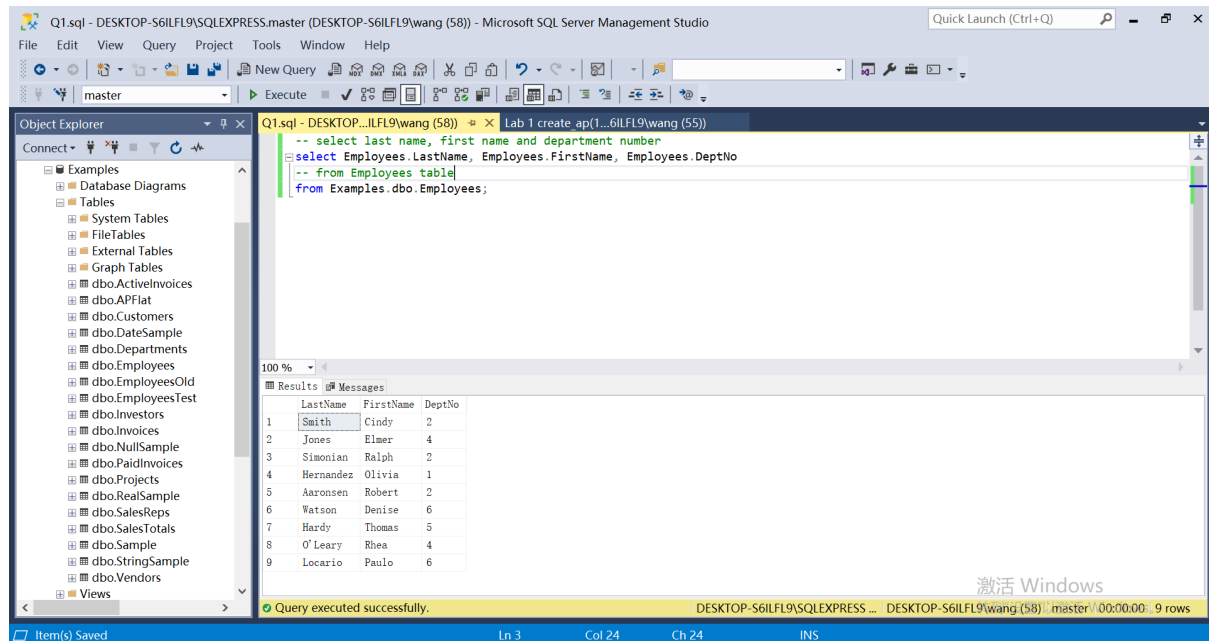


This lab is great, but I can't do much on remarking.....

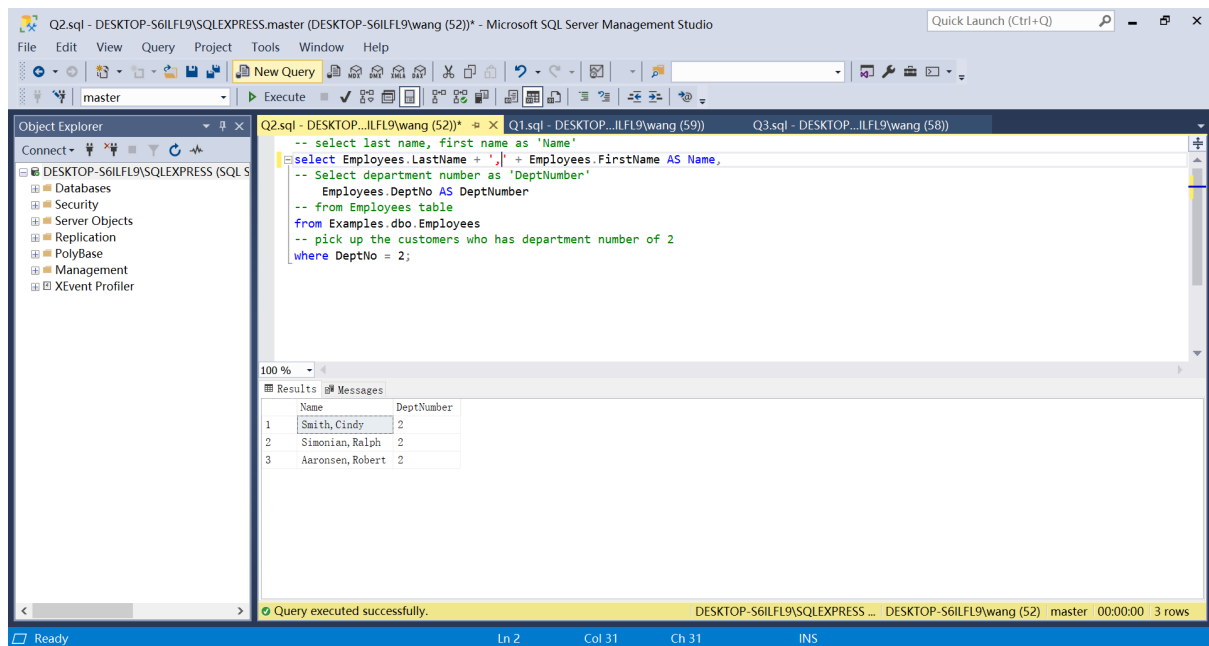
Q1:

```
-- select last name, first name and department number
select Employees.LastName, Employees.FirstName, Employees.DeptNo
-- from Employees table
from Examples.dbo.Employees;
```



