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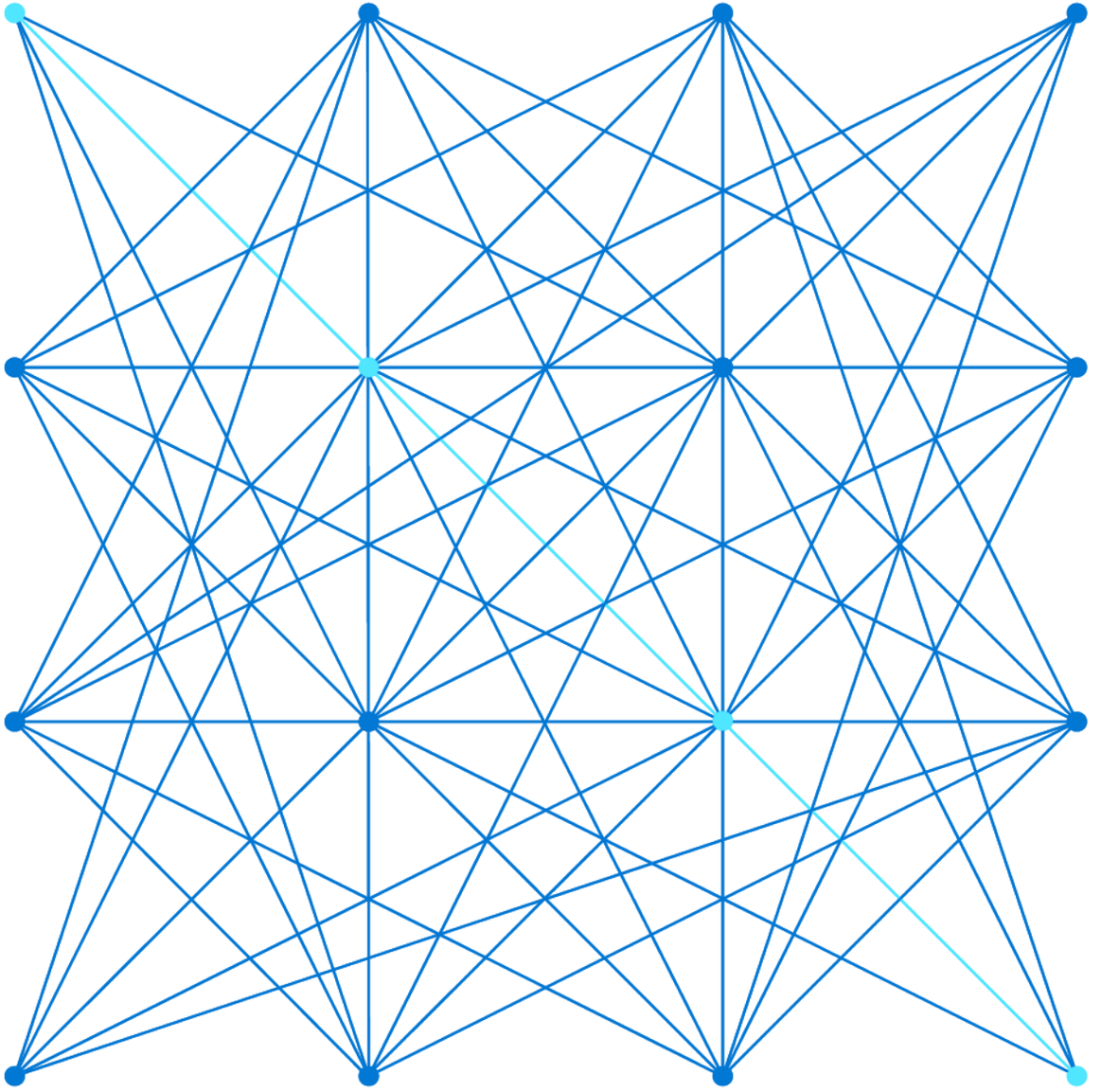
Power Platform

Online Role-based training resources:

# Microsoft Learn

https://docs.microsoft.com/en-us/learn/

# PL-300 Analyzing Data with Power BI



# Module 2: Get Data in Power BI

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# Learning Objectives

You will learn the following concepts:

- Getting data from various data sources
- Optimizing Performance
- Resolving data errors

