

HW 04(b) DWBI

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Question 1) Find the employees hired in the last 365 days of the data set. Determine the last 365 days with a query. List first and last name along with department.

```
SELECT p.FirstName, p.LastName, e.HireDate, d.Name AS DepartmentName, d. GroupName
```

```
FROM HumanResources.Employee AS e
```

```
JOIN HumanResources.EmployeeDepartmentHistory AS edh ON e.BusinessEntityID =  
edh.BusinessEntityID
```

```
JOIN HumanResources.Department AS d ON edh.DepartmentID = d.DepartmentID
```

```
JOIN Person.Person AS p ON e.BusinessEntityID = p.BusinessEntityID
```

```
WHERE HireDate BETWEEN DATEADD (DAY, -365, (SELECT MAX(HireDate) FROM  
HumanResources.Employee))
```

```
AND (SELECT MAX(HireDate) FROM HumanResources.Employee)
```

The screenshot shows the Microsoft SQL Server Management Studio interface. The query editor displays the following SQL query:

```
-- HW 04(b) DWBI  
-- Question 1. Find the employees hired in the last 365 days of the data set. Determine the last 365 days with a query. List first and last  
SELECT p.FirstName, p.LastName, e.HireDate, d.Name AS DepartmentName, d. GroupName  
FROM HumanResources.Employee AS e  
JOIN HumanResources.EmployeeDepartmentHistory AS edh ON e.BusinessEntityID = edh.BusinessEntityID  
JOIN HumanResources.Department AS d ON edh.DepartmentID = d.DepartmentID  
JOIN Person.Person AS p ON e.BusinessEntityID = p.BusinessEntityID  
WHERE HireDate BETWEEN DATEADD(DAY, -365, (SELECT MAX(HireDate) FROM HumanResources.Employee))  
AND (SELECT MAX(HireDate) FROM HumanResources.Employee)
```

The Results pane shows the following data:

	FirstName	LastName	HireDate	DepartmentName	GroupName
1	Tina	Morris-Annan	2013-09-30	Sales	Sales and Marketing
2	Syed	Abbas	2013-03-14	Sales	Sales and Marketing
3	Lynn	Tsofras	2013-05-30	Sales	Sales and Marketing
4	Rachel	Valdez	2013-05-30	Sales	Sales and Marketing
5	Jae	Pak	2012-05-30	Sales	Sales and Marketing
6	Ranjit	Varkey Chudukatil	2012-05-30	Sales	Sales and Marketing

The status bar at the bottom indicates "Query executed successfully." and "6 rows".

Question 2) Show all the employees and add an indicator to the above query showing if they received a raise in the last 365 days.

```
SELECT p.FirstName, p.LastName, eph.Rate, e.HireDate,  
CAST (eph.RateChangeDate AS DATE) AS RateChageDate,  
CASE WHEN RateChangeDate > HireDate THEN 1 ELSE 0 END AS Raise_Indicator  
FROM Person.Person AS p  
JOIN HumanResources.Employee AS e ON p.BusinessEntityID = e.BusinessEntityID  
JOIN HumanResources.EmployeePayHistory As eph ON e.BusinessEntityID = eph.BusinessEntityID  
WHERE RateChangeDate BETWEEN DATEADD (DAY, -365, (SELECT MAX(HireDate) FROM  
HumanResources.Employee))  
AND (SELECT MAX(HireDate) FROM HumanResources.Employee)
```

The screenshot shows the Microsoft SQL Server Management Studio interface. The query editor displays the following SQL query:

```
-- Question 2. Show all the employees and add an indicator to the above query showing if they received a raise in the last 365 days.  
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CAST(eph.RateChangeDate AS DATE) AS RateChageDate,  
CASE WHEN RateChangeDate > HireDate THEN 1 ELSE 0 END AS Raise_Indicator  
FROM Person.Person AS p  
JOIN HumanResources.Employee AS e ON p.BusinessEntityID = e.BusinessEntityID  
JOIN HumanResources.EmployeePayHistory As eph ON e.BusinessEntityID = eph.BusinessEntityID  
WHERE RateChangeDate BETWEEN DATEADD(DAY, -365, (SELECT MAX(HireDate) FROM HumanResources.Employee))  
AND (SELECT MAX(HireDate) FROM HumanResources.Employee)
```