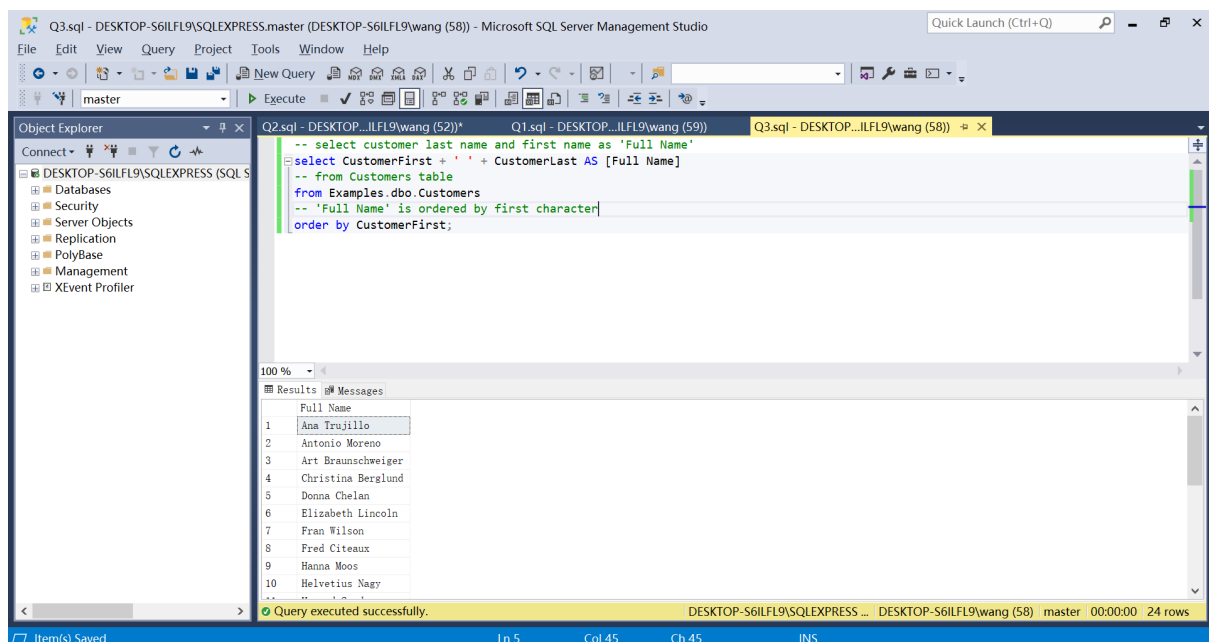
Q2:

```
-- select last name, first name as 'Name'
select Employees.LastName + ',' + Employees.FirstName AS Name,
-- Select department number as 'DeptNumber'
Employees.DeptNo AS DeptNumber
-- from Employees table
from Examples.dbo.Employees
-- pick up the customers who has department number of 2
where DeptNo = 2;
```



Q3:

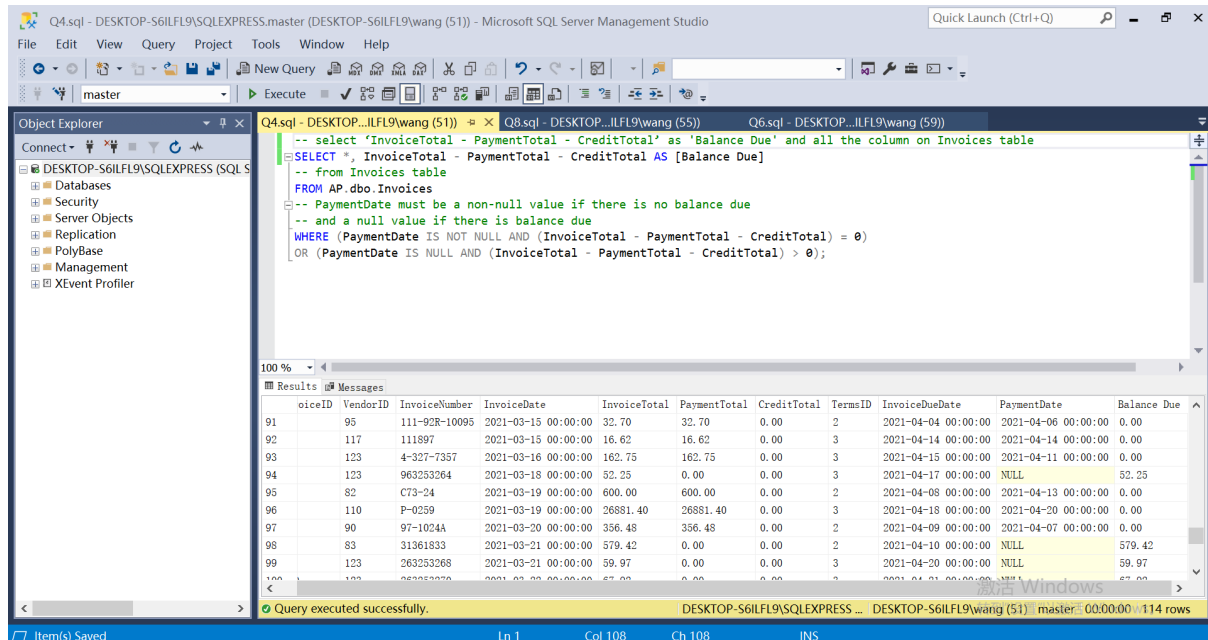
```
-- select customer last name and first name as 'Full Name'
SELECT CustomerFirst + ' ' + CustomerLast AS [Full Name]
-- from Customers table
FROM Examples.dbo.Customers
-- 'Full Name' is ordered by first character
ORDER BY CustomerFirst;
```



Q4::

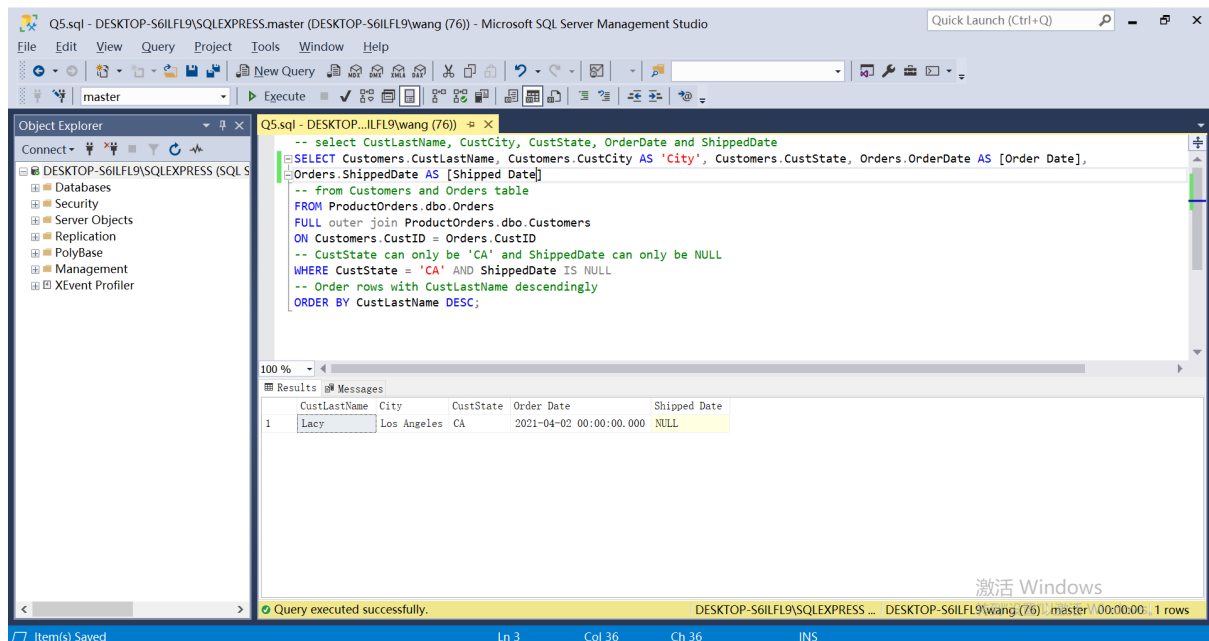
```
-- select 'InvoiceTotal - PaymentTotal - CreditTotal' as 'Balance Due' and all the column on
Invoices table
SELECT *, InvoiceTotal - PaymentTotal - CreditTotal AS [Balance Due]
```

```
-- from Invoices table
FROM AP.dbo.Invoices
-- PaymentDate must be a non-null value if there is no balance due
-- and a null value if there is balance due
WHERE (PaymentDate IS NOT NULL AND (InvoiceTotal - PaymentTotal - CreditTotal) = 0)
OR (PaymentDate IS NULL AND (InvoiceTotal - PaymentTotal - CreditTotal) > 0);
```



