96	Logical Fragmentation		Is a fragmentation situation where in there is a breaking of logical sequence of the pages (e.g column order breakup spreading across different pages though physically the pages might be contiguous)
97	Query Tuning Tips		• Use joins, and avoid using sub-queries as much as possible. • Use Table variables • Use Table Valued Functions • Use CTE's • Use Temp objects • Use Proper Isolation level and avoid unnecessary resource blockade.
98	What is write ahead mechanism.		The SQL server's way of writing to the trans log first before writing to the datafiles is called WriteAhead logging.
99	Query to check blocking sessions		SELECT dm_ws.wait_duration_ms, dm_ws.wait_type, dm_es.status, dm_t.TEXT, dm_qp.query_plan, dm_ws.session_ID, dm_es.cpu_time, dm_es.memory_usage, dm_es.logical_reads, dm_es.total_elapsed_time, dm_es.program_name, DB_NAME(dm_r.database_id) DatabaseName, -- Optional columns dm_ws.blocking_session_id, dm_r.wait_resource, dm_es.login_name, dm_r.command, dm_r.last_wait_type FROM sys.dm_os_waiting_tasks dm_ws

			INNER JOIN sys.dm_exec_requests dm_r ON dm_ws.session_id = dm_r.session_id INNER JOIN sys.dm_exec_sessions dm_es ON dm_es.session_id = dm_r.session_id CROSS APPLY sys.dm_exec_sql_text (dm_r.sql_handle) dm_t CROSS APPLY sys.dm_exec_query_plan (dm_r.plan_handle) dm_qp WHERE dm_es.is_user_process = 1 GO
100	Query to get current mem clerks.		SELECT * FROM sys.dm_os_memory_clerks ORDER BY (single_pages_kb + multi_pages_kb + awe_allocated_kb) desc
101	Query to trace a particular SP		https://www.sqlservercentral.com/Forums/Topic562503-360-1.aspx Create filter for textdata parameter in profiler with the sp name Ex exec _getStuff%
102	Query to get Idx scans, Avg Frag and also the row count associated with correspondin g table names.		SELECT Total_rows,sum(Total_Scans) as Total_Scans,name,[schema],[Table],avg_fragmentation_in_percent FROM (SELECT SUM(pa.rows) as Total_rows,u.user_scans as Total_Scans,b.name,object_schema_name(a.object_id) AS [schema], OBJECT_NAME(a.object_id) as [Table],avg_fragmentation_in_percent

			FROM sys.dm_db_index_physical_stats (70, NULL, NULL, NULL, NULL) AS a INNER JOIN sys.indexes AS b ON a.object_id = b.object_id AND a.index_id = b.index_id INNER JOIN sys.dm_db_index_usage_stats u on u.index_id = b.index_id and u.object_id = b.object_id and u.object_id = a.object_id INNER JOIN sys.objects o on a.object_id = o.object_id INNER JOIN sys.tables ta on ta.object_id = o.object_id and ta.object_id = a.object_id INNER JOIN sys.partitions pa ON pa.OBJECT_ID = ta.OBJECT_ID INNER JOIN sys.schemas sc ON ta.schema_id = sc.schema_id INNER JOIN sys.sysdatabases d on a.database_id = d.dbid group by pa.rows,u.user_scans,b.name,object_sche ma_name(a.object_id), OBJECT_NAME(a.object_id) ,avg_fragmentation_in_percent)SRC group by name,[schema],[Table],avg_fragmentation _in_percent,Total_rows
103	Blocks summary (including		SELECT db.name DBName, tl.request_session_id,

	blocking session IDs)		wt.blocking_session_id, OBJECT_NAME(p.OBJECT_ID) BlockedObjectName, tl.resource_type, h1.TEXT AS RequestingText, h2.TEXT AS BlockingTest, tl.request_mode FROM sys.dm_tran_locks AS tl INNER JOIN sys.databases db ON db.database_id = tl.resource_database_id INNER JOIN sys.dm_os_waiting_tasks AS wt ON tl.lock_owner_address = wt.resource_address INNER JOIN sys.partitions AS p ON p.hobt_id = tl.resource_associated_entity_id INNER JOIN sys.dm_exec_connections ec1 ON ec1.session_id = tl.request_session_id INNER JOIN sys.dm_exec_connections ec2 ON ec2.session_id = wt.blocking_session_id CROSS APPLY sys.dm_exec_sql_text(ec1.most_recent_sql_handle) AS h1 CROSS APPLY sys.dm_exec_sql_text(ec2.most_recent_sql_handle) AS h2 GO

			----- Buffer Cache Hit Ratio SELECT (a.cntr_value * 1.0 / b.cntr_value) * 100.0 as BufferCacheHitRatio FROM sys.dm_os_performance_counters a JOIN (SELECT cntr_value,OBJECT_NAME FROM sys.dm_os_performance_counters WHERE counter_name = 'Buffer cache hit ratio base' AND OBJECT_NAME = 'SQLServer:Buffer Manager') b ON a.OBJECT_NAME = b.OBJECT_NAME WHERE a.counter_name = 'Buffer cache hit ratio' AND a.OBJECT_NAME = 'SQLServer:Buffer Manager' ----- Page life expentency SELECT * FROM sys.dm_os_performance_counters WHERE counter_name = 'Page life expectancy' AND OBJECT_NAME = 'SQLServer:Buffer Manager'
104	Query to get buffer cache hit ratio / PL expectancy.		----- Buffer Cache Hit Ratio

			SELECT (a.cntr_value * 1.0 / b.cntr_value) * 100.0 as BufferCacheHitRatio FROM sys.dm_os_performance_counters a JOIN (SELECT cntr_value,OBJECT_NAME FROM sys.dm_os_performance_counters WHERE counter_name = 'Buffer cache hit ratio base' AND OBJECT_NAME = 'SQLServer:Buffer Manager') b ON a.OBJECT_NAME = b.OBJECT_NAME WHERE a.counter_name = 'Buffer cache hit ratio' AND a.OBJECT_NAME = 'SQLServer:Buffer Manager' ----- Page life expentency SELECT * FROM sys.dm_os_performance_counters WHERE counter_name = 'Page life expectancy' AND OBJECT_NAME = 'SQLServer:Buffer Manager'
105	High Disk IO - file specific		https://dba.stackexchange.com/questions/16492/high-disk-i-o-from-sql-server-or-is-high-disk-i-o-slowing-sql-server
