

Task No 01: Find the company's name that placed order 10290. (Tables: Customers & Orders).

Solution:

```
USE Northwind;
SELECT c.companyName
FROM Customers c
JOIN orders o ON c.customerID = o.customerID
WHERE o.OrderID = 10290;
```

Output:

	CompanyName
1	Comércio Mineiro

Query executed successfully. HP-ELITEBOOK-84 (16.0 RTM) HP-ELITEBOOK-84\ESHOP ... Northwind

Task No 02: Create a report that shows the product name and supplier id for all products supplied by Exotic Liquids, Tokyo Traders, Ma Maison and Lyngbysild. (Tables: Products & Suppliers)

Solution:

```
USE Northwind;
SELECT p.ProductName, p.SupplierID
FROM Products p
JOIN Suppliers s ON p.SupplierID = s.SupplierID
WHERE s.CompanyName IN ('Exotic Liquids', 'Tokyo Traders', 'Ma Maison', 'Lyngbysild');
```

Output:

	ProductName	SupplierID
1	Chai	1
2	Chang	1
3	Aniseed Syrup	1

Query executed successfully. HP-ELITEBOOK-84 (16.0 RTM) HP-ELITEBOOK-84\ESHOP ... Northwind

Task No 03: Create a report that shows all products by name that are in the Confections. (Tables: Products & Categories)

Solution:

```
USE Northwind;
SELECT p.ProductName
FROM Products p
JOIN Categories c ON p.CategoryID = c.CategoryID
WHERE c.CategoryName = 'Confections';
```

Output:

	ProductName
1	Pavlova
2	Teatime Chocolate Biscuits
3	Sir Rodney's Marmalade

Query executed successfully. HP-ELITEBOOK-84 (16.0 RTM) HP-ELITEBOOK-84\ESHOP ... Northwind

Task No 04: Retrieve name of product having maximum, minimum and average unit price along with their prices. (Tables: Products)

Solution:

```
USE Northwind;
SELECT
    ProductName,
    UnitPrice
FROM
    Products
WHERE
```

[Lab no. 06]**[Data Base Management System]
[Sub Queries]**

```
UnitPrice = (SELECT MAX(UnitPrice) FROM Products)
OR UnitPrice = (SELECT MIN(UnitPrice) FROM Products)
OR UnitPrice = (SELECT AVG(UnitPrice) FROM Products);
```

Output:

	ProductName	UnitPrice
1	Geitost	2.50
2	Côte de Blaye	263.50

✓ Query executed successfully.

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Task No 05: Create a report that shows all 5 companies by name that sell products in the Seafood category. (Tables: Suppliers, Products & Categories)

Solution:

```
USE Northwind;
SELECT DISTINCT s.CompanyName
FROM Suppliers s
JOIN Products p ON s.SupplierID = p.SupplierID
JOIN Categories c ON p.CategoryID = c.CategoryID
WHERE c.CategoryName = 'Seafood';
```

Output:

	CompanyName
1	Escargots Nouveaux
2	Lyngbysild
3	Mayumi's

✓ Query executed successfully.

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Task No 06: Write query using a “sub query” to display which Customers were served by which Employee. (Tables: Customers & Employees)

Solution:

```
USE Northwind;
select c.CustomerID, c.contactName, o.EmployeeID, e.firstName
from Customers c join Orders o on o.CustomerID = c.CustomerID
join Employees e on e.EmployeeID = o.EmployeeID
where c.customerID in (select customerID from Orders);
```

Output:

	CustomerID	contactName	EmployeeID	firstName
1	VINET	Paul Henriot	5	Steven
2	TOMSP	Karin Josephs	6	Michael
3	HANAR	Mario Pontes	4	Margaret
4	VICTE	Mary Saveley	3	Janet

✓ Query executed successfully.

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Task No 07: Write query using a “sub query” to list of all the stores that have discount records (use pubs).

Solution:

```
USE Northwind;
SELECT DISTINCT store.stor_name
FROM stores store
JOIN sales sale ON store.stor_id = sale.stor_id
WHERE sale.discount > 0;
```

Output:

Task No 08: Write query using a “sub query” to list all the authors available in Barnum’s store (use pubs).

Solution:

```
USE Northwind;  
Select au_id, au_fname from authors where au_id in  
(Select au_id from titleauthor where title_id  
in(select title_id from sales where stor_id  
in(select stor_id from stores where stor_name = 'Barnum's')));
```

Output:

	au_id	au_fname
1	427-17-2319	Ann
2	846-92-7186	Sheryl
3	899-46-2035	Anne

Query executed successfully.

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Task No 09: Write query using a “sub query” to give the customer id and amount spent of the customer who spent the most.

Solution:

```
USE Northwind;  
select c.customerID , (od.unitprice * od.quantity) from customers c join orders o  
on o.CustomerID = c.CustomerID join [Order Details] od  
on od.OrderID = o.OrderID  
where (unitprice * quantity) =  
(select max(unitPrice * Quantity) from [Order Details]);
```

Output:

	customerID	(No column name)
1	QUICK	15810.00
2	HANAR	15810.00

Query executed successfully.

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Task No 10: Write a query using a “sub query” to find customers who have placed orders. (Tables: Customers & Orders)

Solution:

```
USE Northwind;  
select customerID, ContactName from Customers  
where CustomerID in (select CustomerID from Orders);
```

Output:

	customerID	ContactName
1	ALFKI	Maria Anders
2	ANATR	Ana Trujillo
3	ANTON	Antonio Moreno
4	AROUT	Thomas Hardy

Query executed successfully.

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