Exercise:

1) Display Product's name and their supplier's name (ContactName), whose supplier's name does not contain "A" and there should be at most 10 characters in Product's name.

Solution:

```
use Northwind;
SELECT p.ProductName, s.ContactName AS SupplierName
FROM Products p
INNER JOIN Suppliers s ON p.SupplierID = s.SupplierID
WHERE LEN(p.ProductName) <= 10
AND s.ContactName NOT LIKE '%A%'
```

Output:

	ProductName	SupplierName
1	Spegesild	Niels Petersen
2	Chocolade	Dirk Luchte

✅ Query executed successfully.

2) Create a report showing order ID., OrderDate, EmployeeID, and the firstname and LastName of the associated Employee. (Tables: Employees & Orders)

Solution:

```
use Northwind;
SELECT o.OrderID, o.OrderDate, o.EmployeeID, e.FirstName, e.LastName
FROM Orders o
INNER JOIN Employees e ON o.EmployeeID = e.EmployeeID;
```

Output:

	OrderID	OrderDate	EmployeeID	FirstName	LastName
1	10248	1996-07-04 00:00:00.000	5	Steven	Buchanan
2	10249	1996-07-05 00:00:00.000	6	Michael	Suyama
3	10250	1996-07-08 00:00:00.000	4	Margaret	Peacock
4	10251	1996-07-08 00:00:00.000	3	Janet	Leverling

✅ Query executed successfully.   HP-ELITEBOOK-84 (16.0 RTM) HP-ELITEBOOK-84\ESHOP ... Northwind 00:00:00 830 rows

3) Count no of Products's against each Suppliers name. List only those products whose count is less than 5.

Solution:

```
use Northwind;
SELECT s.CompanyName AS SupplierName, COUNT(p.ProductID) AS ProductCount
FROM Products p
INNER JOIN Suppliers s ON p.SupplierID = s.SupplierID
GROUP BY s.CompanyName
HAVING COUNT(p.ProductID) < 5;
```
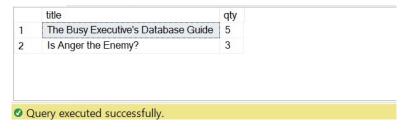
Output:

	SupplierName	ProductCount
1	Aux joyeux ecclésiastiques	2
2	Bigfoot Breweries	3
3	Cooperativa de Quesos 'Las Cabras'	2
4	Escargots Nouveaux	1
5	Exotic Liquids	3

✅ Query executed successfully.   HP-ELITEBOOK-84 (16.0 RTM) HP-ELITEBOOK-84\ESHOP ... Northwind 00:00:00 27 rows

4) Display Titles and their quantity. Show only those records where quantity is less than 10 (Hint Pubs database, table title and sales).

Solution:

```
use pubs;
SELECT t.title, s.qty
FROM titles t
INNER JOIN sales s ON t.title_id = s.title_id
WHERE s.qty < 10;
```

Output:

	title	qty
1	The Busy Executive's Database Guide	5
2	Is Anger the Enemy?	3

✅ Query executed successfully.

5) Display Book Title and publisher Names (pubs Database, Table Title and Publisher).
Solution:

```
use pubs;
SELECT t.title, s.qty
FROM titles t
INNER JOIN sales s ON t.title_id = s.title_id
WHERE s.qty < 10;
```

Output:

	BookTitle	PublisherName
1	The Busy Executive's Database Guide	Algodata Infosystems
2	Cooking with Computers: Surreptitious Balance Sh...	Algodata Infosystems
3	You Can Combat Computer Stress!	New Moon Books
4	Straight Talk About Computers	Algodata Infosystems

✅ Query executed successfully.   HP-ELITEBOOK-84 (16.0 RTM) HP-ELITEBOOK-84\ESHOP ... pubs 00:00:00 18 rows
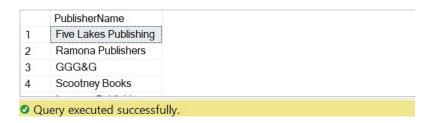
6) Display name of those publishers who haven't published any book yet.
Solution:

```
use pubs;
SELECT p.pub_name AS PublisherName FROM publishers p LEFT JOIN titles t ON p.pub_id =
t.pub_id WHERE t.pub_id IS NULL;
```

Output:

	PublisherName
1	Five Lakes Publishing
2	Ramona Publishers
3	GGG&G
4	Scootney Books

✅ Query executed successfully.

7) Display Authors name whose city is same (Author id should be different).
Solution:

```
use pubs;
SELECT t.title, s.qty
FROM titles t
INNER JOIN sales s ON t.title_id = s.title_id
WHERE s.qty < 10;
```

Output:

	AuthorFirstName1	AuthorLastName1	AuthorFirstName2	AuthorLastName2
1	Abraham	Bennet	Cheryl	Carson
2	Albert	Ringer	Anne	Ringer
3	Ann	Dull	Sheryl	Hunter
4	Anne	Ringer	Albert	Ringer

Query executed successfully.   HP-ELITEBOOK-84 (16.0 RTM) HP-ELITEBOOK-84\ESHOP ... pubs 00:00:00 26 rows

8) Use cross join (Cartesian join) to Display Book Title and Publisher Name.
Solution:

```
use pubs;
SELECT t.title AS BookTitle, p.pub_name AS PublisherName
FROM titles t
CROSS JOIN publishers p;
```

Output:

	BookTitle	PublisherName
1	The Busy Executive's Database Guide	New Moon Books
2	Cooking with Computers: Surreptitious Balance Sh...	New Moon Books
3	You Can Combat Computer Stress!	New Moon Books
4	Straight Talk About Computers	New Moon Books

Query executed successfully.   HP-ELITEBOOK-84 (16.0 RTM) HP-ELITEBOOK-84\ESHOP ... pubs 00:00:00 144 rows

9) Use two full joins to Display Product Name, Category Name and Supplier Name.
Solution:

```
use Northwind;
SELECT
    p.ProductName,
    c.CategoryName,
    s1.CompanyName AS SupplierName
FROM
    Products p FULL JOIN Categories c ON p.CategoryID = c.CategoryID FULL JOIN Suppliers
s1 ON p.SupplierID = s1.SupplierID;
```

Output:

	ProductName	CategoryName	SupplierName
1	Chai	Beverages	Exotic Liquids
2	Chang	Beverages	Exotic Liquids
3	Aniseed Syrup	Condiments	Exotic Liquids
4	Chef Anton's Cajun Seasoning	Condiments	New Orleans Cajun Delights

Query executed successfully.   HP-ELITEBOOK-84 (16.0 RTM) HP-ELITEBOOK-84\ESHOP ... Northwind 00:00:00 77 rows

10) Write a query to list the names of employees that belongs to the same location as the employee named Nancy.

Solution:

```sql
use Northwind;
SELECT FirstName + + LastName [Employee Name]
FROM Employees
WHERE City = (SELECT City FROM Employees WHERE FirstName = 'Nancy');
```

Output:

	Employee Name
1	NancyDavolio
2	LauraCallahan

✅ Query executed successfully.