1. **What is a window function?**

A window function is a function that, for each row, computes a scalar result value based on a calculation against a subset of the rows from the underlying query.

1. **What does PARTITION do?**

PARTITION restricts the window to the subset of rows that have the same values in the partitioning columns as in the current row. Grouping in window

1. **What does ORDER BY do?**

ORDER BY defines ordering. Gives meaning to the rank. Window ordering supports a frame specification.

1. **What does ROWS BETWEEN do?**

ROWS BETWEEN filters a frame, or a subset, of rows from the window partition between the two specified delimiters.

1. **What is a ranking window function? Why would you use it? Give an example.**

A ranking window function ranks each row with respect to others in the window. You would use it to provide a unique sequential number to each row. For example, if you wanted to return the employees with the most sales in order.

1. **What is an offset window function? Why would you use it? Give an example.**

An offset window function returns an element from a row that is at a certain offset from the current row or at the beginning or end of a window frame. You would use it to compute differences between values. For example, if you wanted to compare the previous order values to the current order values of a customer.

1. **What do LEAD and LAG do?**

LAG looks before the current row and LEAD looks ahead. You use these functions to obtain an element from a row that is at a certain offset from the current row within the partition, based on the indicated ordering.

1. **What do FIRST VALUE and LAST VALUE do?**

FIRST VALUE returns an element from the first row, and LAST VALUE returns an element from the last row in the window frame.

1. **What is an aggragate window function? Why would you use it? Give an example.**

An aggregate window function aggregates the rows in the defined window. You would use it to aggregate values of a specific row or rows. For example, if you wanted the total value of all orders.

1. **What is a pivot table and what does it do?**

A pivot table involves rotates data from a state of rows to a state of columns, possibly aggregating values along the way.