# Lesson 1: Get data from various data sources

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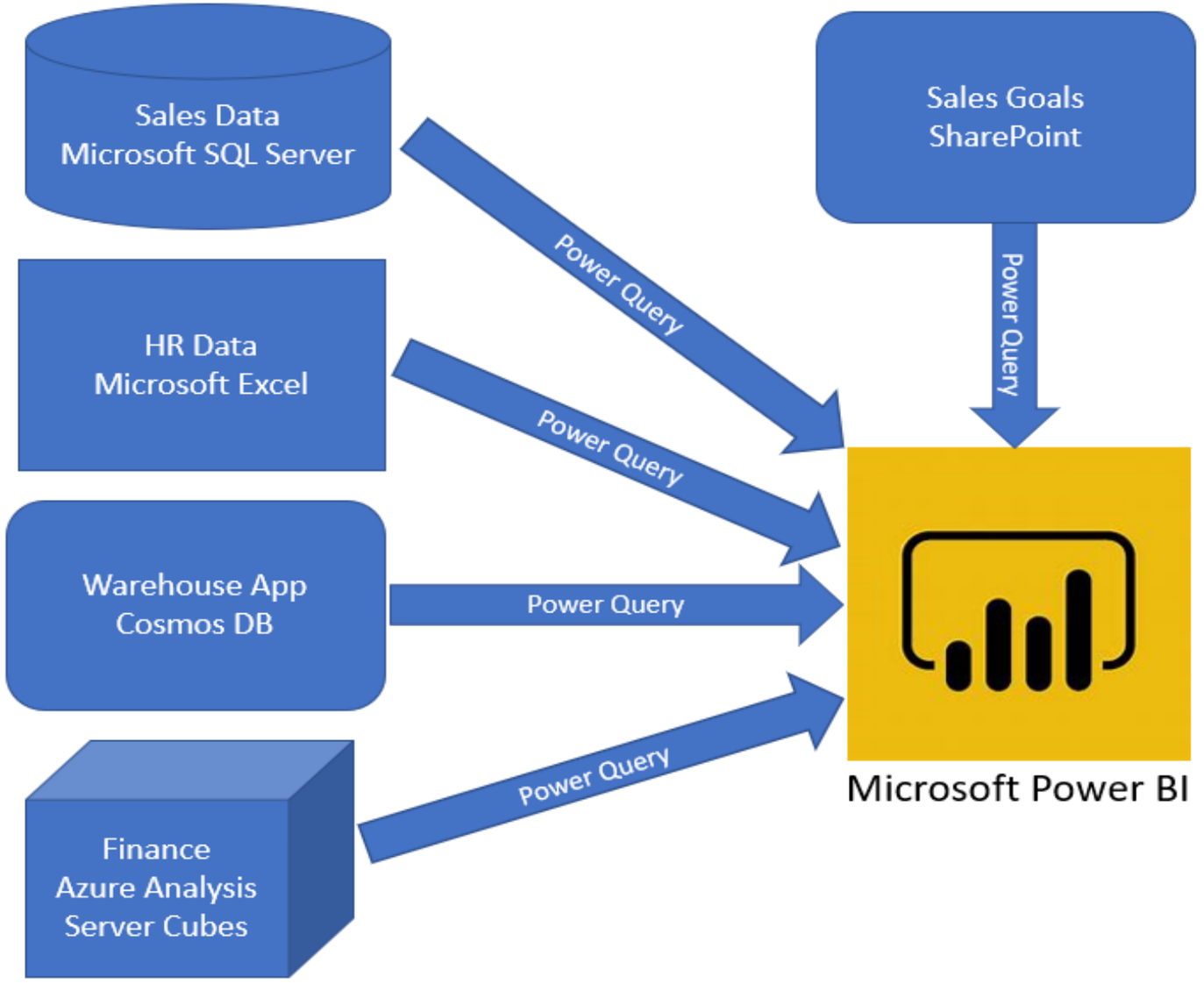
# Introduction to getting data

The first step in the data analysis process is identifying and getting data.



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# Get data from flat files

ResellerSales_202006.csv

File Origin: 1200: Unicode | Delimiter: Comma | Data Type Detection: Based on first 200 rows

| SalesOrderNumber | SalesOrderLineNumber | OrderDate | DueDate | ShipDate | ProductKey | ResellerKey | PromotionKey |
|---|---|---|---|---|---|---|---|
| SO71691 | 2 | 6/1/2020 | 6/11/2020 | 6/8/2020 | 434 | 104 | |
| SO71691 | 4 | 6/1/2020 | 6/11/2020 | 6/8/2020 | 222 | 104 | |
| SO71774 | 1 | 6/1/2020 | 6/11/2020 | 6/8/2020 | 436 | 609 | |
| SO71774 | 2 | 6/1/2020 | 6/11/2020 | 6/8/2020 | 418 | 609 | |
| SO71775 | 1 | 6/1/2020 | 6/11/2020 | 6/8/2020 | 573 | 595 | |
| SO71775 | 2 | 6/1/2020 | 6/11/2020 | 6/8/2020 | 555 | 595 | |
| SO71775 | 3 | 6/1/2020 | 6/11/2020 | 6/8/2020 | 490 | 595 | |
| SO71776 | 1 | 6/2/2020 | 6/12/2020 | 6/9/2020 | 514 | 106 | |
| SO71777 | 1 | 6/2/2020 | 6/12/2020 | 6/9/2020 | 408 | 128 | |
| SO71777 | 2 | 6/2/2020 | 6/12/2020 | 6/9/2020 | 436 | 128 | |
| SO71778 | 1 | 6/2/2020 | 6/12/2020 | 6/9/2020 | 467 | 557 | |
| SO71778 | 2 | 6/2/2020 | 6/12/2020 | 6/9/2020 | 566 | 557 | |

