Category	Item	Remark
General	Define the target performance	
	Check the pattern of performance	
	Check recent change	
	Reproduce issue in testing environment	
Hardware	Check CPU and RAM usage	Consider to add CPU and RAM to improve
	Check event log	
	Check Harddisk Space	
	Restart Servers	
	Tune the SAN disk from SAS to SSD for improving batch process performance	
Client	Check the region of impact users	
	Check CPU and RAM usage	
	Check Network between clients and servers	SpeedTest
	Arrange faster PCs to check again	
Database	Data growth	
	Check the statistics on the tables	STATS_DATE(id, indid) as 'stats_date', rowmodctr as modified_rows FROM sys.sysindexes WHERE id IN (SELECT object_id FROM sys.tables)
	Check database usage	run script -> SELECT file_id, name, type_desc, physical_name, size, max_size FROM sys.database_files ;
	check rebulid index and re-org table	
	Check the presence / absence of indexes	Refer to above script
	Housekeep data	
	Run Execution Plan	Review the Execution Plan and expected cardinality (number of rows) in each step of the Execution Plan.
	Rebuild Index and re-org tables	
	Run stat	

		Run scirpt SELECT [s_tst].[session_id], [s_es].[login_name] AS [Login Name], DB_NAME (s_tdt.database_id) AS [Database], [s_tdt].[database_transaction_begin_time] AS [Begin Time], [s_tdt].[database_transaction_log_bytes_used] AS [Log Bytes], [s_tdt].[database_transaction_log_bytes_reserved] AS [Log Rsvd], [s_est].text AS [Last T-SQL Text], [s_eqp].[query_plan] AS [Last Plan] FROM sys.dm_tran_database_transactions [s_tdt] JOIN sys.dm_tran_session_transactions [s_tst] ON [s_tst].[transaction_id] = [s_tdt].[transaction_id] JOIN sys.[dm_exec_sessions] [s_es] ON [s_es].[session_id] = [s_tst].[session_id] JOIN sys.dm_exec_connections [s_ec] ON [s_ec].[session_id] = [s_tst].[session_id] LEFT OUTER JOIN sys.dm_exec_requests [s_er] ON [s_er].[session_id] = [s_tst].[session_id] CROSS APPLY sys.dm_exec_sql_text ([s_ec].[most_recent_sql_handle]) AS [s_est] OUTER APPLY sys.dm_exec_query_plan ([s_er].[plan_handle]) AS [s_eqp] ORDER BY [Begin Time] ASC; GO
	Database blocking in the MS SQL	
	Temporary Table and Table Variable in SQL	https://www.c-sharpcorner.com/article/temporary-tables-and-table-variables-in-sql/
Application	Check Application log	
	Use monitoring tools (e.g. Application Insight,	
	Restart Services	
	Add debug log in application	