

Assignment 2

Question 1:

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

```
SELECT orderid, orderdate, requireddate,
       shippeddate, shipname, shipaddress,
       DATEDIFF(d, orderdate, shippeddate) AS [Delay Time]
FROM Sales.Orders
WHERE DATEDIFF (d, orderdate, shippeddate) <= 5;
```

The Object Explorer on the left shows the database structure for 'Domas-PC\Domas (55)', including System Databases, TSQL2012, Database Diagrams, Tables, System Tables, FileTables, and Views.

The Results pane shows the following data:

	orderid	orderdate	requireddate	shippeddate	st
3	10252	2006-07-09 00:00:00.000	2006-08-06 00:00:00.000	2006-07-11 00:00:00.000	S
4	10255	2006-07-12 00:00:00.000	2006-08-09 00:00:00.000	2006-07-15 00:00:00.000	S
5	10256	2006-07-15 00:00:00.000	2006-08-12 00:00:00.000	2006-07-17 00:00:00.000	S
6	10262	2006-07-22 00:00:00.000	2006-08-19 00:00:00.000	2006-07-25 00:00:00.000	S
7	10266	2006-07-26 00:00:00.000	2006-09-06 00:00:00.000	2006-07-31 00:00:00.000	S
8	10268	2006-07-30 00:00:00.000	2006-08-27 00:00:00.000	2006-08-02 00:00:00.000	C

The status bar at the bottom indicates the connection is to 'Domas-PC\SQLEXPRESS (11.0 RTM) | Domas-PC\Domas (55) | TSQL2012' and shows 274 rows.

Question 2:

Windows7 [Running]

SQLQuery1.sql - DOMAS-PC\SQLEXPRESS.TSQL2012 (Domas-PC\Domas (54))* - Microsoft SQL Server Management Studio

File Edit View Query Project Debug Tools Window Help

TSQL2012 Execute Debug

Object Explorer

Connect

Sales.OrderDetails

Sales.Orders

Columns

- orderid (PK, int, not null)
- custid (FK, int, null)
- empid (FK, int, not null)
- orderdate (datetime, not null)
- requireddate (datetime, not null)
- shippeddate (datetime, null)
- shipperid (FK, int, not null)
- freight (money, not null)
- shipname (nvarchar(40), not null)
- shipaddress (nvarchar(60), not null)
- shipcity (nvarchar(15), not null)
- shipregion (nvarchar(15), null)
- shippostalcode (nvarchar(10), null)
- shipcountry (nvarchar(15), not null)

Keys

Constraints

Triggers

SQLQuery1.sql - D...as-PC\Domas (54))*

```
SELECT shipcountry, COUNT (*) AS TOTAL
FROM Sales.Orders
GROUP BY shipcountry
```

100 %

Results Messages

	shipcountry	TOTAL
1	Finland	22
2	USA	122
3	Italy	28
4	Brazil	83
5	Germany	122
6	Switzerland	18
7	Mexico	28

DOMAS-PC\SQLEXPRESS (11.0 RTM) | Domas-PC\Domas (54) | TSQL2012 | 00:00:00 | 21 rows

Ready Ln 3 Col 21 Ch 21 INS

11:02 PM 3/24/2017

Left

Question 3:

Windows 7 [Running]

SQLQuery1.sql - DOMAS-PC\SQLEXPRESS.TSQL2012 (Domas-PC\Domas (54))* - Microsoft SQL Server Management Studio

File Edit View Query Project Debug Tools Window Help

TSQL2012 Execute Debug

Object Explorer

Connect

- Sales.OrderDetails
- Sales.Orders
 - Columns
 - orderid (PK, int, not null)
 - custid (FK, int, null)
 - empid (FK, int, not null)
 - orderdate (datetime, not null)
 - requireddate (datetime, not null)
 - shippeddate (datetime, null)
 - shipperid (FK, int, not null)
 - freight (money, not null)
 - shipname (nvarchar(40), not null)
 - shipaddress (nvarchar(60), not null)
 - shipcity (nvarchar(15), not null)
 - shipregion (nvarchar(15), null)
 - shippostalcode (nvarchar(10), null)
 - shipcountry (nvarchar(15), not null)
 - Keys
 - Constraints
 - Triggers

SQLQuery1.sql - D...as-PC\Domas (54))*

```
SELECT TOP 3 shipcountry, COUNT (*) AS TOTAL
FROM Sales.Orders
GROUP BY shipcountry
ORDER BY TOTAL DESC
```