Load | Transform Data | Cancel

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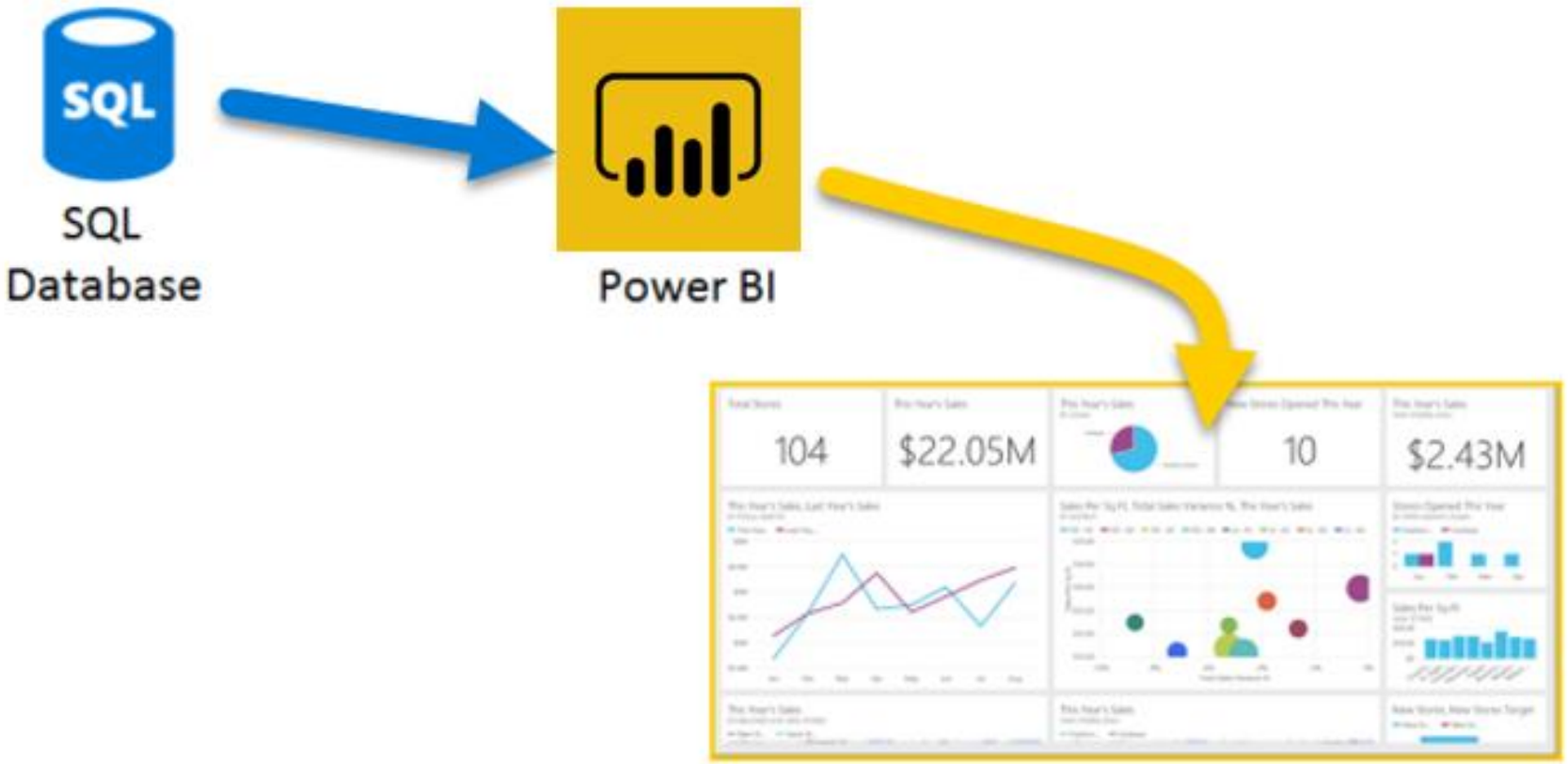
