Chapter 02c, In-class Lab Assignment

T-SQL Fundamentals

1 Sqlite queries, Northwind database

1. List the employee IDs with the number of sales by each employee from most sales to least. I want to recognize the employees with the most sales.
2. I want to look at the average discounts taken by all customers for products that cost more than $50.00. Specifically, I want to know the average discount of all orders for each product from the highest price to the lowest price.
3. I am doing an analysis of which shippers ship to each country, and I need a report showing the number of orders each shipper delivered to each country and the nuber of orders. I don't need the data where the number of orders is ten or less, but I need the report listed by country and the number of orders shipped to that country.
4. For each order, what was the time lag between the order date and the ship date?
5. Continuing with the previous query, I need the average time lag for each shipper.
6. I am doing inventory, and I need to know the total price of each product on hand, that is, the price of each product line, sorted alphabetically by product name.
7. What is the dollar total we have tied up in inventory?
8. We have discovered that some customers favor certain employees. I need to know this information. I need a report of the most common employee/customer pairs, the nuber of times the employee took orders from the customer, and the number of orders. Alphabetize this by customer id. Omit customer/employee pairs whre the number of orders is less than five.
9. How many days were in the service (if you are a veteran), or how many days will you serve (assuming you know your ETS date)?
10. Answer these questions using the built in time and date function.
    - What is today's date?
    - What was the first day of the month?
    - What will be the first day of the next month?
    - What is the last day of this month?

2 SQL Server queries

Complete the Chapter 2 Exercises in the *T-SQL Fundamentals* text beginning on page 93.

Solutions to the lab queries

Attempt to write the queries before you look at the solutions. Do not look at the solutions before you attempt to write the query.

```
1  select employeeid, count(orderid) as number_of_orders from orders group by employeeid order
       by number_of_orders desc;
2
3  select productid, unitprice, avg(discount) as average_discount from order_details where
       unitprice > 50 group by productid, unitprice order by unitprice desc;
4
5  select shipperid, shipcountry, count(orderid) as order_count from orders group by shipperid,
        shipcountry having count(orderid) > 10 order by shipcountry, order_count desc;
6
7  select shipperid, orderdate as ordered, shippeddate as shipped, julianday(shippeddate) -
       julianday(orderdate) as days_difference from orders limit 10;
8
9  select shipperid, orderdate as ordered, shippeddate as shipped, avg(julianday(shippeddate) -
        julianday(orderdate)) as days_average from orders group by shipperid order by
       days_average;
10
11 select productid, productname, sum(unitsinstock * unitprice) as total_per_product from
       products group by productid;
12
13 select productid, productname, sum(unitsinstock * unitprice) as total_per_product from
       products group by productid order by productname;
14
15 select sum(unitprice * unitsinstock) from products;
16
17 select employeeid, customerid, count(orderid) from orders group by employeeid, customerid
       having count(orderid) > 4 order by customerid;
18
19 select julianday('now') - julianday('2018-07-08');
20
21 SELECT date('now');
22 SELECT date('now','start of month');
23 SELECT date('now','start of month','+1 month');
24 SELECT date('now','start of month','+1 month','-1 day');
```