ISQS 3348
In-Class SQL Practice5 – Inserting, Updating, and Deleting Data

Please write the SQL queries (one for each question) to answer the following questions. Use the ***sql_practice* database** on the Blackboard course website.

1. Add a new product to the `products` table. The product's name is *Fishy Fingers*, is supplied by *Tokyo Traders*, and is in the *Seafood* category. Because the `ProductID` field in the `products` table has the auto-increment column property set, you do not need to specify a specific product ID in your `INSERT` statement (i.e., you won't insert any value for the `ProductID` field). You will need to make up the other values for the remainder of the fields in the `products` table, however, except for the `UnitsInStock`, `UnitsOnOrder`, and `Discontinued` fields which should be set to *0*.

```
1    #1
2    select supplierid from suppliers where CompanyName = 'Tokyo Traders'; #4
3    select categoryID from categories where categoryName = 'Seafood'; #8
4
5    insert into products
6    value (null, 'Fishy Fingers', 4, 8, '10', 2.5, 0, 0, 5, 0);
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

supplierid
4

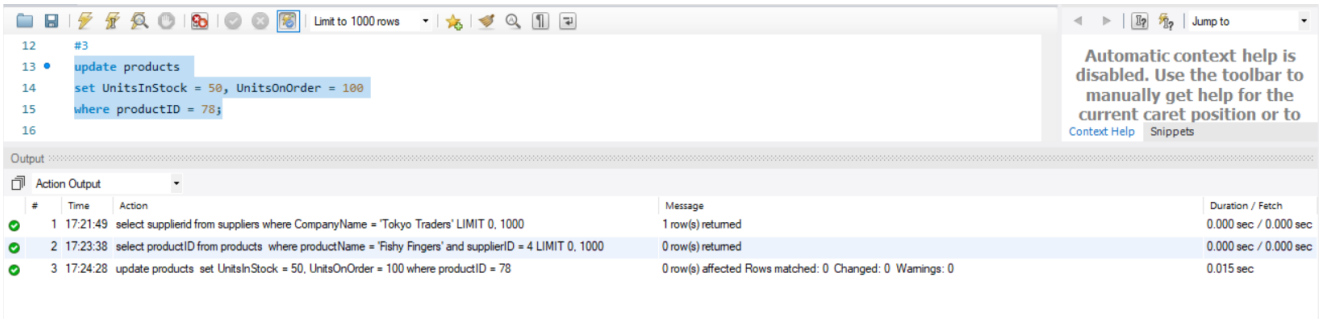
2. What is the `ProductID` of the product you just added? Find it by querying the `products` table. In your answer, write both the SQL statement and the result you receive.

