

Bahria University, Karachi Campus



LAB EXPERIMENT NO.

04

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.
B	Create a report showing order ID., OrderDate, EmployeeID, and the firstname and LastName of the associated Employee. (Tables: Employees & Orders)
C	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)
E	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).
H	Use cross join (Cartesian join) to Display Book Title and Publisher Name.
I	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: 04/03/24

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))* X
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:

100 %					
Results Messages					
	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
5	10252	1996-07-09 00:00:00.000	4	Margaret	Peacock
6	10253	1996-07-10 00:00:00.000	3	Janet	Leverling
7	10254	1996-07-11 00:00:00.000	5	Steven	Buchanan
8	10255	1996-07-12 00:00:00.000	9	Anne	Dodsworth
9	10256	1996-07-15 00:00:00.000	3	Janet	Leverling
10	10257	1996-07-16 00:00:00.000	4	Margaret	Peacock
11	10258	1996-07-17 00:00:00.000	1	Nancy	Davolio
12	10259	1996-07-18 00:00:00.000	4	Margaret	Peacock
13	10260	1996-07-19 00:00:00.000	4	Margaret	Peacock
14	10261	1996-07-19 00:00:00.000	4	Margaret	Peacock
15	10262	1996-07-22 00:00:00.000	8	Laura	Callahan
16	10263	1996-07-23 00:00:00.000	9	Anne	Dodsworth

Query executed successfully.

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))* ✕
select s.ContactName, COUNT(P.ProductID) AS ProductCount from Products p inner join Suppliers s on p.SupplierID=s.SupplierID
group by s.ContactName having COUNT(p.ProductID)<5 ;
```

Output:

	ContactName	ProductCount
1	Anne Heikkonen	3
2	Antonio del Valle Saavedra	2
3	Beate Vileid	3
4	Carlos Diaz	1
5	Chandra Leka	3
6	Chantal Goulet	2
7	Charlotte Cooper	3
8	Cheryl Saylor	3
9	Dirk Luchte	2
10	Eliane Noz	2

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))* ✕
SELECT t.title AS TITLE, s.qty AS TOTAL_QUANTITY FROM titles t INNER JOIN sales s ON t.title_id = s.title_id WHERE s.qty < 10;
```

Output:

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

Task No. 05:

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

Solution:

```
SQLQuery1.sql - M...\Musaafir!~ (77))* X
SELECT title AS TITLE, pub_name AS PUBLISHER_NAME FROM titles INNER JOIN publishers ON titles.pub_id = publishers.pub_id;
```

Output:

Results		Messages
	TITLE	PUBLISHER_NAME
1	The Busy Executive's Database Guide	Algodata Infosystems
2	Cooking with Computers: Surreptitious Balance Sheets	Algodata Infosystems
3	You Can Combat Computer Stress!	New Moon Books
4	Straight Talk About Computers	Algodata Infosystems
5	Silicon Valley Gastronomic Treats	Binnet & Hardley
6	The Gourmet Microwave	Binnet & Hardley
7	The Psychology of Computer Cooking	Binnet & Hardley
8	But Is It User Friendly?	Algodata Infosystems
9	Secrets of Silicon Valley	Algodata Infosystems
10	Net Etiquette	Algodata Infosystems
11	Computer Phobic AND Non-Phobic Individuals: Beha...	Binnet & Hardley
12	Is Anger the Enemy?	New Moon Books
13	Life Without Fear	New Moon Books
14	Prolonged Data Deprivation: Four Case Studies	New Moon Books
15	Emotional Security: A New Algorithm	New Moon Books
16	Onions, Leeks, and Garlic: Cooking Secrets of the M...	Binnet & Hardley

Query executed successfully.

Task No. 06:

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

Solution:

```
SQLQuery1.sql - M...\Musaafir!~ (77))* X
SELECT pub_name AS PUBLISHERS_NAME FROM publishers LEFT JOIN titles ON publishers.pub_id = titles.pub_id WHERE titles.pub_id IS NULL;
```

Output:

100 % ▾

Results Messages

	PUBLISHERS_NAME
1	Five Lakes Publishing
2	Ramona Publishers
3	GGG&G
4	Scootney Books
5	Lucerne Publishing

Task No. 07:

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

Solution:

```
SQLQuery1.sql - M...\Musaafir!~ (55))*
SELECT DISTINCT a1.au_fname + ' ' + a1.au_lname AS AUTHOR1, a2.au_fname + ' ' + a2.au_lname AS AUTHOR2, a1.City FROM authors a1 JOIN authors a2
ON a1.city = a2.city WHERE a1.au id <> a2.au id;
```

Output:

Results		Messages	
	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

Query executed successfully.

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:

Results		Messages	
	Book_Title	Publisher_Name	
1	The Busy Executive's Database Guide	New Moon Books	
2	Cooking with Computers: Surreptitious Balance Sheets	New Moon Books	
3	You Can Combat Computer Stress!	New Moon Books	
4	Straight Talk About Computers	New Moon Books	
5	Silicon Valley Gastronomic Treats	New Moon Books	
6	The Gourmet Microwave	New Moon Books	
7	The Psychology of Computer Cooking	New Moon Books	
8	But Is It User Friendly?	New Moon Books	
9	Secrets of Silicon Valley	New Moon Books	
10	Net Etiquette	New Moon Books	

Task No. 09:

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

Solution:

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

	ProductName	CategoryName	ContactName
1	Chai	Beverages	Charlotte Cooper
2	Chang	Beverages	Charlotte Cooper
3	Aniseed Syrup	Condiments	Charlotte Cooper
4	Chef Anton's Cajun Seasoning	Condiments	Shelley Burke
5	Chef Anton's Gumbo Mix	Condiments	Shelley Burke
6	Grandma's Boysenberry Spread	Condiments	Regina Murphy
7	Uncle Bob's Organic Dried Pears	Produce	Regina Murphy
8	Northwoods Cranberry Sauce	Condiments	Regina Murphy
9	Mishi Kobe Niku	Meat/Poultry	Yoshi Nagase
10	Ikura	Seafood	Yoshi Nagase
11	Queso Cabrales	Dairy Products	Antonio del Valle Saavedra
12	Queso Manchego La Pastora	Dairy Products	Antonio del Valle Saavedra
13	Konbu	Seafood	Mayumi Ohno
14	Tofu	Produce	Mayumi Ohno
15	Genen Shouyu	Condiments	Mayumi Ohno
16	Pavlova	Confections	Ian Devling

Task No. 10:

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

Solution:

```
SQLQuery1.sql - M...\Musaafir!~ (69))* X
SELECT e2.FirstName, e2.LastName FROM Employees e1 JOIN Employees e2 ON e1.city = e2.city WHERE e1.firstName = 'Nancy';
```

Output:

	firstName	lastName
1	Nancy	Davolio
2	Laura	Callahan