**Query 3**

CREATE OR ALTER PROCEDURE [dbo].[ReportCustomerTurnover](@Choice INT = 1, @Year INT = 2013)

AS

BEGIN

SET nocount ON;

IF (@Choice = 1)

BEGIN

SELECT Cu.CustomerName,

(

SELECT COALESCE(Sum(InvL.UnitPrice\*InvL.Quantity), 0)

FROM Sales.InvoiceLines as InvL,

Sales.Invoices as Inv

WHERE InvL.InvoiceID = Inv.InvoiceID

AND Cu.CustomerId = Inv.customerid

AND Month(Inv.InvoiceDate) = 1

AND Year(Inv.InvoiceDate) = @Year ) as 'Jan',

(

SELECT COALESCE(Sum(InvL.UnitPrice\*InvL.Quantity), 0)

FROM Sales.InvoiceLines as InvL,

Sales.Invoices as Inv

WHERE InvL.InvoiceID = Inv.InvoiceID

AND Cu.CustomerId = Inv.customerid

AND Month(Inv.InvoiceDate) = 2

AND Year(Inv.InvoiceDate) = @Year ) as 'Feb',

(

SELECT COALESCE(Sum(InvL.UnitPrice\*InvL.Quantity), 0)

FROM Sales.InvoiceLines as InvL,

Sales.Invoices as Inv

WHERE InvL.InvoiceID = Inv.InvoiceID

AND Cu.CustomerId = Inv.customerid

AND Month(Inv.InvoiceDate) = 3

AND Year(Inv.InvoiceDate) = @Year ) as 'Mar',

(

SELECT COALESCE(Sum(InvL.UnitPrice\*InvL.Quantity), 0)

FROM Sales.InvoiceLines as InvL,

Sales.Invoices as Inv

WHERE InvL.InvoiceID = Inv.InvoiceID

AND Cu.CustomerId = Inv.customerid

AND Month(Inv.InvoiceDate) = 4

AND Year(Inv.InvoiceDate) = @Year ) as 'Apr',

(

SELECT COALESCE(Sum(InvL.UnitPrice\*InvL.Quantity), 0)

FROM Sales.InvoiceLines as InvL,

Sales.Invoices as Inv

WHERE InvL.InvoiceID = Inv.InvoiceID

AND Cu.CustomerId = Inv.customerid

AND Month(Inv.InvoiceDate) = 5

AND Year(Inv.InvoiceDate) = @Year ) as 'May',

(

SELECT COALESCE(Sum(InvL.UnitPrice\*InvL.Quantity), 0)

FROM Sales.InvoiceLines as InvL,

Sales.Invoices as Inv

WHERE InvL.InvoiceID = Inv.InvoiceID

AND Cu.CustomerId = Inv.customerid

AND Month(Inv.InvoiceDate) = 6

AND Year(Inv.InvoiceDate) = @Year ) as 'Jun',

(

SELECT COALESCE(Sum(InvL.UnitPrice\*InvL.Quantity), 0)

FROM Sales.InvoiceLines as InvL,

Sales.Invoices as Inv

WHERE InvL.InvoiceID = Inv.InvoiceID

AND Cu.CustomerId = Inv.customerid

AND Month(Inv.InvoiceDate) = 7

AND Year(Inv.InvoiceDate) = @Year ) as 'Jul',

(

SELECT COALESCE(Sum(InvL.UnitPrice\*InvL.Quantity), 0)

FROM Sales.InvoiceLines as InvL,

Sales.Invoices as Inv

WHERE InvL.InvoiceID = Inv.InvoiceID

AND Cu.CustomerId = Inv.customerid

AND Month(Inv.InvoiceDate) = 8

AND Year(Inv.InvoiceDate) = @Year ) as 'Aug',

(

SELECT COALESCE(Sum(InvL.UnitPrice\*InvL.Quantity), 0)

FROM Sales.InvoiceLines as InvL,

Sales.Invoices as Inv

WHERE InvL.InvoiceID = Inv.InvoiceID

AND Cu.CustomerId = Inv.customerid

AND Month(Inv.InvoiceDate) = 9

AND Year(Inv.InvoiceDate) = @Year ) as 'Sep',

(

SELECT COALESCE(Sum(InvL.UnitPrice\*InvL.Quantity), 0)

FROM Sales.InvoiceLines as InvL,

Sales.Invoices as Inv

WHERE InvL.InvoiceID = Inv.InvoiceID

AND Cu.CustomerId = Inv.customerid

AND Month(Inv.InvoiceDate) = 10

AND Year(Inv.InvoiceDate) = @Year ) as 'Oct',

(

SELECT COALESCE(Sum(InvL.UnitPrice\*InvL.Quantity), 0)