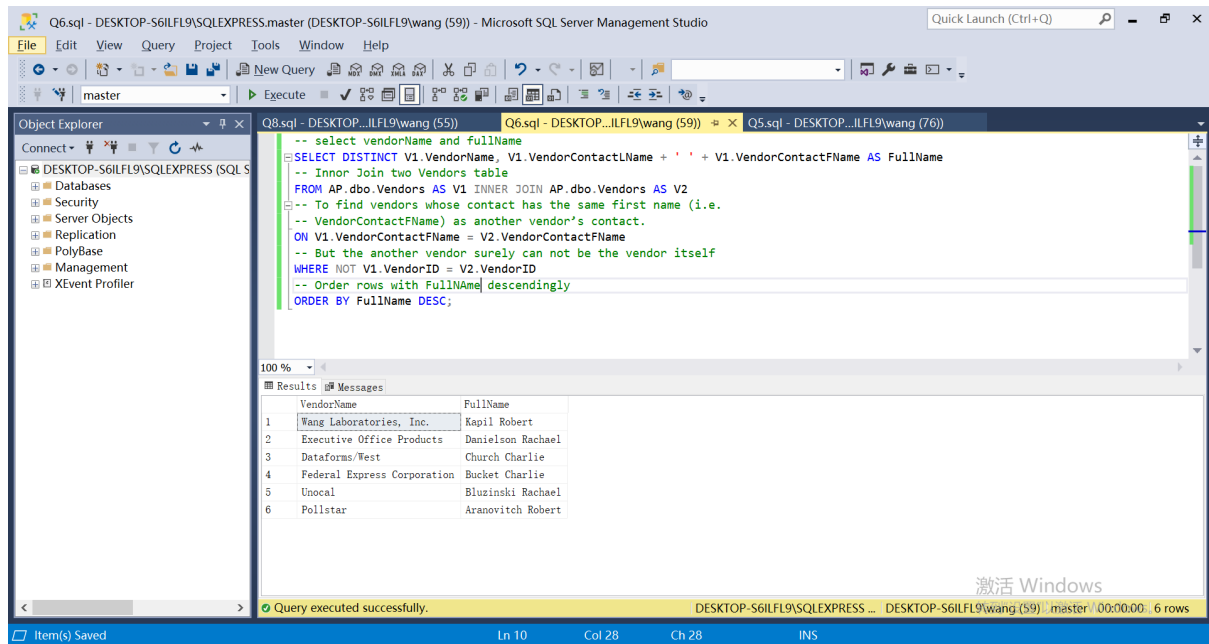
Q5:

```
-- select CustLastName, CustCity, CustState, OrderDate and ShippedDate
SELECT Customers.CustLastName, Customers.CustCity AS 'City', Customers.CustState,
Orders.OrderDate AS [Order Date],
Orders.ShippedDate AS [Shipped Date]
-- from Customers and Orders table
FROM ProductOrders.dbo.Orders
FULL outer join ProductOrders.dbo.Customers
ON Customers.CustID = Orders.CustID
-- CustState can only be 'CA' and ShippedDate can only be NULL
WHERE CustState = 'CA' AND ShippedDate IS NULL
-- Order rows with CustLastName descendingly
ORDER BY CustLastName DESC;
```



