

# TSQL Homework 04

## Chapter 4, T-SQL Query Fundamentals

### Readings

Read Chapter 4 in the *T-SQL Query Fundamentals* book.

### Homework questions

1. In your own words, what is a *subquery*?
2. In your own words, what is a *self contained subquery*?
3. In your own words, what is a *correlated subquery*?
4. Give an example of a subquery that returns a single value. When would you use this kind of subquery?
5. Give an example of a subquery that returns multiple values. When would you use this kind of subquery?
6. Give an example of a subquery that returns table values. When would you use this kind of subquery?
7. What does the *exists* predicate do? Give an example.
8. What happens if we use the *not* operator before a predicate? Give an example.
9. When you use *exists* or *not exists* with respect to a row in a database, does it return two or three values? Explain your answer.
10. How would you use a subquery to calculate aggregates? For example, you want to calculate yearly sales of a product, and you also want to keep a running sum of total sales. Explain how you would use a subquery to do this.