Data Platform Learning Path

	Topics	Topic Details	Learning Method	References
Week 1	SQL Server 2017 on Linux SQL Server on Linux What's new in SQL Server 2019	*fundamentals of SQL Server on Linux* *run SQL Server on Linux containers* *deploy SQL Server on Linux* *tune your SQL Server on Linux deployment*	Self Study/HOL	https://docs.microsoft.com/en-us/learn/paths/sql-server-2017-on-linux/ https://docs.microsoft.com/en-us/sql/sql-server/what-s-new-in-sql-server-ver15?view=sqlallproducts-allversions https://docs.microsoft.com/en-us/sql/linux/sql-server-linux-overview?view=sqlallproducts-allversions
Week 2	Azure for the Data Engineer	*Cloud Use Cases* *ADS(Storage/ADL/CosmosDB/Hdinsights /Stream Analytics etc*	Self Study/HOL	https://docs.microsoft.com/en-us/learn/paths/azure-for-the-data-engineer/
	Store Data in Azure	*Azure Storage* *Azure SQL Database* *Azure Cosmos DB*	Self Study/HOL	https://docs.microsoft.com/en-us/learn/paths/store-data-in-azure/
Week 3	Working with Relational Data in Azure Azure SQL Managed Instance	*Azure SQL Database* *SQL Elastic Pools* *PostgreSQL Server* *Secuirty* *SQL Managed Instance*	Self Study/HOL	https://docs.microsoft.com/en-us/learn/paths/work-with-relational-data-in-azure/ https://channel9.msdn.com/Series/Windows-Azure-SQL-Database/02?term=Azure%20fundamentals&video-31to60=true&video-gt60=true&lang-en=true https://github.com/MicrosoftDocs/azure-docs/blob/master/articles/sql-database/sql-database-managed-instance-get-started.md
Week 4	Implement a Data Warehouse with Azure SQL DataWarehouse	*create an Azure SQL Data Warehouse* *Issue queries and visualize data from an Azure SQL Data Warehouse* *Import data into Azure SQL Data Warehouse using Polybase* *Understand the security controls provided by Azure Storage and Azure SQL Data Warehouse* *Large Scale Data Processing with Azure Data Lake Storage Gen2*	Self Study/HOL	https://docs.microsoft.com/en-us/learn/paths/implement-sql-data-warehouse/ https://docs.microsoft.com/en-us/learn/paths/data-processing-with-azure-adls/

Week 5	Large Scale Data Processing with Azure Data Lake Storage Gen2	*Introduction to Azure Data Lake Storage* *Upload data to Azure Data Lake Storage Gen2*	Self Study/HOL	https://docs.microsoft.com/en-us/learn/modules/upload-data-to-azure-data-lake-storage/index
Week 6	Work with NoSQL data in Azure Cosmos DB	*create an Azure Cosmos DB account, database, and container built to scale as your application grows.* *compare the different APIs available in Azure Cosmos DB* *data to your database and query NoSQL data in Azure Cosmos DB* *Insert & QUery Data* *Store & Access NoSQL Data* *Optimize Performance using partition* *Distribute your data globally*	Self Study/HOL	https://docs.microsoft.com/en-us/learn/paths/work-with-nosql-data-in-azure-cosmos-db/ https://channel9.msdn.com/Blogs/Azure/SQL-Saturday-Holland-2015-Introduction-to-Azure-DocumentDB?term=Azure%20fundamentals&video-31to60=true&video-gt60=true&lang-en=truez
Week 7	Data Modernization: Phase I & 2 : Pre-Migration & Migration	*Services and tools available for data migration scenarios* *Conducting an inventory of the databases* *Identifying potential migration issues or blockers* *Homogenous vs heterogenous migrations*	Self Study/HOL	*https://docs.microsoft.com/en-us/azure/dms/dms-tools-matrix* *Cassandra to Azure Cosmos DB* *MongoDB to Azure Cosmos DB* *Access to Azure SQL Database* *Access to SQL Server* *DB2 to SQL Server* *DB2 to Azure SQL Database* *MySQL to Azure SQL Database* *MySQL to SQL Server* *Oracle to Azure Database for PostgreSQL* *Oracle to Azure SQL Database* *Oracle to Azure SQL Data Warehouse* *Oracle to SQL Server* *SAP ASE to SQL Server* *SQL Server to Azure SQL Database* *SQL Server to Azure SQL Database Managed Instance* *SQL Server to Azure SQL Data Warehouse* *SQL Server to SQL Server*
	Discover	*identify existing data sources and details about the features that are being used* *Tools: Azure Migrate, MAP Toolkit, other services & tools*	Self Study/HOL	
	Assess	*Understand any gaps between the source and target instances* *Data Migration Assistant (DMA) or Ora2PG etc*	Self Study/HOL	
Week 8	Convert	*Convert the schema to work in the target environment: Methods & Tools (DMA/SSMA/Ora2PG etc)* *Data Migration method(s)* *Data sync and Cutover*	Self Study/HOL	

	Phase 3: Post Migration	post-migration tasks to ensure that everything is functioning as smoothly and efficiently as possible Develop validation tests Set up test environment Run validation tests Run performance tests	Self Study/HOL	