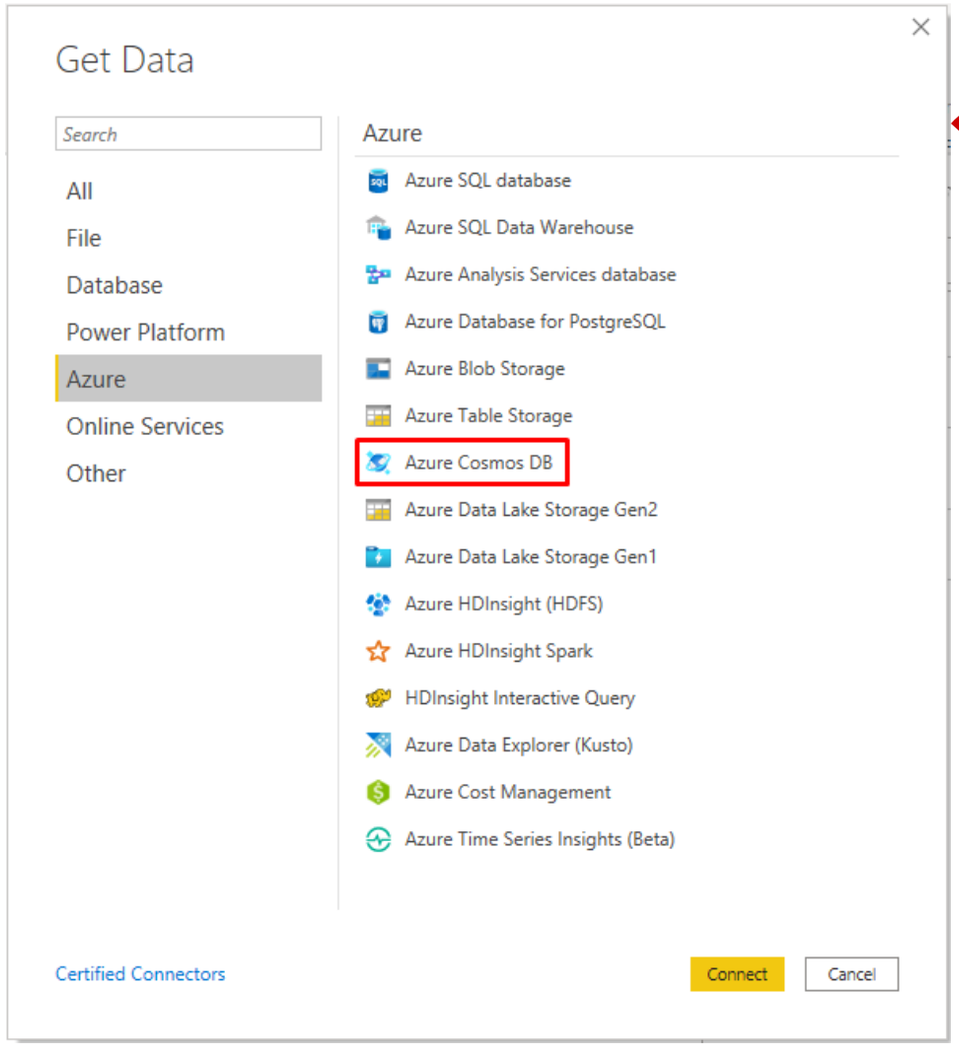
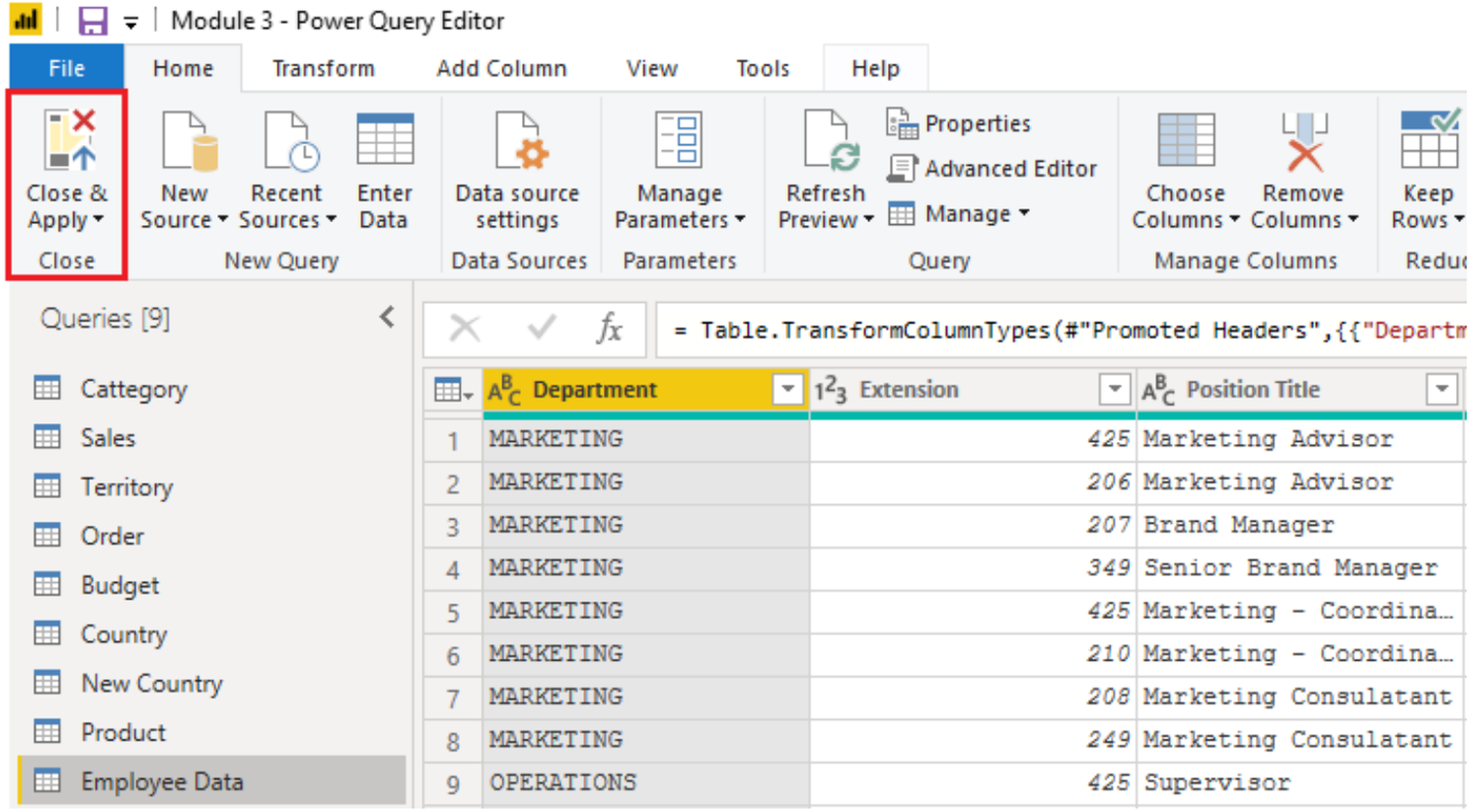
# Get data from relational data sources



