**SQL Query info**

1. What is logical reads ?

A logical read **occurs every time the Database Engine requests a page from the buffer cache**. If the page is not currently in the buffer cache, a physical read first copies the page from disk into the cache

****Logical Reads**** - Reading the data from the data cache

****Physical Reads**** - Reading the data from Disk

1. How to Reduce the logical & physical reads in sql server ?

Usually the best way to reduce logical read is to **apply correct index or to rewrite the query**. Physical read indicates total number of data pages that are read from disk. In case no data in data cache, the physical read will be equal to number of logical read. And usually it happens for first query request

# Resolving "100 percent CPU Usage" Problem In SQL Server

1. You need first to identify whether SQL is consuming all the memory resources.
2. mostly it is assumed that longer running queries are a problem, but it is not true all the time. Yes, it may cause a problem but small concurrent running queries having maximum worker time or maximum execution count can also be a problem. For example, a query which is executing before 1 sec can’t be a problem but the same query, if executed 1 lac times concurrently (at the same time) can cause an issue.
3. mostly select queries are the culprit and create such situations, so that SQL Server starts consuming 100% of memory resources. You can use the task manager or resource monitor to find the CPU usage.
4. Total Worker Time ?

total\_worker\_time is **the amount of time that has been spent running this query since the plan was compiled**, i.e. if the plan has been run 100 times since it was compiled, and each time it ran it to 10 ms, the total\_worker\_time would be 1000 ms.

1. Execution Time ?

the time taken by the SQL server to complete the execution of the compiled query plan