1. In SQL Server, assuming you can find the result by using both joins and subqueries, which one would you prefer to use and why?

I’d like to use subqueries for better readability.

1. What is CTE and when to use it?

CTE(common table expression): is a temporary result set that you can reference within another SELECT, INSERT, UPDATE, or DELETE statement. A CTE can be used to create a recursive query, substitute for a view when the general use of a view is not required and so on.

1. What are Table Variables? What is their scope and where are they created in SQL Server?

It is a special type of the local variable that helps to store data temporarily.

The lifetime of the table variable only lasts for the duration of the batch, function, or stored procedure.

1. What is the difference between DELETE and TRUNCATE? Which one will have better performance and why?

DELETE can be rolled back but TRUNCATE cannot. DELETE is slower than TRUNCATE.

1. What is Identity column? How does DELETE and TRUNCATE affect it?

Identity column is a special type of column that is used to automatically generate key values based on a provided seed and increment.

DELETE retains the identity and does not reset it to the seed value. TRUNCATE resets the identity to its seed value.

1. What is difference between “delete from table\_name” and “truncate table table\_name”?

ELETE FROM table\_name is used to delete all records from table\_name.

TRUNCATE table table\_name is used to delete records from table\_name without removing table structure, it does not use WHERE clause.