Bahria University,

Karachi Campus



LAB EXPERIMENT NO.

**5**

LIST OF TASKS

|  |  |
| --- | --- |
| TASK NO | OBJECTIVE |
| 1 | Find the company’s name that placed order 10290. |
| 2 | Find the Companies that placed orders in 1997. |
| 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. |
| 4 | Create a report that shows all products by name that are in the Seafood category. |
| 5 | Create a report that shows all companies by name that sell products in CategoryID 8. |
| 6 | Create a report that shows all 5companies by name that sell products in the Seafood category. |
| 7 | Write query using a “sub query” to display which Customers were served by which Employee |
| 8 | Write query using a “sub query” to list of all the stores that have discount records |
| 9 | Write query using a “sub query” to name publishers have got titles in store in Seattle? |
| 10 | Write query using a “sub query” to list all the authors available in Barnum’s store |
| 11 | Write query using a “sub query” to give the customer id and amount spent of the customer who spent the most. |
| 12 | Write query using a “sub query” to list all Northwind customers who have not placed an order. |

Submitted On:

Date: 12/04/2022

**Task No. 1: Find the company’s name that placed order 10290. Find the company’s name that placed order 10290.**

**Solution:**

Select CompanyName from Customers where CustomerID in (select CustomerID from Orders

where OrderID = '10290' )

**Output:**

Graphical user interface, application, Word

Description automatically generated

**Task No. 2: Find the Companies that placed orders in 1997.**

**Solution:**

SELECT CompanyName FROM Customers WHERE CustomerID IN (SELECT CustomerID FROM Orders WHERE OrderDate like '%1997%')

Or

SELECT CompanyName FROM Customers WHERE CustomerID IN (SELECT CustomerID FROM Orders WHERE OrderDate BETWEEN '1-Jan-1997' AND '31-Dec-1997');

Graphical user interface, application

Description automatically generated**Output:**

**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.**

**Solution:**

SELECT ProductName,SupplierID from Products where SupplierID in (SELECT SupplierID FROM Suppliers WHERE CompanyName in ('Grandma Kelly''s Homestead','Tokyo Traders','Exotic Liquids'));

**Output:**

Graphical user interface, application, Word

Description automatically generated

**Task No. 4: Create a report that shows all products by name that are in the Seafood category.**

**Solution:**

select productname from products where categoryid in (select categoryid from categories where categoryname='Seafood');

**Output:**

Graphical user interface, application, Word

Description automatically generated

**Task No. 5: Create a report that shows all companies by name that sell products in CategoryID 8.**

**Solution:**

select CompanyName from Suppliers where SupplierId in (select SupplierId from Products

where CategoryId = 8)

**Output:**

Graphical user interface, application, Word

Description automatically generated

**Task No. 6: Create a report that shows all 5companies by name that sell products in the Seafood category.**

**Solution:**

select top 5 CompanyName from Suppliers where SupplierID in (Select SupplierID from Products where CategoryID in (select CategoryID from Categories where CategoryName = 'SeaFood'))

**Output:**

Graphical user interface, application

Description automatically generated with medium confidence

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

**Solution:**

select orders.OrderID,customers.contactname as customer\_name, (select FirstName+' '+LastName from Employees where employeeid in (orders.employeeid)) as Employee\_Name from customers inner join orders on orders.customerid=customers.customerid where customers.customerid in (select orders.customerid from orders)(wrong)

or

select OrderID, FirstName+' '+LastName as Employee\_Name, e.EmployeeID , ContactName as Customer

from Orders o inner join Employees e on e.EmployeeID = o.EmployeeID

inner join Customers c on c.CustomerID = o.CustomerID order by e.EmployeeID; (best query)

or

select orders.OrderID,customers.contactname as customer\_name ,

(select FirstName+' '+LastName from Employees where employeeid in (orders.employeeid))

as Employee\_Name , (select EmployeeID from Employees where employeeid in (orders.employeeid)) as EmployeeID from customers inner join orders on orders.customerid=customers.customerid

where Orders.EmployeeID in (Select EmployeeID from Employees) (correct)

or

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

**Task No. 8: Write query using a “sub query” to list of all the stores that have discount records**

**Solution:**

select stor\_name from stores where stor\_id = (select stor\_id from discounts where stor\_id is not null)

**Output:**

Graphical user interface, application, Word

Description automatically generated

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

**Solution:**

select 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**

**Solution:**

select au\_fname + ' ' + au\_lname as author\_name from authors where au\_id in (select au\_id from titleauthor where title\_id in (select title\_id from sales where stor\_id = (select stor\_id from stores where stor\_name = 'Barnum''s')))

**Output:**

Application

Description automatically generated with medium confidence

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

**Solution:**

Select A.CustomerID, UnitPrice \* Quantity as HighestAmount from (Select Orders.OrderID,Customers.CustomerID from Orders Inner join Customers on Customers.CustomerID= Orders.CustomerID)A inner join (Select Orders.OrderID, UnitPrice, Quantity from Orders inner join [Order Details] on Orders.OrderID= [Order Details].OrderID where UnitPrice\*Quantity in (select max(UnitPrice\*Quantity)from [Order Details]))B ON A.OrderID = B.OrderID

**Output:**

Graphical user interface, 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 AS CustomerName,CompanyName from customers

where customerid not in (select customerid from orders);

**Output:**

Graphical user interface, text, application

Description automatically generated