Standard Exception Handling Questions

1. **What will happen if you try to insert a sale for a product_id that does not exist in the products table?**

   o Try inserting into sales(product_id, quantity_sold) with a non-existing product ID and handle the foreign key constraint error.

2. **How do you handle a NOT FOUND error while updating a product that doesn't exist?**

   o Write a procedure that tries to update a non-existing product and handles the error.

3. **What happens if you divide by zero in a stored procedure? How will you handle it using a handler?**

   o Try dividing two numbers where the divisor is zero and catch the error.

4. **How can you handle an SQLSTATE exception when inserting a duplicate primary key (manually)?**

   o Forcefully insert a value with a manual product_id that already exists and use a HANDLER for duplicate entry.

5. **Create a procedure that tries to delete a product and handles any error gracefully with a message.**

Custom Exception Handling Questions (Using SIGNAL)

6. **Write a procedure to sell a product, and throw a custom exception if quantity_sold > available quantity.**

7. **Create a procedure that checks if the product price is negative before inserting. Throw a custom error if true.**

8. **How can you prevent a product from being deleted if it exists in the sales table? Use SIGNAL for custom error.**

9. **Write a procedure that throws a custom exception if the name of a product is NULL or empty during insertion.**

10. **Create a procedure to update the price of a product. Throw a custom message if the price is too high (e.g., > 10,000).**