Bahria University, Karachi Campus



LIST OF TASKS

TASK NO	OBJECTIVE	
A	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.	
В	Create a report showing order ID., OrderDate, EmployeeID, and the firstname and LastName of the associated Employee. (Tables: Employees & Orders)	
С	Count no of Products's against each Suppliers name. List only those products whose count is less than 5.	
D	Display Titles and their quantity. Show only those records where quantity is less than 10 (Hint Pubs database, table title and sales)	
Е	Display Book Title and publisher Names (pubs Database, Table Title and Publisher).	
F	Display name of those publishers who haven't published any book yet.	
G	Display Authors name whose city is same (Author id should be different).	
Н	Use cross join (Cartesian join) to Display Book Title and Publisher Name.	
Ι	Use two full joins to Display Product Name, Category Name and Supplier Name.	
J	Write a query to list the names of employees that belongs to the same location as the employee named Nancy	

Submitted On: Date: <u>04/03/24</u>

[DATABASE MANAGEMENT SYSTEMS LAB]

[SQL Joins]

Task No. 01:

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:

```
SQLQuery1.sql - M...\Musaafir!~ (69))* *>

SELECT Products.ProductName, Suppliers.ContactName FROM Products INNER JOIN Suppliers ON Products.SupplierID = Suppliers.SupplierID

WHERE Suppliers.ContactName NOT LIKE '%A%' AND LEN(Products.ProductName) <= 10;
```

Output:

	ProductName	ContactName	
1	Spegesild	Niels Petersen	
2	Chocolade	Dirk Luchte	

Task No. 02:

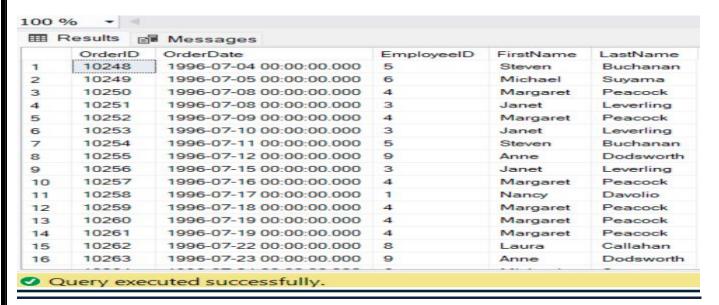
Create a report showing order ID., OrderDate, EmployeeID, and the firstname and LastName of the associated Employee. (Tables: Employees & Orders)

Solution:

```
SQLQuery1.sql - M...\Musaafir!~ (69))* + X

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

Output:



[DATABASE MANAGEMENT SYSTEMS LAB] [SQL Joins]

Task No. 03:

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

Solution:

```
SQLQuery1.sql - M...\Musaafir!~ (69))* + X

| Select s.ContactName, COUNT(P.ProductID) AS ProductCount from Products p inner join Suppliers s on p.SupplierID group by s.ContactName having COUNT(p.ProductID)
```

Output:



Task No. 04:

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

Solution:

```
SQLQuery1.sql - M...\Musaafir!~ (77))* + X

SQLQuery1.sql - M...\Musaafir!~ (77))* + X
```

Output:



[Lab no. 02]

[DATABASE MANAGEMENT SYSTEMS LAB]

[SQL Joins]

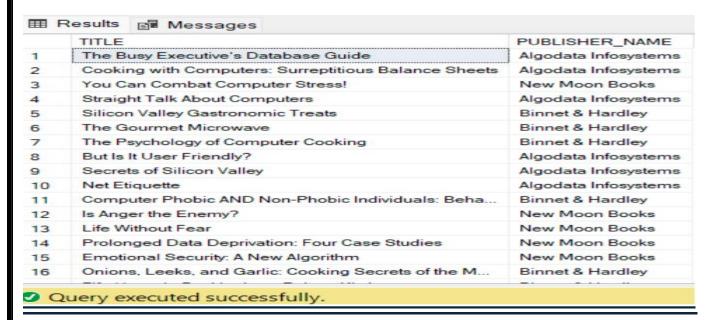
Task No. 05:

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

Solution:



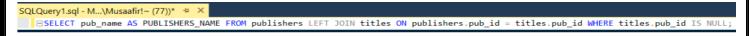
Output:



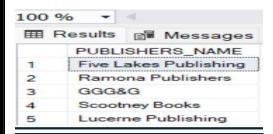
Task No. 06:

Display name of those publishers who haven't published any book yet.

Solution:



Output:



[DATABASE MANAGEMENT SYSTEMS LAB] [SQL Joins]

Task No. 07:

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

Solution:

```
SQLQuery1.sql - M...\Musaafir!~ (55))* * X

SSLQuery1.sql - M...\Musaafir!~ (55))* * X

SSELECT DISTINCT al.au_fname + ' ' + al.au_lname AS AUTHOR1, a2.au_fname + ' ' + a2.au_lname AS AUTHOR2, a1.City FROM authors a1 JOIN authors a2 |

ON al.city = a2.city WHERE al.au id <> a2.au id;
```

Output:

	AUTHOR1	AUTHOR2	City
1	Abraham Bennet	Cheryl Carson	Berkeley
2	Albert Ringer	Anne Ringer	Salt Lake City
3	Ann Dull	Sheryl Hunter	Palo Alto
4	Anne Ringer	Albert Ringer	Salt Lake City
5	Cheryl Carson	Abraham Bennet	Berkeley
6	Dean Straight	Dirk Stringer	Oakland
7	Dean Straight	Livia Karsen	Oakland
8	Dean Straight	Marjorie Green	Oakland
9	Dean Straight	Stearns MacFeather	Oakland
10	Dirk Stringer	Dean Straight	Oakland
11	Dirk Stringer	Livia Karsen	Oakland
12	Dirk Stringer	Marjorie Green	Oakland
13	Dirk Stringer	Stearns MacFeather	Oakland
14	Livia Karsen	Dean Straight	Oakland
15	Livia Karsen	Dirk Stringer	Oakland
16	Livia Karsen	Marjorie Green	Oakland

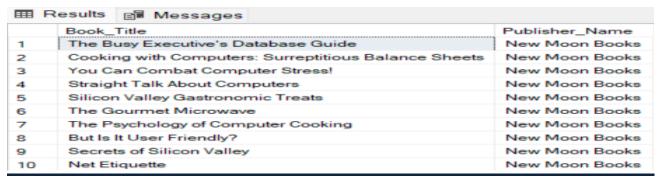
Task No. 08:

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

Solution:

```
SQLQuery1.sql-M...\Musaafir!~ (77))* ⊅ ×
□SELECT title AS Book_Title, pub_name AS Publisher_Name FROM titles CROSS JOIN publishers;
```

Output:



[Lab no. 02]

[DATABASE MANAGEMENT SYSTEMS LAB] [SQL Joins]

Task No. 09:

Use two full joins to Display Product Name, Category Name and Supplier Name.

Solution:

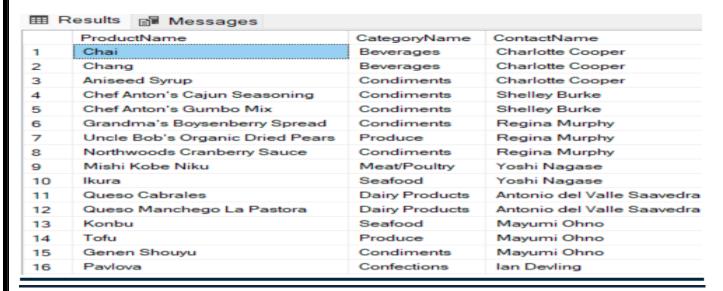
```
SQLQuery1.sql - M...\Musaafir!~ (69))*  

SQLQuery1.sql - M...\Musaafir!~ (69))*  

SELECT p.ProductName, c.CategoryName, s.ContactName FROM Products p FULL JOIN Categories c ON p.CategoryID = c.CategoryID |

FULL JOIN Suppliers s ON p.SupplierID = s.SupplierID;
```

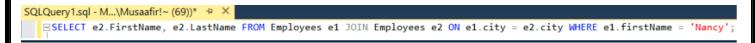
Output:



Task No. 10:

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

Solution:



Output:

