Bahria University,

Karachi Campus

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LAB EXPERIMENT NO.

**05**

LIST OF TASKS

|  |  |
| --- | --- |
| TASK NO | OBJECTIVE |
|  | **SQL SUB QUERIES** |
|  | **Find the company’s name that placed order 10290. (Tables : Customers & Orders)** |
| 2 | **Find the Companies that placed orders in 1997 (Tables : Customers & Orders)** |
| 3 | **Create a report that shows the product name and supplier id for all products supplied by Exotic Liquids, Grandma Kelly's Homestead, and Tokyo Traders. (Tables : Products & Suppliers)**  **HINT: You will need to escape the apostrophe in "Grandma Kelly's Homestead." To do so, place another apostrophe in front of it. For example,**  **SELECT \* FROM Suppliers WHERE CompanyName='Grandma Kelly‘’s Homestead’;** |
| 4 | **Create a report that shows all products by name that are in the Seafood category. (Tables : Products & Categories)** |
| 5 | **Create a report that shows all companies by name that sell products in CategoryID 8. (Tables : Supplier & Products)** |
| 6 | **Create a report that shows all 5companies by name that sell products in the Seafood category.(Tables: Suppliers, Products & Categories)** |
| 7 | **Write query using a “sub query” to display which Customers were served by which Employee use Northwind** |
| 8 | **Write query using a “sub query” to list of all the stores that have discount records use pubs** |
| 9 | **Write query using a “sub query” to name publishers have got titles in store in Seattle? Use pubs** |
| 10 | **Write query using a “sub query” to list all the authors available in Barnum’s store use pubs** |
| 11 | **Write query using a “sub query” to give the customer id and amount spent of the customer who spent the most using Northwind** |
| 12 | **Write query using a “sub query” to list all Northwind customers who have not placed an order.** |

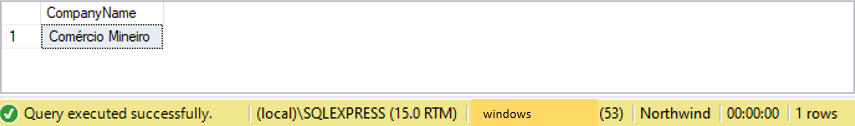
Submitted On:

**5 - 4 - 2023**

(Date: DD/MM/YY)

**Task No. 1:** Find the company’s name that placed order 10290. (Tables: Customers & Orders)

**Solution:** SELECT CompanyName from Customers where CustomerID = (select CustomerID from Orders where OrderID=10290)

**Outupt:** 

**Task No. 2:** Find the Companies that placed orders in 1997 (Tables: Customers & Orders)

**Solution:** SELECT CompanyName from Customers where CustomerID in (select CustomerID from Orders where year(OrderDate)=1997)

**Output:**

Graphical user interface, application, Word

Description automatically generated

**Task No. 3:** Create a report that shows the product name and supplier id for all products supplied by Exotic Liquids, Grandma Kelly's Homestead, and Tokyo Traders. (Tables: Products & Suppliers)

**Solution:** SELECT SupplierID,ProductName from Products as p where SupplierID in (select SupplierID from Suppliers as s where CompanyName in ('Exotic Liquids' ,'Grandma Kelly''s Homestead' ,'Tokyo Traders'))

**Output:**

Graphical user interface, text, application

Description automatically generated

**Task No. 4:** Create a report that shows all products by name that are in the Seafood category. (Tables : Products & Categories)

**Solution:** select ProductName,CategoryID from Products where CategoryID in (select CategoryID from Categories where CategoryName ='Seafood')

**Output:**

Graphical user interface, text, application

Description automatically generated **Task No. 5:** Create a report that shows all companies by name that sell product in CategoryID 8.(Tables: Supplier & Products)

**Solution:** select CompanyName from Suppliers where SupplierID in (select SupplierID from Products where CategoryID = 8)

**Output:**

Graphical user interface, text, application

Description automatically generated

**Task No. 6:** Create a report that shows all 5companies by name that sell products in the Seafood category.(Tables: Suppliers, Products & Categories)

**Solution:** select CompanyName from Suppliers where SupplierID in (select SupplierID from Products where CategoryID = (select CategoryID from Categories where CategoryName='Seafood'))

**Output:**

Graphical user interface, application, Word

Description automatically generated **Task No. 7:** Write query using a “sub query” to display which Customers were served by which Employee use Northwind.

**Solution:** Select ContactName, A.OrderID, firstname+' '+Lastname as Employee FROM (select Orderid,ContactName from orders left join Customers on Orders.CustomerID = Customers.CustomerID) A inner join ( select OrderID,FirstName,LastName from Orders left join employees on Orders.EmployeeID=Employees.EmployeeID)B on A.Orderid=B.Orderid

**Output:**

Graphical user interface, application

Description automatically generated with medium confidence **Task No. 8:** Write query using a “sub query” to list of all the stores that have discount records use pubs.

**Solution:** select a.stor\_id,a.stor\_name ,b.discount from stores as a,discounts as b where a.stor\_id in (select b.stor\_id from discounts)

**Output:**

Graphical user interface, text, application

Description automatically generated **Task No. 9:** Write query using a “sub query” to name publishers have got titles in store in Seattle? Use pubs.

**Solution:** select pub\_id,pub\_name from publishers where pub\_id in (select pub\_id from titles where title\_id in (select title\_id from sales where stor\_id in(select stor\_id from stores where city ='Seattle')))

**Output:**

Graphical user interface, text, application

Description automatically generated

**Task No. 10:** Write query using a “sub query” to list all the authors available in Barnum’s store use pubs.

**Solution:** select au\_fname+' '+au\_lname as [Full Name] 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 like 'ba%')))

**Output:**

Graphical user interface, text, application, chat or text message

Description automatically generated

**Task No. 11:** Write query using a “sub query” to give the customer id and amount spent of the customer who spent the most using Northwind.

**Solution:** select CustomerID,max(Quantity\*UnitPrice) as [Highest Price] from Customers,[Order Details] where CustomerID in (select CustomerID from Orders where OrderID in (select OrderID from [Order Details] WHERE UnitPrice\*Quantity in (select MAX(UnitPrice\*Quantity) from [Order Details] ))) group by CustomerID

**Output:**

Graphical user interface, text, application

Description automatically generated **Task No. 12:** Write query using a “sub query” to list all Northwind customers who have not placed an order.

**Solution:** (select CustomerID,ContactName from customers) except (select CustomerID,ContactName from customers where customerid in (select Orders.CustomerID from Orders))

**Output:** Graphical user interface, application

Description automatically generated