

Task 2 Thought Process

At first, the required metrics can be fetched using separate SELECT statements for each one while using of course the right corresponding aggregate function. However, this approach will lead to poor performance as the table is scanned five separate times (not the most efficient way). To optimize the solution, it is better to use one single SELECT statement so that the table is scanned only once. Furthermore, another point that needs to be taken into consideration is Data Quality therefore any expected NULL value was handled and any maintenance event with no downtime was excluded for average downtime calculation consistency. Finally, a simple check is made that there are no negative values in any numeric field.