

SQL based on another SQL

Assume that you have these two tables:

PlaceOrder

| | OrderID | CID | Quantity | DeliverBy |
|---|---------|-----|----------|--------------------------|
| ▶ | 1 | 1 | 23 | Tuesday April 23, 2010 |
| | 2 | 1 | 3 | Wednesday April 22, 2010 |
| | 3 | 4 | 6 | Monday October 31, 2010 |

Type

| | Name | Price | cookID |
|--|----------------|--------|--------|
| | Chocolate Chip | \$0.30 | 1 |
| | Oatmeal | \$0.20 | 2 |
| | Sugar | \$0.34 | 3 |
| | Peanut Butter | \$0.40 | 4 |

You can then write this SQL statement:

```
SELECT Name, Price, Quantity, (Price*Quantity) AS Subtotal
FROM Type, PlaceOrder
WHERE cookID = CID;
```

This SQL has some extra features,

(Price*Quantity) Will perform a **calculation** and MULTIPLY those two fields.

AS Subtotal Will nicely **rename the column** as Subtotal

The SQL produces:

| | Name | Price | Quantity | Subtotal |
|---|----------------|--------|----------|----------|
| | Chocolate Chip | \$0.30 | 23 | 6.9 |
| | Chocolate Chip | \$0.30 | 3 | 0.9 |
| ▶ | Peanut Butter | \$0.40 | 6 | 2.4 |

If you **save** the above SQL query as "sub", you can **refer to it in other SQL queries!**
This is one of the extra features: SQL in SQL.

For example:

```
SELECT sum(subtotal) AS PreTaxTotal, sum(subtotal)*0.13 AS Tax,
sum(subtotal)*1.13 AS Total
FROM Sub;
```

This SQL has some extra features:

sum(subtotal)*0.13 Take the aggregate and multiply it to find the tax.
As Tax Rename the column as tax
From Sub Don't pull it from a table, pull it from the Sub query.

This produces:

| PreTaxTotal | Tax | Total |
|-------------|-------|--------|
| 10.2 | 1.326 | 11.526 |

Create the above tables and the above queries.