```
7
8    #2
9    select ProductID from products
10   where ProductName = 'Fishy Fingers' and supplierID = 4;
11
12   select * from products;
```

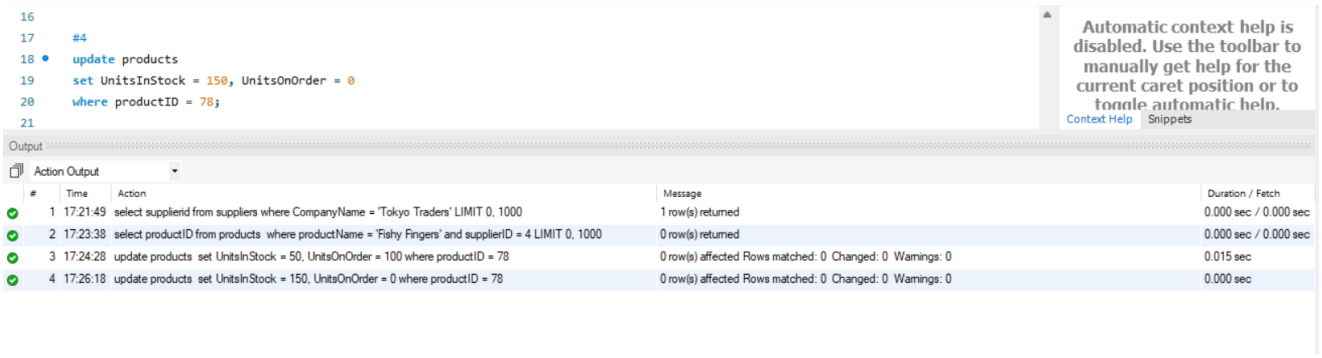
Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content:

ProductID
78
NULL

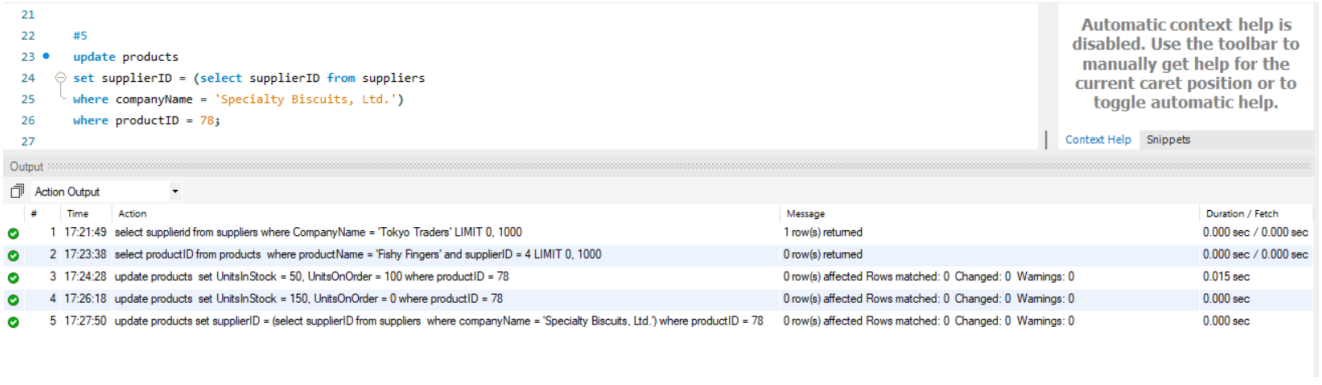
3. Your business has placed several orders for *Fishy Fingers* product from *Tokyo Traders*. One of these orders has come in, and contains *50* units. The other order, of *100* units, has not come in yet and is still on order. Write and execute the SQL statement that updates your record for this product in the `products` table with this information, setting the values for `UnitsInStock` and `UnitsOnOrder` with the above values, respectively.



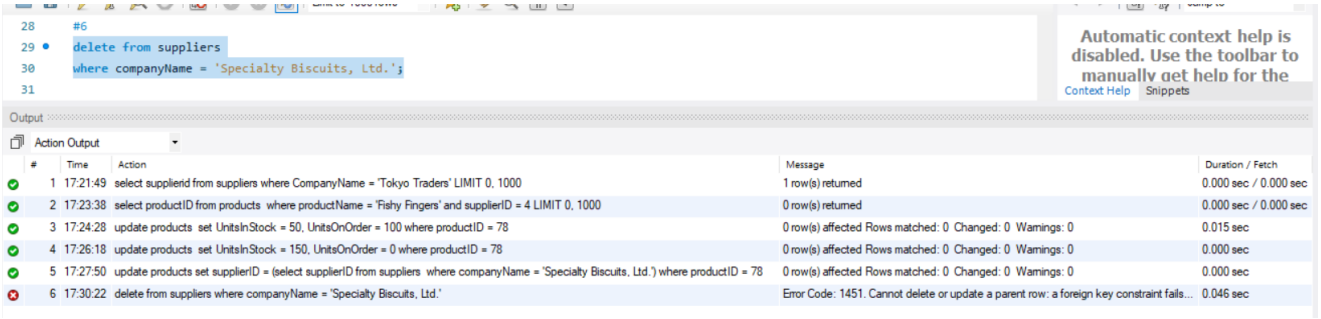
4. The second order for *Fishy Fingers* from *Tokyo Traders* has arrived. Write and execute the SQL statement that updates the necessary field(s) with the correct value(s) (assume you have not sold any *Fishy Fingers* yet).



5. *Tokyo Traders* has decided to sell the rights to produce, market, and sell *Fishy Fingers* to another supplier, *Specialty Biscuits, Ltd*. Write and execute the SQL statements that are needed to ensureyour database represents this new reality?



6. Delete the company *Specialty Biscuits, Ltd.* from the supplier table. Are you able to delete it? If not, what is the reason?



```
28    #6
29 •  delete from suppliers
30    where companyName = 'Specialty Biscuits, Ltd.';
31
```

Automatic context help is disabled. Use the toolbar to manually get help for the

Context Help | Snippets

Output

Action Output

#	Time	Action	Message	Duration / Fetch
1	17:21:49	select supplierid from suppliers where CompanyName = 'Tokyo Traders' LIMIT 0, 1000	1 row(s) returned	0.000 sec / 0.000 sec
2	17:23:38	select productID from products where productName = 'Fishy Fingers' and supplierID = 4 LIMIT 0, 1000	0 row(s) returned	0.000 sec / 0.000 sec
3	17:24:28	update products set UnitsInStock = 50, UnitsOnOrder = 100 where productID = 78	0 row(s) affected Rows matched: 0 Changed: 0 Warnings: 0	0.015 sec
4	17:26:18	update products set UnitsInStock = 150, UnitsOnOrder = 0 where productID = 78	0 row(s) affected Rows matched: 0 Changed: 0 Warnings: 0	0.000 sec
5	17:27:50	update products set supplierID = (select supplierID from suppliers where companyName = 'Specialty Biscuits, Ltd.') where productID = 78	0 row(s) affected Rows matched: 0 Changed: 0 Warnings: 0	0.000 sec
6	17:30:22	delete from suppliers where companyName = 'Specialty Biscuits, Ltd.'	Error Code: 1451. Cannot delete or update a parent row: a foreign key constraint fails...	0.046 sec

Error message:

Error Code: 1451. Cannot delete or update a parent row: a foreign key constraint fails

(`sql_practice`.`products`, CONSTRAINT `FK_Products_Suppliers` FOREIGN KEY (`SupplierID`) REFERENCES `suppliers` (`SupplierID`)) 0.016 sec

What is this error message telling you?
Answer:
When I try to delete this particular supplier, Specialty Biscuits, Ltd.,
the referential integrity is violated, because this supplier has products in the products table. Essentially, when deleting records, you are not deleting records that are referenced in related tables.