



The **SELECT** statement is used to select data from a database.

If you want to select all the fields available in the table, you can use the asterisk notation (*). It's generally referred to as a "select star" and is simply telling SQL to go and retrieve everything from the specified table:

```
SELECT *  
FROM table_name;
```

If you want to select specific fields from a table, you have to name each specific column:

```
SELECT column1, column2, ...  
FROM table_name;
```

It is also possible to tell SQL to calculate a value using an expression.

Type	Operators
• Arithmetic operators	+ , - , * , / , % <i>e.g. UnitsInStock + UnitsOnOrder</i>
• String concatenation operator	+ <i>e.g. FirstName + ' ' + LastName</i>

If adding 2 numbers together, it will add the numbers together e.g.

$2 + 2 = 4$

If adding two sting values together, it will concatenate the numbers e.g.

$'2' + '2' = '22'$



Exercise 1: Retrieve data by using the SELECT statement

Northwind Traders are attempting to learn more about their stock levels, and so they ask you 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. Create a report using the SELECT * statement against the Products table.
2. Create a report that selects the ProductID, ProductName, UnitPrice and UnitsInStock columns from the Products table.
3. Add columns to the second report so that it also calculates the current value of stock and the future value of stock.

Task 1: Create a report 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 dbo.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: Create a report that selects individual columns from a table

1. Create another new query and call it "StockList.sql".
2. It should access the dbo.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: Create a report 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.