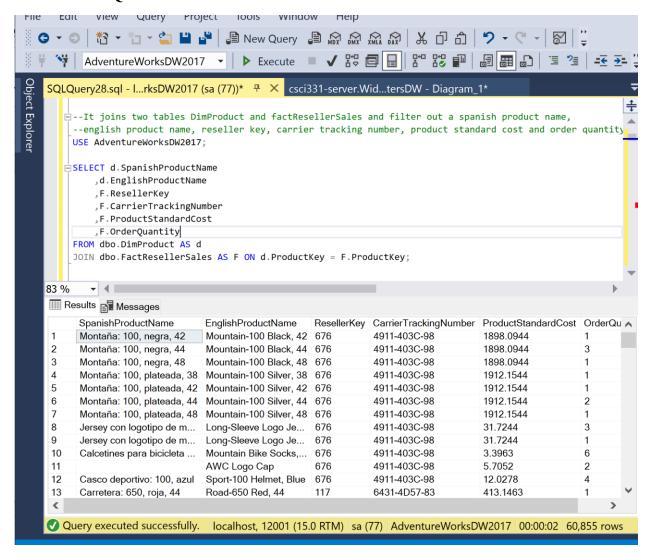Sital Pun

Professor Heller

 CSCI 331– Database Systems

THREE TOP QUERIES

New Query

WideWorldImportersDW   ▶ Execute

SQLQuery28.sql - l...portersDW (sa (77))*   csci331-server.Wid...tersDW - Diagram_1*

```sql
--

USE WideWorldImportersDW;

SELECT year(P.[Date Key]) AS Year
    ,P.[Ordered Quantity]
    ,P.[Received Outers]
    ,P.[Ordered Outers]
    ,P.[Is Order Finalized]
FROM Fact.Purchase AS P
WHERE P.[Ordered Quantity] IN (
        SELECT MAX(O.Quantity)
        FROM Fact.[Order] AS O
        INNER JOIN Fact.Sale AS S ON O.Quantity = S.Quantity
        )
GROUP BY year(P.[Date Key])
    ,P.[Ordered Quantity]
    ,P.[Received Outers]
    ,P.[Ordered Outers]
    ,P.[Is Order Finalized]
```

62 %

Results   Messages

	Year	Ordered Quantity	Received Outers	Ordered Outers	Is Order Finalized
1	2014	360	15	15	1
2	2015	360	15	15	1
3	2013	360	36	36	1
4	2013	360	30	30	1
5	2016	360	15	15	1

✔ Query executed successfully.   localhost, 12001 (15.0 RTM)   sa (77)   WideWorldImportersDW   00:00:00   5 rows

Ln 208   Col 26   INS

SQLQuery28.sql - localhost, 12001.AdventureWorks2017 (sa (77...

File   Edit   View   Query   Project   Tools   Window   Help

AdventureWorks2017   ▷ Execute

SQLQuery28.sql - l...Works2017 (sa (77))*   ✕   csci331-server.Wid...tersDW - Diagram_1*

```
--It filters out the employee history with employee name, birthdate, maximum vacation hour they took while working, marital status, startdate and endate.
USE AdventureWorks2017;

WITH EmplHistory
AS (
    SELECT E.BirthDate
        ,E.JobTitle
        ,E.VacationHours
        ,UPPER(E.MaritalStatus) AS MaritalStatus
        ,ED.StartDate
        ,ED.EndDate
        ,ED.DepartmentID
    FROM HumanResources.Employee AS E
    INNER JOIN HumanResources.EmployeeDepartmentHistory AS ED ON E.BusinessEntityID = ED.BusinessEntityID
    )
SELECT D.Name
    ,FORMAT(H.BirthDate, 'd', 'en-US') as BirthDate
    ,MAX(H.VacationHours) as MaxVacationHour
    ,H.JobTitle
    ,H.MaritalStatus
    ,H.StartDate
    ,H.EndDate
FROM EmplHistory AS H
INNER JOIN HumanResources.Department AS D ON H.DepartmentID = D.DepartmentID
WHERE H.EndDate IS NOT NULL
GROUP BY D.Name
    ,FORMAT(H.BirthDate, 'd', 'en-US')
    ,H.JobTitle
    ,H.MaritalStatus
```

51 %

Results   Messages

	Name	BirthDate	MaxVacationHour	JobTitle	MaritalStatus	StartDate	EndDate
1	Engineering	12/23/1974	48	Senior Tool Designer	S	2007-12-05	2010-05-30
2	Finance	1/6/1976	0	Chief Financial Officer	M	2009-01-31	2013-11-13
3	Marketing	2/10/1978	49	Purchasing Manager	S	2011-02-25	2011-07-30
4	Production	11/6/1981	45	Scheduling Assistant	M	2009-01-07	2011-08-31
5	Purchasing	3/19/1975	40	Marketing Manager	S	2007-12-20	2009-07-14
6	Quality Assurance	2/10/1978	49	Purchasing Manager	S	2011-07-31	2012-07-14

