**Practical Questions**

1. Write a scalar user-defined function to calculate the factorial of a given integer.
2. Create a table-valued function that returns all employees who have joined in the last 30 days.
3. Write a user-defined function that takes a string as input and returns the reverse of that string.
4. Implement a user-defined function to calculate the total sales for a specific product ID using data from a Sales table.
5. Write an inline table-valued function to return a list of all customers who have placed orders above a specific amount, where the amount is passed as a parameter.

**Scenario-Based Questions**

1. A company wants to standardize date formatting across its reports. Write a user-defined function to accept a date as input and return it in the format DD-MMM-YYYY.
2. Suppose you need to calculate the age of employees based on their birthdate. Write a scalar-valued function for this task.
3. In a database with a Products table, create a multi-statement table-valued function that categorizes products into low, medium, and high price ranges based on predefined thresholds.
4. Discuss the impact of user-defined functions on query performance. Suggest best practices for optimizing UDFs in SQL Server.
5. Write a user-defined function that calculates the number of weekdays (Monday-Friday) between two given dates.

**Advanced Questions**

1. Can a user-defined function call another user-defined function? Demonstrate this with an example.
2. Explain how you would handle errors in a user-defined function. Provide an example where you handle a divide-by-zero error in a scalar-valued function.
3. Write a multi-statement table-valued function that returns the Fibonacci series up to a given number.