Fundamentals of Data Management

Pass Tasks 8.1.2: SQL - DML - Updates

Overview

In this tutorial, you will practise using SQL DML statements to add and manipulate data in a relational database.

Purpose

Learn to write SQL DML statements to add, remove and change data in a database.

Task

Solve the tasks given below.

Time

This task should be completed in your eighth lab class and submitted for feedback in the eighth lab or at the beginning of lab 9.

Resources

- Online resources, e.g.
  - Tutorialspoint:
    http://www.tutorialspoint.com/mysql/mysql-insert-query.htm
    http://www.tutorialspoint.com/mysql/mysql-update-query.htm
    http://www.tutorialspoint.com/mysql/mysql-delete-query.htm
  - MySQL reference:
    http://dev.mysql.com/doc/refman/5.7/en/insert.html
    http://dev.mysql.com/doc/refman/5.7/en/update.html
    http://dev.mysql.com/doc/refman/5.7/en/delete.html

Feedback

Discuss your solutions with the tutorial instructor.

Next

Get started on Task 8.1.3.

Pass Tasks 8.1.2 — Submission Details and Assessment Criteria

Document your solutions using a word processor. Upload the Pass level work to Doubtfire in pdf format. The tutors will discuss them with you in the lab.

First, create two tables to work with:

```
CREATE TABLE Purchase(
purchaseID int unsigned not null auto_increment,
custName VARCHAR (30) not null,
orderedDate DATE not null,
shipDate DATE,
PRIMARY KEY (purchaseID));

CREATE TABLE PurchasedItem(
purchaseID int unsigned not null,
itemNo int unsigned not null,
productName VARCHAR(30) not null,
orderedQty TINYINT unsigned not null,
quotedPrice DECIMAL(5, 2) not null,
PRIMARY KEY (purchaseID, itemNo),
FOREIGN KEY (purchaseID) REFERENCES Purchase(purchaseID));
```

Second, turn off autocommit:

```
SET AUTOCOMMIT = false;
```

Subtask 8.1.2

Run the following statement:

```
INSERT into Purchase (custName, shipDate, orderedDate) VALUES ('Sarah
Smith', '2016-05-12', '2016-05-10');
```

Check the result by displaying the content of the Purchase table. Document your observations.

Roll back the changes and re-run the statement. Display the result again – document your observations.

The following statement is intended as a child row of the entry made by the previous statement:

```
Insert into PurchasedItem (purchaseID, itemNo, productName, orderedqty,
quotedPrice) VALUES (?, 1, 'Cricket bat', 2, 80.50);
```

What do you have to substitute the questionmark (?) for to create the foreign key relationship? Research the answer here:

http://dev.mysql.com/doc/connector-odbc/en/connector-odbc-usagenotes-functionality-last-insert-id.html

Remember to commit the changes when you have finished.

Document the answer and submit.