✅ Query executed successfully.   localhost, 12001 (15.0 RTM)   sa (77)   AdventureWorks2017   00:00:00   6 rows

THREE WORST QUERIES:


```sql
USE WideWorldImportersDW;

SELECT O.[Customer Key]
    ,year(o.[Order Date Key]) AS OrderYear
    ,o.Quantity
    ,c.Customer
    ,c.Category
    ,c.[Primary Contact]
FROM Fact.[Order] AS o
JOIN Dimension.Customer AS c ON O.[Customer Key] = c.[Customer Key]
WHERE o.[Order Date Key] = '20130105';
```

	Customer Key	OrderYear	Quantity	Customer	Category	Primary Contact
1	0	2013	10	Unknown	N/A	N/A
2	2	2013	4	Tailspin Toys (Sylvanite, MT)	Novelty Shop	Lorena Cindric
3	6	2013	7	Tailspin Toys (Jessie, ND)	Novelty Shop	Biswajeet Thakur
4	42	2013	50	Tailspin Toys (Arietta, NY)	Novelty Shop	Chandrakanta Raut
5	64	2013	6	Tailspin Toys (Hodgdon, ME)	Novelty Shop	Rohana Kaskar
6	75	2013	6	Tailspin Toys (Windsor Locks, CT)	Novelty Shop	Vlasta Srbova
7	80	2013	30	Tailspin Toys (Valdese, NC)	Novelty Shop	Bharat Ankitham
8	100	2013	3	Tailspin Toys (Tunnelhill, PA)	Novelty Shop	Bhavani Bhowmick
9	102	2013	1	Tailspin Toys (Fieldbrook, CA)	Novelty Shop	Tea Koppel
10	107	2013	6	Tailspin Toys (Glen Avon, CA)	Novelty Shop	Karie Mercier
11	109	2013	40	Tailspin Toys (South Laguna, CA)	Novelty Shop	Ae-Cha Joo
12	116	2013	48	Tailspin Toys (Rafael Capó, PR)	Novelty Shop	Toma Nastase
13	122	2013	7	Tailspin Toys (McClave, CO)	Novelty Shop	Mauri Enestam
14	135	2013	10	Tailspin Toys (Terre du Lac, MO)	Novelty Shop	Gaurav Sikdar

Query executed successfully.   localhost, 12001 (15.0 RTM)   sa (77)   WideWorldImportersDW   00:00:00   125 rows

Quick Launch (Ctrl+Q)

File   Edit   View   Query   Project   Tools   Window   Help

Northwinds2020TSQLV6   ▶ Execute

SQLQuery28.sql - I...020TSQLV6 (sa (77))*   csci331-server.Wid...tersDW - Diagram_1*

```sql
USE Northwinds2020TSQLV6;

SELECT E.EmployeeFirstName
    ,E.EmployeeLastName
    ,(
        SELECT count(O.CustomerId)
        FROM Sales.[Order] AS O
        ) AS NoOfOrder
FROM HumanResources.Employee AS E
GROUP BY E.EmployeeFirstName
    ,E.EmployeeLastName;
```

100 %

Results   Messages

	EmployeeFirstName	EmployeeLastName	NoOfOrder
1	Don	Funk	830
2	Judy	Lew	830
3	Maria	Cameron	830
4	Patricia	Doyle	830
5	Paul	Suurs	830
6	Russell	King	830
7	Sara	Davis	830
8	Sven	Mortensen	830
9	Yael	Peled	830

✓ Query executed successfully.   localhost, 12001 (15.0 RTM)   sa (77)   Northwinds2020TSQLV6   00:00:00   9 rows

Ln 1   INS

File   Edit   View   Query   Project   Tools   Window   Help

WideWorldImportersDW   ▷ Execute

SQLQuery28.sql - l...portersDW (sa (77))*   ✕   csci331-server.Wid...tersDW - Diagram_1*

```sql
USE WideWorldImportersDW;

WITH OrderSale
AS (
    SELECT O.[Customer Key]
        ,O.Quantity
        ,O.[City Key]
        ,O.[Picked Date Key]
        ,O.[Tax Amount]
    FROM Fact.[Order] AS O
    )
SELECT OS.Quantity
    ,OS.[Tax Amount]
    ,S.[Delivery Date Key]
    ,OS.[City Key]
    ,MIN(S.Profit) AS Profit
FROM OrderSale AS OS
INNER JOIN Fact.Sale AS S ON OS.[Customer Key] = S.[Customer Key]
WHERE S.[Delivery Date Key] = '20140102'
    AND OS.Quantity = 2
GROUP BY OS.Quantity
    ,OS.[Tax Amount]
    ,S.[Delivery Date Key]
```