FROM Sales.InvoiceLines as InvL,

Sales.Invoices as Inv

WHERE InvL.InvoiceID = Inv.InvoiceID

AND Cu.CustomerId = Inv.customerid

AND Month(Inv.InvoiceDate)= 11

AND Year(Inv.InvoiceDate) = @Year ) as 'Nov',

(

SELECT COALESCE(Sum(InvL.UnitPrice\*InvL.Quantity), 0)

FROM Sales.InvoiceLines as InvL,

Sales.Invoices as Inv

WHERE InvL.InvoiceID = Inv.InvoiceID

AND Cu.CustomerId = Inv.customerid

AND Month(Inv.InvoiceDate) = 12

AND Year(Inv.InvoiceDate) = @Year ) as 'Dec'

FROM Sales.Customers as Cu

ORDER BY Cu.CustomerName

END

IF (@Choice = 2)

BEGIN

SELECT Cu.CustomerName,

(

SELECT COALESCE(Sum(InvL.UnitPrice\*InvL.Quantity), 0)

FROM Sales.InvoiceLines as InvL,

Sales.Invoices as Inv

WHERE InvL.InvoiceID = Inv.InvoiceID

AND Cu.CustomerId = Inv.customerid

AND Year(Inv.InvoiceDate) = @Year

AND Datepart(quarter, Inv.InvoiceDate) = 1 ) as 'Q1',

(

SELECT COALESCE(Sum(InvL.UnitPrice\*InvL.Quantity), 0)

FROM Sales.InvoiceLines as InvL,

Sales.Invoices as Inv

WHERE InvL.InvoiceID = Inv.InvoiceID

AND Cu.CustomerId = Inv.customerid

AND Year(Inv.InvoiceDate) = @Year

AND Datepart(quarter, Inv.InvoiceDate) = 2 ) as 'Q2',

(

SELECT COALESCE(Sum(InvL.UnitPrice\*InvL.Quantity), 0)

FROM Sales.InvoiceLines as InvL,

Sales.Invoices as Inv

WHERE InvL.InvoiceID = Inv.InvoiceID

AND Cu.CustomerId = Inv.customerid

AND Year(Inv.InvoiceDate) = @Year

AND Datepart(quarter, Inv.InvoiceDate) = 3 ) as 'Q3',

(

SELECT COALESCE(Sum(InvL.UnitPrice\*InvL.Quantity), 0)

FROM Sales.InvoiceLines as InvL,

Sales.Invoices as Inv

WHERE InvL.InvoiceID = Inv.InvoiceID

AND Cu.CustomerId = Inv.customerid

AND Year(Inv.InvoiceDate) = @Year

AND Datepart(quarter, Inv.InvoiceDate) = 4 ) as 'Q4'

FROM Sales.Customers as Cu

ORDER BY Cu.CustomerName

END

IF (@Choice = 3)

BEGIN

SELECT Cu.CustomerName,

(

SELECT COALESCE(Sum(InvL.UnitPrice\*InvL.Quantity), 0)

FROM Sales.InvoiceLines as InvL,

Sales.Invoices as Inv

WHERE InvL.InvoiceID = Inv.InvoiceID

AND Cu.CustomerId = Inv.customerid

AND Year(Inv.InvoiceDate) = 2013 ) as '2013',

(

SELECT COALESCE(Sum(InvL.UnitPrice\*InvL.Quantity), 0)

FROM Sales.InvoiceLines as InvL,

Sales.Invoices as Inv

WHERE InvL.InvoiceID = Inv.InvoiceID

AND Cu.CustomerId = Inv.customerid

AND Year(Inv.InvoiceDate) = 2014 ) as '2014',

(

SELECT COALESCE(Sum(InvL.UnitPrice\*InvL.Quantity), 0)

FROM Sales.InvoiceLines as InvL,

Sales.Invoices as Inv

WHERE InvL.InvoiceID = Inv.InvoiceID

AND Cu.CustomerId = Inv.customerid

AND Year(Inv.InvoiceDate) = 2015 ) as '2015',

(

SELECT COALESCE(Sum(InvL.UnitPrice\*InvL.Quantity), 0)

FROM Sales.InvoiceLines as InvL,

Sales.Invoices as Inv

WHERE InvL.InvoiceID = Inv.InvoiceID

AND Cu.CustomerId = Inv.customerid

AND Year(Inv.InvoiceDate) = 2016 ) as '2016'

FROM Sales.Customers as Cu

ORDER BY Cu.CustomerName

END

END