<https://learn.microsoft.com/en-us/training/modules/explore-query-performance-optimization/?source=recommendations>

**Explore query performance optimization**

* 1 hr 24 min
* Module
* 10 Units

Feedback

Intermediate

Database Administrator

Azure SQL Database

SQL Server

Read and understand various forms of execution plans. Compare estimated vs actual plans. Learn how and why plans are generated. Understand the purpose and benefits of the Query Store.

**Learning objectives**

After completing this module, you will be able to:

* Generate and save execution plans
* Compare the different types of execution plans
* Understand how and why query plans are generated
* Explain the purpose and benefits of the Query Store
* Investigate the available reports and data in the Query Store

[**Start**](https://learn.microsoft.com/en-us/training/modules/explore-query-performance-optimization/1-introduction/)Add

**Prerequisites**

* Ability to use tools for running queries against a Microsoft SQL database, either on-premises on cloud-based.
* Ability to write code in the SQL language, particularly the Microsoft T-SQL dialect, at a basic level.
* Basic understanding of structure and usage of SQL Server indexes.
* Basic understanding of relational database concepts.

**This module is part of these learning paths**

* [Optimize query performance in Azure SQL](https://learn.microsoft.com/training/paths/optimize-query-performance-sql-server/)

**Module assessment**

Assess your understanding of this module. Sign in and answer all questions correctly to earn a pass designation on your profile.

[**Take the module assessment**](https://learn.microsoft.com/training/modules/explore-query-performance-optimization/9-knowledge-check/)

* [Introduction](https://learn.microsoft.com/en-us/training/modules/explore-query-performance-optimization/1-introduction)1 min
* [Understand query plans](https://learn.microsoft.com/en-us/training/modules/explore-query-performance-optimization/2-understand-query-plans)11 min
* [Explain estimated and actual query plans](https://learn.microsoft.com/en-us/training/modules/explore-query-performance-optimization/3-explain-estimated-actual)13 min
* [Describe dynamic management views and functions](https://learn.microsoft.com/en-us/training/modules/explore-query-performance-optimization/4-describe-dynamic-management-views-functions)3 min
* [Explore Query Store](https://learn.microsoft.com/en-us/training/modules/explore-query-performance-optimization/5-explore-query-store)13 min
* [Identify problematic query plans](https://learn.microsoft.com/en-us/training/modules/explore-query-performance-optimization/6-identify-problematic)15 min
* [Describe blocking and locking](https://learn.microsoft.com/en-us/training/modules/explore-query-performance-optimization/7-describe-blocking-locking)12 min
* [Exercise: Identify and resolve blocking issues](https://learn.microsoft.com/en-us/training/modules/explore-query-performance-optimization/8-exercise-identify-resolve-blocking-issues)10 min
* [Knowledge check](https://learn.microsoft.com/en-us/training/modules/explore-query-performance-optimization/9-knowledge-check)5 min
* [Summary](https://learn.microsoft.com/en-us/training/modules/explore-query-performance-optimization/10-summary)1 min