

# Retrieving Data

## Exercise Handout

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## Overview

You will be working with the Products table in the Northwind database to produce a list of products and their stock levels.

If you're feeling confident, there is a second exercise which uses some string concatenation on the Employees table.

## Objectives

At the end of this set of exercises, you will be able to:

- write a simple select statement.
- write a select statement that picks out only certain columns from the source table.
- write a select statement that uses calculated values.

## Setup: Launch SQL Server Management Studio (if necessary)

1. Launch the virtual machine.
2. Launch SQL Server Management Studio.
3. Connect to the server.

## Exercise 1: Retrieve data by using the SELECT statement

Northwind Traders are attempting to learn more about their stock levels. You have been asked to produce a list of products.

In this exercise, you will create simple SELECT statement queries.

The main tasks for this exercise are as follows:

1. Write a query using the SELECT \* statement against the Products table.
2. Write a query that selects the ProductID, ProductName, UnitPrice and UnitsInStock columns from the Products table.
3. Add columns to the second query so that it also calculates the current value of stock and the future value of stock.

### Task 1: Write a query using SELECT \*

1. Create a new query and save it with a filename of "SelectAllProductDetails.sql"
2. Create a query that uses the Northwind database and then displays all columns and all rows from the Products table.
3. Execute the query by hitting the <F5> key.
4. Browse the result set in the Results pane. You should see 77 rows returned.

### Task 2: Write a query that selects individual columns from a table

1. Create another new query and call it "StockList.sql".
2. It should access the Products table in the Northwind database.
3. It should only include the ProductID, ProductName, UnitPrice and UnitsInStock columns.
4. Execute the query by hitting the <F5> key.
5. Browse the result set in the Results pane and confirm that only the specified columns appear.

**Task 3: Write a query that selects individual columns from a table**

1. Edit the existing "StockList.sql" query.
2. Add the UnitsOnOrder column to the select list.
3. Add a calculated column that multiplies UnitPrice by UnitsInStock and alias it as CurrentStockValue.
4. Add a second calculated column that adds UnitsOnOrder to UnitsInStock and multiplies the result by UnitPrice. Alias the new column as FutureStockValue.
5. Execute the query by hitting the <F5> key.
6. Browse the result set in the Results pane and confirm that the current stock value of ProductID 2, Chang, is 323 and its future value is 1083.

## **(Optional) Exercise 2: Concatenate strings in a select list**

Write a query that selects the FullName and telephone Extension from the Employees table in the Northwind database.

You'll need to concatenate the FirstName and LastName columns and you'll need to put a space between them. There are 9 rows in the Employees table.



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