# Get data from NoSQL



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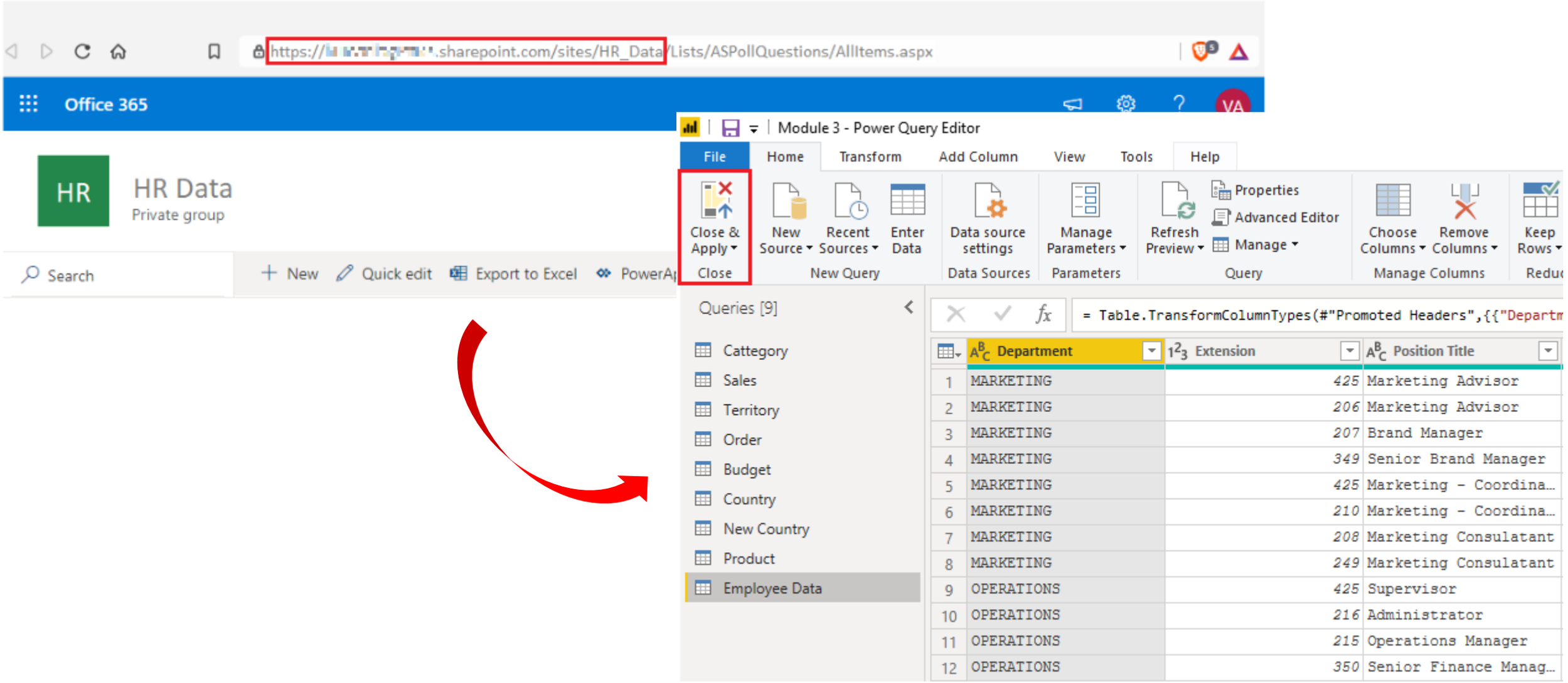
# Get data from applications



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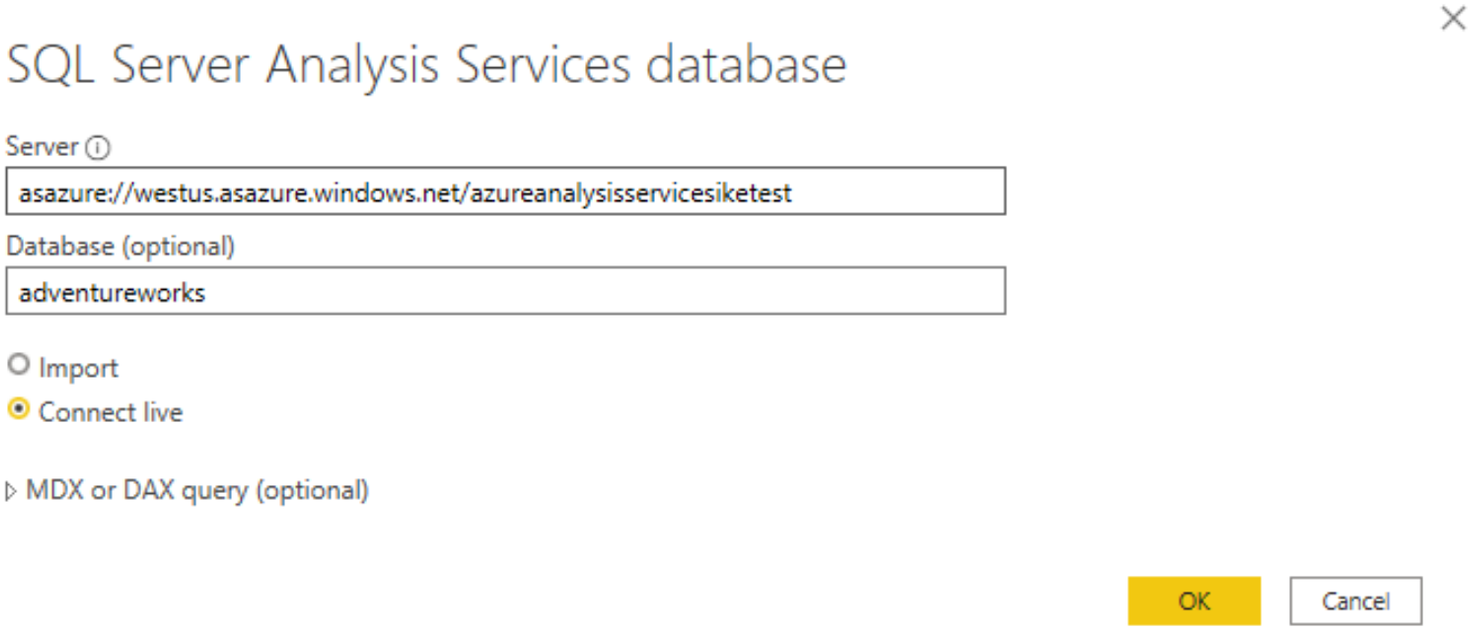
# Get data from Analysis Services