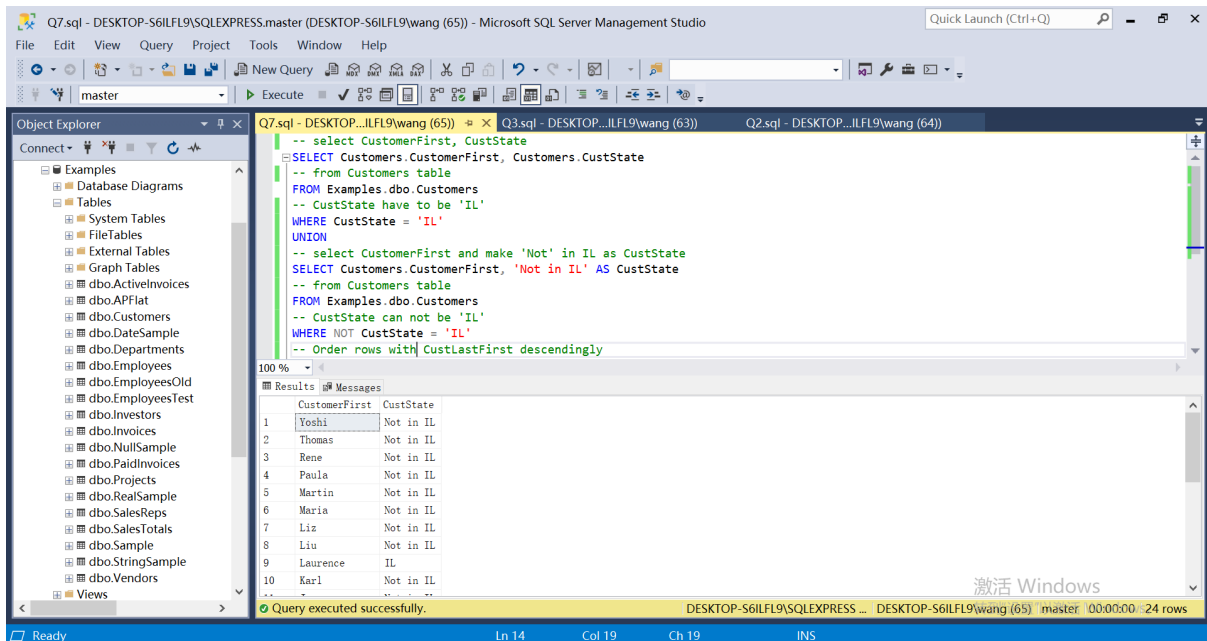
Q6:

```
-- select vendorName and fullName
SELECT DISTINCT V1.VendorName, V1.VendorContactLName + ' ' +
V1.VendorContactFName AS FullName
-- Inner Join two Vendors table
FROM AP.dbo.Vendors AS V1 INNER JOIN AP.dbo.Vendors AS V2
-- To find vendors whose contact has the same first name (i.e.
-- VendorContactFName) as another vendor's contact.
ON V1.VendorContactFName = V2.VendorContactFName
-- But the another vendor surely can not be the vendor itself
WHERE NOT V1.VendorID = V2.VendorID
-- Order rows with FullName descendingly
ORDER BY FullName DESC;
```



Q7:

```
-- select CustomerFirst, CustState
SELECT Customers.CustomerFirst, Customers.CustState
-- from Customers table
FROM Examples.dbo.Customers
-- CustState have to be 'IL'
WHERE CustState = 'IL'
UNION
-- select CustomerFirst and make 'Not' in IL as CustState
SELECT Customers.CustomerFirst, 'Not in IL' AS CustState
-- from Customers table
FROM Examples.dbo.Customers
-- CustState can not be 'IL'
WHERE NOT CustState = 'IL'
-- Order rows with CustLastFirst descendingly
ORDER BY CustomerFirst DESC;
```



Q8:

-- select AccountNo and AccountDescription

SELECT GLAccounts.AccountNo, GLAccounts.AccountDescription

-- from GLAccounts table

FROM AP.dbo.GLAccounts LEFT JOIN AP.dbo.InvoiceLineItems

ON GLAccounts.AccountNo = InvoiceLineItems.AccountNo

-- selected row's corresponding InvoiceLineItems.AccountNo have to be NULL

WHERE InvoiceLineItems.AccountNo IS NULL

-- Order rows with GLAccounts.AccountNo descendingly

ORDER BY AccountNo DESC;

