Tutorial 3

Question 1

a. What is data classification, and why is it important in data obfuscation?

b. Name three common types of data that require protection.

Question 2

a. What is the primary goal of confidentiality in data security?  
b. List two techniques used to achieve confidentiality through data obfuscation.

Question 3

a. What is the difference between symmetric and asymmetric encryption?  
b. What does TDE stand for, and what does it protect?

Question 4

a. How does CLE differ from TDE?  
b. What data type must be used for storing encrypted values in CLE?

Question 5

1. What is the purpose of data anonymization?
2. Give one example of a real-world scenario where data anonymization would be applied, and explain the benefit.
3. Explain the difference between data anonymization and data masking.
4. Why is anonymization considered a safer technique than encryption or masking when it comes to sharing datasets externally?

Question 6

a. What is the key difference between static and dynamic data masking?  
b. In what scenario is static masking commonly used?

Question 7

1. What is data hashing?
2. Name two common uses of hashing in data security.
3. What is the difference between hashing and encryption? Provide one key distinction.
4. What data type must be used to store hash values in a SQL Server table?

Question 8

A company hashes passwords using SHA-256 and stores the hash in the database. A breach exposes the hashes. What additional step should the company have taken to better protect against password cracking?