An analytical data engine that lets you digest data from multiple data sources and create calculations on the fly.



# Lesson 2: Optimize Performance

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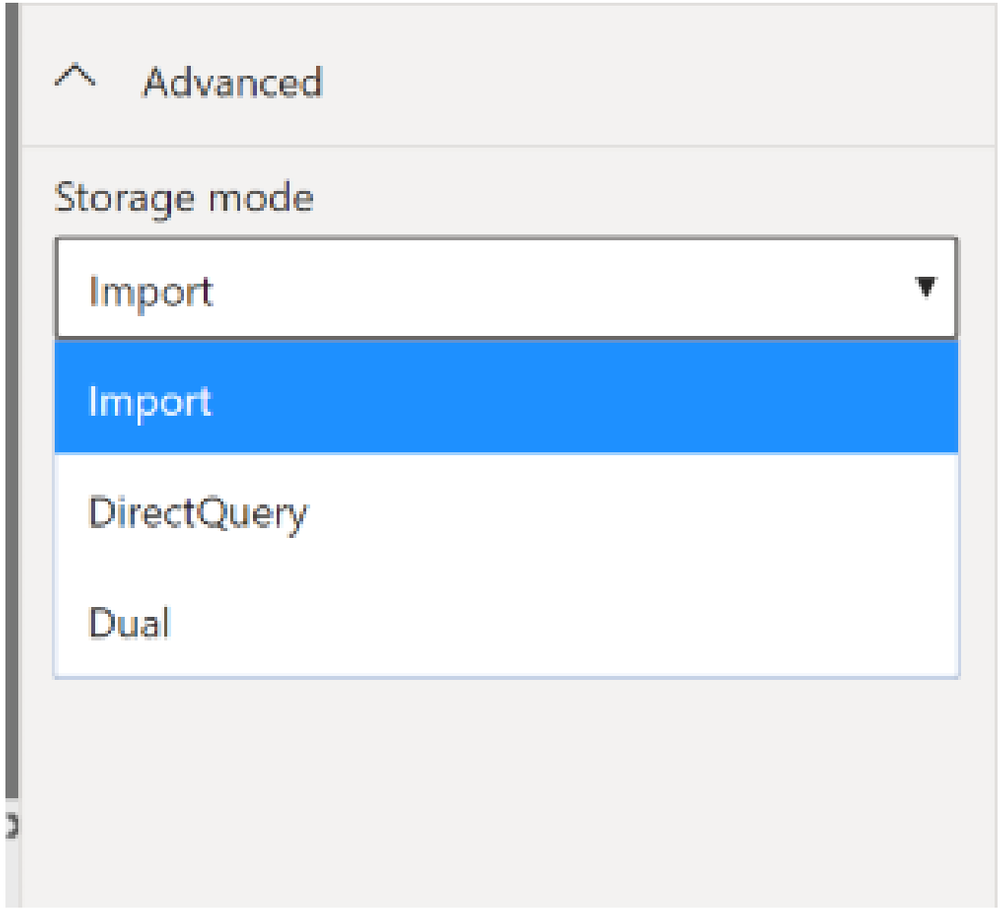
# Select a Storage Mode

- Specifies the storage mode of a table and lets Power BI determine how to cache data for reports.
- Set the storage mode for each table individually.



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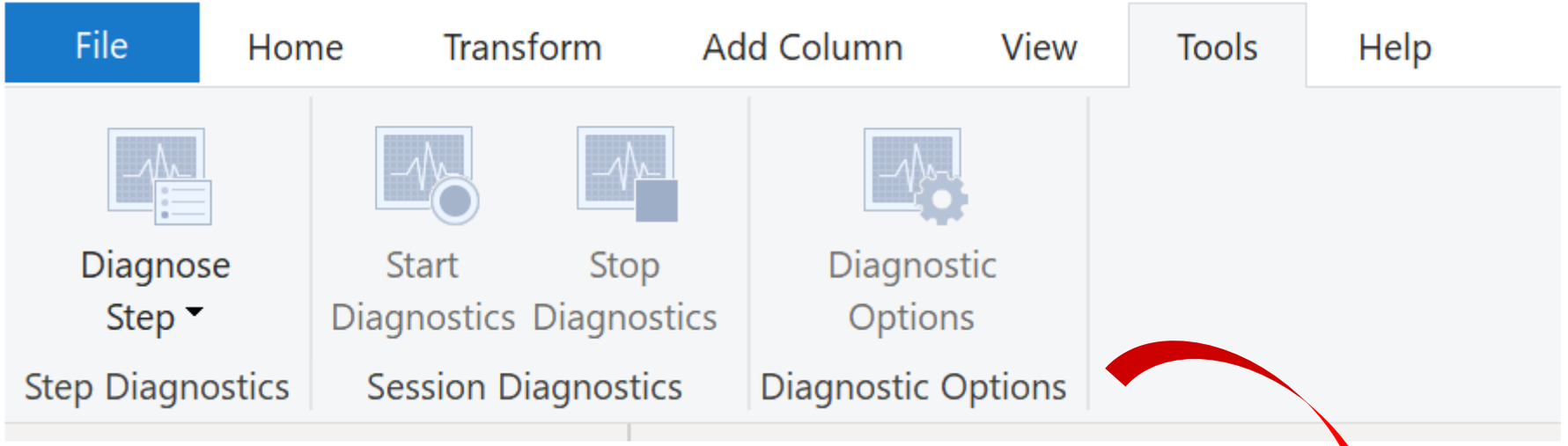
# Fix Performance Issues




