

Exercise:

a) Write query that retrieve those cities of Customers where any supplier belongs to.

Solution:

```
use Northwind
SELECT DISTINCT c.City
FROM Customers c
WHERE EXISTS (
    SELECT 1
    FROM Suppliers s
    WHERE s.City = c.City
);
```

Output:

	City
1	Berlin
2	London
3	Montréal
4	Paris
5	Sao Paulo

✓ Query executed successfully.

b) Write query that retrieve those cities of Customers where no single supplier belongs to.

Solution:

```
use Northwind
SELECT DISTINCT c.City FROM Customers c WHERE NOT EXISTS (SELECT 1 FROM Suppliers s
WHERE s.City = c.City );
```

Output:

	City
1	Aachen
2	Albuquerque
3	Anchorage
4	Århus
5	Barcelona
6	Barquisimeto

✓ Query executed successfully.

c) Write query that retrieve the regions of Employees and Suppliers.

Solution:

```
use Northwind
SELECT DISTINCT E.Region AS Employee_Region, S.Region AS Supplier_Region
FROM Employees E
JOIN Suppliers S ON E.Region = S.Region;
```

Output:

Employee_Region	Supplier_Region

✓ Query executed successfully.

d) List distinct cities from of customers and suppliers, country must be Germany.

Solution:

```
use Northwind
SELECT DISTINCT City
FROM (
    SELECT City, Country
    FROM Customers
    UNION
    SELECT City, Country
    FROM Suppliers
) AS Combined
WHERE Country = 'Germany';
```

Output:

	City
1	Aachen
2	Berlin
3	Brand...
4	Cune...
5	Cuxha

✔ Query executed successfully.

e) List all customers and suppliers (ContactName, City, and Country).

Solution:

```
use Northwind
SELECT ContactName, City, Country
FROM (
    SELECT ContactName, City, Country
    FROM Customers
    UNION ALL
    SELECT ContactName, City, Country
    FROM Suppliers
) AS Combined;
```

Output:

	ContactName	City	Country
1	Maria Anders	Berlin	Germany
2	Ana Trujillo	México D.F.	Mexico
3	Antonio Moreno	México D.F.	Mexico
4	Thomas Hardy	London	UK
5	Christina Berolund	Luleå	Sweden

✔ Query executed successfully.