The Results pane shows the following data:

	FirstName	LastName	Rate	HireDate	RateChageDate	Raise_Indicator
1	Sheela	Word	30.00	2011-02-25	2012-07-14	1
2	Tate	Mensa-Annan	23.0769	2012-09-30	2012-09-30	0
3	Syed	Abbas	48.101	2013-03-14	2013-03-14	0
4	Lynn	Tsoflas	23.0769	2013-05-30	2013-05-30	0
5	Rachel	Valdez	23.0769	2013-05-30	2013-05-30	0
6	Jae	Pak	23.0769	2012-05-30	2012-05-30	0
7	Ranjit	Varkey Chudukati	23.0769	2012-05-30	2012-05-30	0

The status bar at the bottom indicates "Query executed successfully." and "7 rows".

Question 3. Create a summary sales report by customer show name along with number of orders and the total of the orders.

```
SELECT FirstName, LastName, COUNT(SalesOrderNumber) AS NumberOfOrders,
SUM(OrderQty) AS TotalOrderQty, SUM(SubTotal) AS SubTotal, SUM(TaxAmt) AS TaxAmount,
SUM(TotalDue) AS TotalDue, SUM(LineTotal) AS LineTotal
FROM Sales.Customer AS c
JOIN Person.Person AS p ON c.PersonID = p.BusinessEntityID
JOIN Sales.SalesOrderHeader AS soh ON c.CustomerID = soh.CustomerID
JOIN Sales.SalesOrderDetail sod ON soh.SalesOrderID = sod.SalesOrderID
GROUP BY FirstName, LastName
```

The screenshot shows the Microsoft SQL Server Management Studio interface. The query editor contains the following SQL query:

```
-- Question 3. Create a summary sales report by customer show name along with number of orders and the total of the orders.
SELECT FirstName, LastName, COUNT(SalesOrderNumber) AS NumberOfOrders,
SUM(OrderQty) AS TotalOrderQty, SUM(SubTotal) AS SubTotal, SUM(TaxAmt) AS TaxAmount,
SUM(TotalDue) AS TotalDue, SUM(LineTotal) AS LineTotal
FROM Sales.Customer AS c
JOIN Person.Person AS p ON c.PersonID = p.BusinessEntityID
JOIN Sales.SalesOrderHeader AS soh ON c.CustomerID = soh.CustomerID
JOIN Sales.SalesOrderDetail sod ON soh.SalesOrderID = sod.SalesOrderID
GROUP BY FirstName, LastName
```

The Results pane shows the following data:

FirstName	LastName	NumberOfOrders	TotalOrderQty	SubTotal	TaxAmount	TotalDue	LineTotal
Casey	Suarez	2	2	1322.98	105.8384	1461.893	1322.980000
Alyssa	Lee	3	3	269.91	21.5928	298.2507	89.970000
Elijah	Henderson	5	5	3124.75	249.98	3452.849	624.950000
Sean	Monis	3	3	224.94	17.9952	248.5587	74.980000
John	Jones	3	3	96.81	7.7448	106.9752	32.270000
Gabrielle	Perry	4	4	3123.28	249.8624	3451.2244	780.820000
Curtis	He	4	4	4540.3475	363.2278	5017.0841	2180.407500
Xavier	Edwards	7	7	14291.1225	1143.2898	15791.6906	5841.372500
Kurt	Raje	4	4	4636.3296	370.9064	5123.1444	2926.389600
Brian	Ramirez	4	4	9479.84	758.3872	10475.2232	2369.960000
Ashley	Wilson	3	3	128.91	10.3128	142.4457	42.970000
Benjamin	Flores	3	3	111.81	8.9448	123.5502	37.270000
Mary	Parker	1	1	2319.99	185.5992	2563.589	2319.990000
Ruben	Subram	3	3	8238.23	659.0584	9103.2442	5908.250000
Thomas	Hernandez	1	1	2319.99	185.5992	2563.589	2319.990000
Brad	Oliver	4	4	765.08	61.2064	845.4136	191.270000
Kendra	Suarez	2	2	64.56	5.1648	71.3368	22.280000
Ryan	Perry	5	5	11947.96	955.8369	13202.4958	4755.340000
Marcus	Jackson	4	4	2415.84	193.2672	2669.5032	603.950000
Mindy	Martin	39	86	198723.4...	19042.8625	223717.1...	35704.748...
Nathan	Robinson	5	5	10232.07	818.5656	11306.4376	3145.260000

The status bar at the bottom indicates "Query executed successfully." and "19,018 rows".