Queries [17]

- Diagnostics [2]
  - Diagnostics_Detailed...
  - Diagnostics__2020-0...

| | Id | Query | Step | Exclusive Duration | Category | Data Source Kind |
|---|---|---|---|---|---|---|
| 1 | 1.1 | Product | Changed Type | 0.00:00:00.0457545 | Evaluator | null |
| 2 | 1.2 | Product | Source | 0.00:00:01.9567741 | Evaluator | null |

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# Optimize Query Performance

- Performance in Power Query depends heavily on the performance at the data source.
- Follow performance tuning guidelines of the source product.
- Some performance tuning can be done in Power BI.

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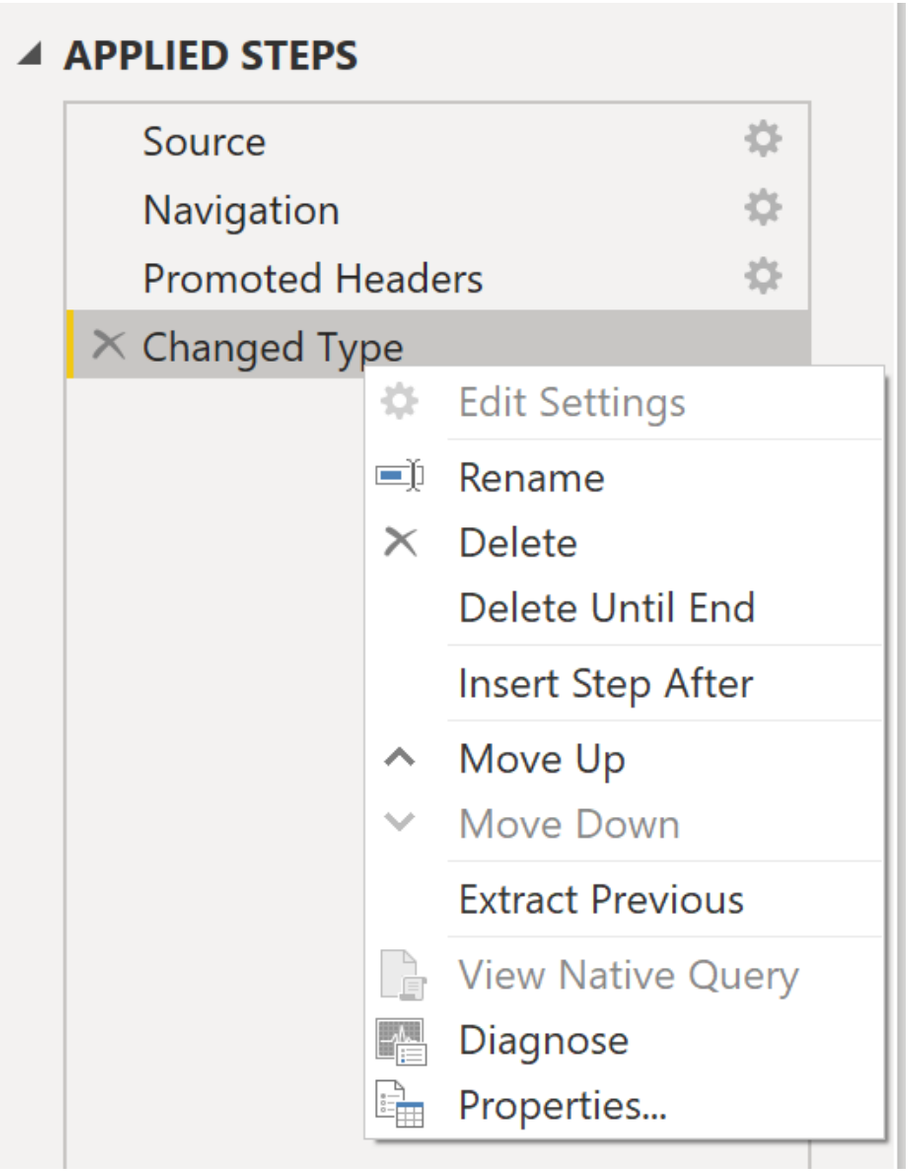
# Query Folding

