL pool | <https://docs.microsoft.com/en-us/azure/synapse-analytics/sql-data-warehouse/sql-data-warehouse-tables-partition> |
| 12 | Secure a data warehouse in Azure Synapse Analytics | https://docs.microsoft.com/en-us/learn/modules/secure-data-warehouse-azure-synapse-analytics/ |
| 13 | Choosing a stream processing technology in Azure | https://docs.microsoft.com/en-us/azure/architecture/data-guide/technology-choices/stream-processing |

**Based On Labs:**

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| --- | --- |
| Concept | Link |
| Delta Lake Architecture | <https://delta>.io/ |
| Structured Streaming | <https://docs>.microsoft.com/en-us/azure/databricks/getting-started/spark/streaming |
| Hyperspace | <https://docs>.microsoft.com/en-us/azure/synapse-analytics/spark/apache-spark-performance-hyperspace?pivots=programming-language-csharp |
| Microsoft Spark Utilities | <https://docs>.microsoft.com/en-us/azure/synapse-analytics/spark/icrosoft-spark-utilities?pivots=programming-language-csharp |
| PySpark | <https://www>.tutorialspoint.com/pyspark/index.htm |
| Star Schema | <https://docs>.microsoft.com/en-us/power-bi/guidance/star-schema |
| Clustered Columnstore index | <https://docs>.microsoft.com/en-us/sql/relational-databases/indexes/columnstore-indexes-overview?view=sql-server-ver15 |
| Data Flow Transformations | <https://docs>.microsoft.com/en-us/azure/data-factory/data-flow-transformation-overview |
| OPENROWSET | https://docs.microsoft.com/en-us/sql/t-sql/functions/openrowset-transact-sql?view=sql-server-ver15. |
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| Over Clause, Aggregate Function, Analytical function, ROWS or Range | <https://docs>.microsoft.com/en-us/sql/t-sql/queries/select-over-clause-transact-sql?view=sql-server-ver15 |
| Workload Management | <https://docs>.microsoft.com/en-us/azure/synapse-analytics/sql-data-warehouse/sql-data-warehouse-workload-management |
| Explain with recommendations | https://docs.microsoft.com/en-us/sql/t-sql/queries/explain-transact-sql?view=azure-sqldw-latest |
| System Dynamic Management Views(DMV) | https://docs.microsoft.com/en-us/sql/relational-databases/system-dynamic-management-views/system-dynamic-management-views?view=sql-server-ver15 |
| DBCC (Database Console Command) | https://docs.microsoft.com/en-us/sql/t-sql/database-console-commands/database-console-commands?view=sql-server-ver15 |
| Clustered Column store Index | https://docs.microsoft.com/en-us/sql/relational-databases/indexes/columnstore-indexes-overview?view=sql-server-ver15 |
| Azure Synapse Link for Cosmos DB | <https://docs>.microsoft.com/en-us/azure/cosmos-db/synapse-link |
| Azure Cosmos DB Analytical store | https://docs.microsoft.com/en-us/azure/cosmos-db/analytical-store-introduction |
| Security in Azure Synapse Analytics | https://docs.microsoft.com/en-us/security/benchmark/azure/baselines/synapse-analytics-security-baseline |
| Windowing Functions | https://docs.microsoft.com/en-us/stream-analytics-query/windowing-azure-stream-analytics |
| DataBricks stream from event hubs | https://docs.microsoft.com/en-us/azure/databricks/scenarios/databricks-stream-from-eventhubs |
| Structured streaming Programming | [https://spark.apache.org/docs/latest/structured-streaming-programming-guide.html#](https://spark.apache.org/docs/latest/structured-streaming-programming-guide.html) |