Question 4. Show the credit card info for sales - mask the credit card number data so only the last two digits of the card are visible.

```
SELECT SalesOrderNumber, FirstName, LastName, CardType,  
STUFF (CardNumber, 1, 12, '*****') AS CardNumber,  
ExpMonth, ExpYear, TotalDue  
FROM Sales.Customer c  
JOIN Person.Person AS p ON c.PersonID = p.BusinessEntityID  
JOIN Sales.SalesOrderHeader AS soh ON c.CustomerID = soh.CustomerID  
JOIN Sales.CreditCard AS cc ON soh.CreditCardID = cc.CreditCardID
```

The screenshot shows the Microsoft SQL Server Enterprise Manager interface. The query editor displays the following SQL query:

```
-- Question 4. Show the credit card info for sales - mask the credit card number data so only the last two digits of the card are visible  
SELECT SalesOrderNumber, FirstName, LastName, CardType,  
STUFF (CardNumber, 1, 12, '*****') AS CardNumber,  
ExpMonth, ExpYear, TotalDue  
FROM Sales.Customer c  
JOIN Person.Person AS p ON c.PersonID = p.BusinessEntityID  
JOIN Sales.SalesOrderHeader AS soh ON c.CustomerID = soh.CustomerID  
JOIN Sales.CreditCard AS cc ON soh.CreditCardID = cc.CreditCardID
```

The Results pane shows the following data:

SalesOrderNumber	FirstName	LastName	CardType	CardNumber	ExpMonth	ExpYear	TotalDue
SO43659	James	Hendergart	ColonialVoice	*****59	2	2007	23153.2339
SO43660	Takiko	Collins	Vista	*****13	4	2007	1457.3288
SO43661	Jauna	Elson	Distinguish	*****06	9	2007	36865.8012
SO43662	Robin	McGuigan	ColonialVoice	*****21	1	2006	32474.9324
SO43663	Jimmy	Bischoff	Vista	*****65	1	2007	472.3108
SO43664	Sandeep	Katyal	ColonialVoice	*****20	7	2008	27510.4109
SO43665	Richard	Bready	Vista	*****57	11	2006	16158.6961
SO43666	Abraham	Swearengen	Vista	*****33	4	2007	5694.8564
SO43667	Scott	MacDonald	SuperiorCard	*****46	11	2008	6876.3649
SO43668	Ryan	Calafato	ColonialVoice	*****30	11	2008	40487.7233
SO43669	Carolyn	Farino	Vista	*****49	2	2005	807.2585
SO43670	Mae	Black	Vista	*****50	6	2007	6893.2549
SO43671	Peggy	Justice	Vista	*****44	6	2008	9153.6054
SO43672	Phyllis	Thomas	Vista	*****98	3	2006	6895.41
SO43673	Nancy	Hirota	Vista	*****52	9	2006	4216.0258
SO43674	Eric	Brumfield	SuperiorCard	*****56	4	2005	2955.0542
SO43675	Valerie	Hendricks	Vista	*****50	2	2006	6434.0848
SO43676	Mark	Hanson	ColonialVoice	*****02	4	2008	15992.7446
SO43677	Brenda	Heaney	SuperiorCard	*****34	4	2006	8773.681
SO43678	Jean	Jordan	Vista	*****20	9	2006	11036.3964
SO43679	Susan	French	SuperiorCard	*****55	9	2008	1481.1742
SO43680	Frances	Adams	Distinguish	*****71	9	2007	12832.9009
SO43681	Charles	Christensen	SuperiorCard	*****58	8	2005	15524.0686
SO43682	Judith	Frazier	SuperiorCard	*****18	5	2006	4363.7107
SO43683	Francois	Ferrier	ColonialVoice	*****97	3	2006	48204.0662
SO43684	Russell	King	SuperiorCard	*****62	11	2005	6301.6258

The status bar at the bottom indicates "Query executed successfully." and "30,334 rows".