68 %

▦ Results ▤ Messages

	Quantity	Tax Amount	Delivery Date Key	City Key	Profit
1	2	3.90	2014-01-02	56939	-108.00
2	2	3.90	2014-01-02	80871	-108.00
3	2	9.60	2014-01-02	38583	-108.00
4	2	9.60	2014-01-02	88084	-108.00
5	2	9.60	2014-01-02	60508	-108.00
6	2	9.00	2014-01-02	69283	-108.00
7	2	3.90	2014-01-02	67099	-108.00
8	2	10.50	2014-01-02	75493	-108.00
9	2	10.20	2014-01-02	82995	-108.00
10	2	569.70	2014-01-02	103655	-108.00

✓ Query executed successfully.   localhost, 12001 (15.0 RTM) sa (77) WideWorldImportersDW 00:00:00 2,582 rows

THREE WORST BUT CORRECTED:


```sql
USE Northwinds2020TSQLV6;

SELECT E.EmployeeId, E.EmployeeFirstName
    ,E.EmployeeLastName
    ,(
        SELECT count(O.Freight)
        FROM Sales.[Order] AS O
     ) AS Freight
FROM HumanResources.Employee AS E
GROUP BY E.EmployeeId, E.EmployeeFirstName
    ,E.EmployeeLastName;
```

	EmployeeId	EmployeeFirstName	EmployeeLastName	Freight
1	1	Sara	Davis	830
2	2	Don	Funk	830
3	3	Judy	Lew	830
4	4	Yael	Peled	830
5	5	Sven	Mortensen	830
6	6	Paul	Suurs	830
7	7	Russell	King	830
8	8	Maria	Cameron	830
9	9	Patricia	Doyle	830

✓ Query executed successfully.   localhost, 12001 (15.0 RTM)   sa (77)   Northwinds2020TSQLV6   00:00:00   9 rows

Quick Launch (Ctrl+Q)

File   Edit   View   Query   Project   Tools   Window   Help

New Query

Northwinds2020TSQLV6   Execute

SQLQuery28.sql - I...020TSQLV6 (sa (77))*   X   csci331-server.Wid...tersDW - Diagram_1*

```sql
-- It shows the total number of orders shipped to France and group by customerId, OrderDate and shipTou
USE Northwinds2020TSQLV6;

WITH OrderSale
AS (
    SELECT O.CustomerId
        ,OD.Quantity
        ,O.ShipToCountry
        ,O.OrderDate
    FROM Sales.[Order] AS O
    INNER JOIN Sales.OrderDetail AS OD ON O.OrderId = OD.OrderId
    )
SELECT OS.CustomerId
    ,OS.OrderDate
    ,OS.ShipToCountry
    ,SUM(OS.Quantity) AS TotalQuantity
FROM OrderSale AS OS
WHERE OS.ShipToCountry LIKE '%FRANCE'
GROUP BY OS.CustomerId
```

83 %

Results   Messages

	CustomerId	OrderDate	ShipToCountry	TotalQuantity
1	7	2014-07-25	France	50
2	7	2014-09-04	France	80
3	7	2014-11-22	France	138
4	7	2015-02-05	France	99
5	7	2015-02-18	France	69
6	7	2015-06-05	France	30
7	7	2015-06-12	France	63
8	7	2015-06-30	France	50
9	7	2015-08-12	France	25
10	7	2015-09-23	France	12

Query executed successfully.   localhost, 12001 (15.0 RTM)   sa (77)   Northwinds2020TSQLV6   00:00:00   76 rows

Quick Launch (Ctrl+Q)

File   Edit   View   Query   Project   Tools   Window   Help

New Query

WideWorldImportersDW   Execute

SQLQuery28.sql - I...portersDW (sa (77))*   csci331-server.Wid...tersDW - Diagram_1*

```sql
USE WideWorldImportersDW;

SELECT O.[Customer Key]
      ,year(o.[Order Date Key]) AS OrderYear
      ,o.Quantity
      ,o.[Unit Price]
      ,c.[Postal Code]
FROM Fact.[Order] AS o
JOIN Dimension.Customer AS c ON O.[Customer Key] = c.[Customer Key]
WHERE o.[Order Date Key] = '20130105'
AND o.[Customer Key]>0;
```

100 %

Results   Messages

	Customer Key	OrderYear	Quantity	Unit Price	Postal Code
1	2	2013	4	13.00	90216
2	6	2013	7	13.00	90298
3	42	2013	50	1.28	90124
4	64	2013	6	32.00	90673
5	75	2013	6	13.00	90456
6	80	2013	30	32.00	90541
7	100	2013	3	13.00	90788
8	102	2013	1	32.00	90205
9	107	2013	6	13.00	90782
10	109	2013	40	4.10	90247

Query executed successfully.   localhost, 12001 (15.0 RTM)   sa (77)   WideWorldImportersDW   00:00:00   91 rows

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