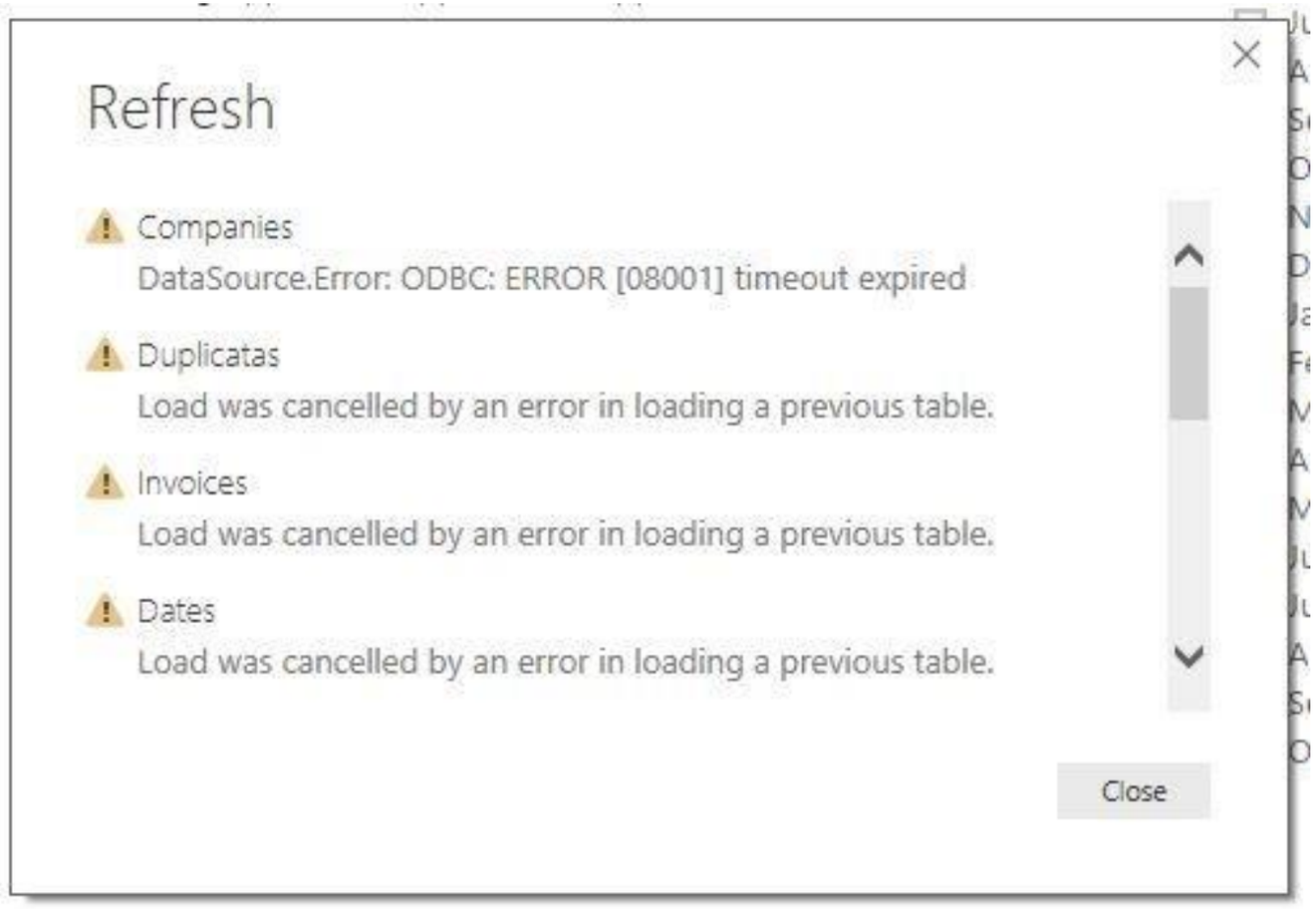
The process that lets Power Query generate a single query statement to retrieve and transform source data.



# Lesson 3: Resolve Data Errors

# Identify and Resolve Data Import Errors

- You may encounter the following errors:
  - Query Timeout.
  - Couldn’t find data formatted as a table.
  - Could not find file.
  - Data type errors.



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# Module Overview

We covered the following concepts:

- Getting data from various data sources
- Optimizing Performance
- Resolving data errors

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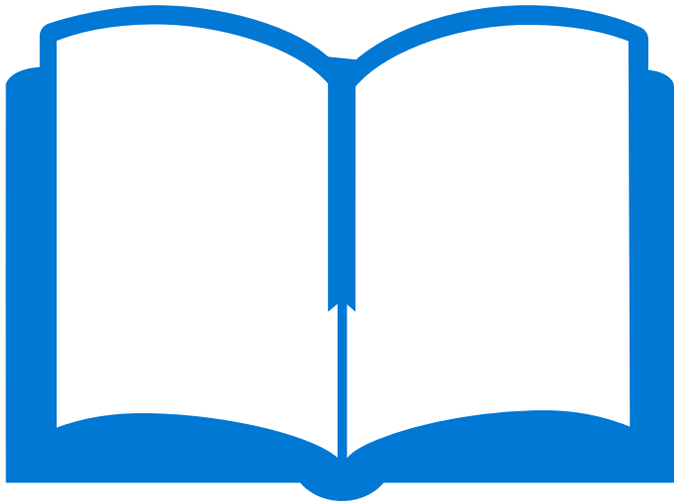
# References

- PL-300 Prepare data for analysis

https://docs.microsoft.com/en-us/learn/modules/get-data/

- PL-300 Clean, Transform, and load data in Power BI

https://docs.microsoft.com/en-us/learn/modules/clean-data-power-bi/



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