座號： 　　姓名： 2022/6/8

階段性作業六

Select合併查詢與子查詢

**請利用【北風】資料庫，完成下列查詢要求。**

**1.請試寫一合併查詢，查詢出訂購日期落在1996年7月並指定送貨公司為「United Package」的有訂單之訂貨明細資料，並列出訂單號碼、產品類別名稱、產品名稱、產品訂購單價、產品訂購數量、產品價錢小計、客戶編號、客戶名稱、收貨人名字、訂購日期、處理訂單員工的姓名、送貨方式、供應商名稱等資料項目，其中產品價錢小計請以四捨五入計算至整數位。**

答案填寫處：

select o.OrderID, cate.CategoryName, p.ProductName , od.UnitPrice , od.Quantity , round(od.UnitPrice\*od.Quantity\*(1-od.Discount),0) as 產品價錢小計 ,

cust.CustomerID , cust.CompanyName , cust.ContactName , o.OrderDate , e.LastName , e.FirstName , Ship.CompanyName as 送貨方式 , sup.CompanyName as 供應商名稱

from Orders as o

inner join [Order Details] as od on o.OrderID=od.OrderID

inner join Products as p on p.ProductID=od.ProductID

inner join Categories as cate on cate.CategoryID=p.CategoryID

inner join Customers as cust on cust.CustomerID=o.CustomerID

inner join Employees as e on e.EmployeeID=o.EmployeeID

inner join Shippers as Ship on Ship.ShipperID = o.ShipVia

inner join Suppliers as sup on sup.SupplierID=p.SupplierID

where OrderDate >= '1996/07/01' and OrderDate <= '1996/07/31' and Ship.CompanyName='United Package' '

**2.請試寫一合併查詢，查詢客戶ANTON歷年來所訂購的所有產品，並統計出各種產品的訂購數量，輸出如下結果。**

|  |  |  |  |
| --- | --- | --- | --- |
| CustomerID | ContactName | ProductName | Quantity |
| ANTON | Antonio Moreno | Alice Mutton | 18 |
| ANTON | Antonio Moreno | Boston Crab Meat | 10 |
| ANTON | Antonio Moreno | Chang | 20 |
| ANTON | Antonio Moreno | Chocolade | 15 |
| ANTON | Antonio Moreno | Geitost | 38 |
| ANTON | Antonio Moreno | Gumbar Gummibarchen | 30 |
| ANTON | Antonio Moreno | Ipoh Coffee | 15 |
| ANTON | Antonio Moreno | Louisiana Hot Spiced Okra | 4 |
| ANTON | Antonio Moreno | Perth Pasties | 25 |
| ANTON | Antonio Moreno | Queso Cabrales | 74 |
| ANTON | Antonio Moreno | Raclette Courdavault | 15 |
| ANTON | Antonio Moreno | Ravioli Angelo | 5 |
| ANTON | Antonio Moreno | Rhonbrau Klosterbier | 30 |
| ANTON | Antonio Moreno | Sasquatch Ale | 40 |
| ANTON | Antonio Moreno | Singaporean Hokkien Fried Mee | 20 |

答案填寫處：

select c.CustomerID , c.ContactName , p.ProductName , od.Quantity from Products as p

inner join [Order Details] as od on od.ProductID=p.ProductID

inner join Orders as o on o.OrderID=od.OrderID

inner join Customers as c on c.CustomerID=o.CustomerID

where c.CustomerID='ANTON'

order by p.ProductName

**3.** **請利用exists運算子配合子查詢式，找出哪些客戶從未下過訂單，並列出客戶的所有欄位。(不可用到in運算，亦不可用合併查詢式)**

答案填寫處：

select \* from Customers

where not exists (select \* from Orders where Customers.CustomerID = Orders.CustomerID )

**4.** **請利用in運算子配合子查詢式，查詢哪些員工有處理過訂單，並列出員工的員工編號、姓名、職稱、內部分機號碼、附註欄位。(不可用到exists運算，亦不可用合併查詢式)**

答案填寫處：

select EmployeeID,LastName,FirstName,Title,Extension,Notes from Employees

where EmployeeID in (select EmployeeID from Orders )

**5.** **請合併查詢與子查詢兩種寫法，列出1998年度所有被訂購過的產品資料，並列出產品的所有欄位，且依產品編號由小到大排序。(寫合併查詢時不得用任何子查詢式，寫子查詢時不得用任何合併查詢式)**

合併查詢答案填寫處：

select \* from Products

intersect

select p.\* from Products as p

inner join [Order Details] as od on p.ProductID=od.ProductID

inner join Orders as o on od.OrderID = o.OrderID

where o.OrderDate >='1998/1/1' and o.OrderDate<='1998/12/31'

子查詢答案填寫處：

select \* from Products

where ProductID in(select ProductID from [Order Details]

where OrderID in (select OrderID from Orders where OrderDate>='1998/1/1'and OrderDate<='1998/12/31'))

order by ProductID

**繳交作業時，請在答案欄中繕打，並將完成結果列印出來，於上方親自簽上座號及姓名。**

**（本項作業須達80分以上方可通過）**