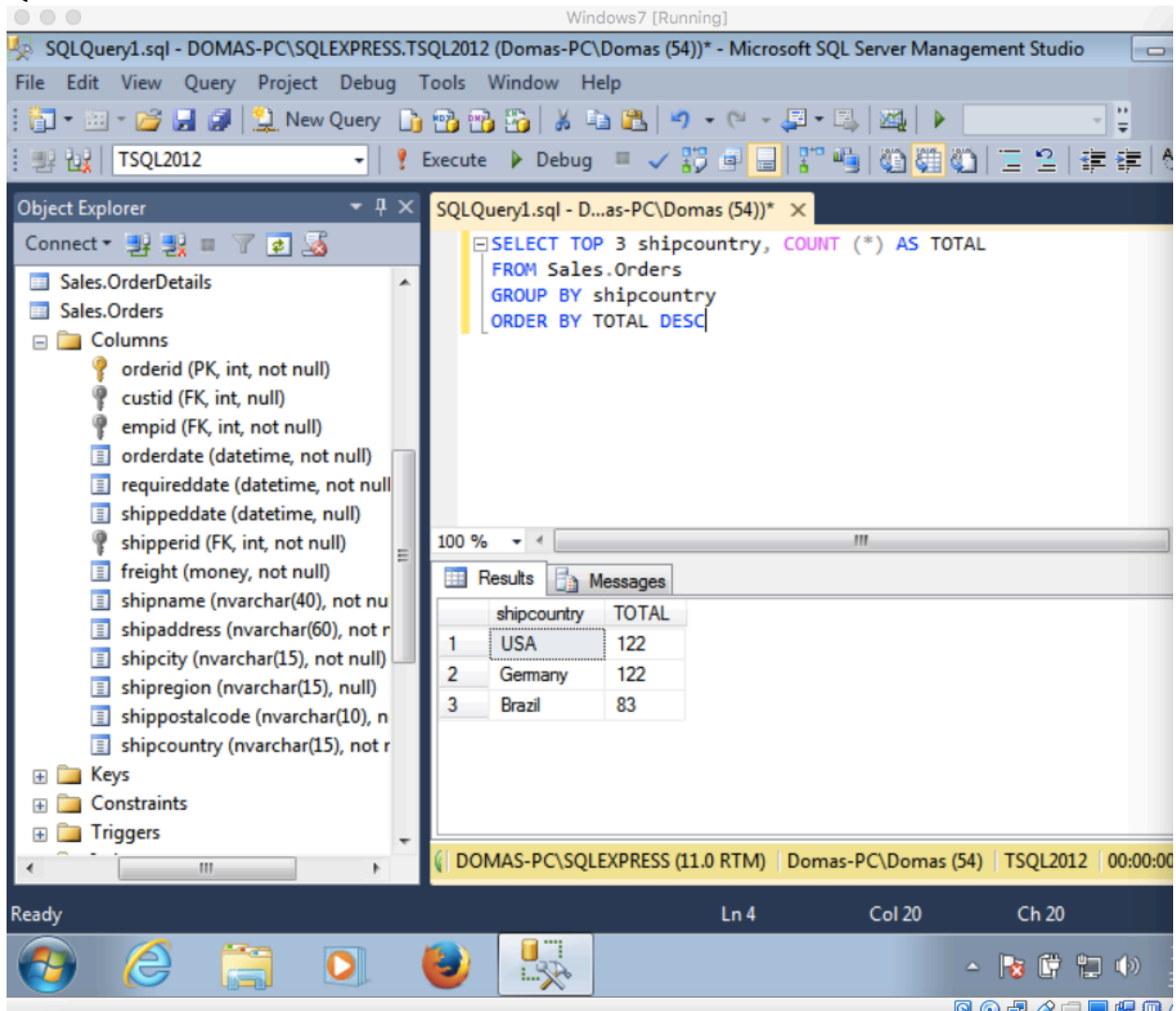
100 %

Results Messages

	shipcountry	TOTAL
1	USA	122
2	Germany	122
3	Brazil	83

DOMAS-PC\SQLEXPRESS (11.0 RTM) | Domas-PC\Domas (54) | TSQL2012 | 00:00:00

Ready Ln 4 Col 20 Ch 20

The screenshot shows the Microsoft SQL Server Management Studio interface. The 'Object Explorer' on the left displays the 'Sales.Orders' table structure with columns like orderid, custid, empid, orderdate, requireddate, shippeddate, shipperid, freight, shipname, shipaddress, shipcity, shipregion, shippostalcode, and shipcountry. The main query window shows a SQL query that selects the top 3 ship countries by total order count. The 'Results' pane at the bottom shows the output of the query, which is a table with two columns: 'shipcountry' and 'TOTAL'. The results are: USA (122), Germany (122), and Brazil (83). The status bar at the bottom indicates the current position in the query (Ln 4, Col 20, Ch 20) and the execution time (00:00:00).

Question 4:

Windows7 [Running]

Query2.sql - DOMAS-PC\SQLEXPRESS.TSQL2012 (Domas-PC\Domas (55))* - Microsoft SQL Server Management Studio

File View Query Project Debug Tools Window Help

TSQL2012 Execute Debug

SQLQuery2.sql - D...as-PC\Domas (55))* SQLQuery1.sql - D...as-PC\Domas (54))*

```
SELECT e.lastname, COUNT (*) AS [Number Of Orders]
FROM Sales.Orders AS s, HR.Employees AS e
WHERE s.empid = e.empid AND
(s.orderdate >= '01/01/2007' AND s.orderdate < '02/01/2007')
GROUP BY e.lastname, s.empid
ORDER BY [Number Of Orders] ASC
```

100 %

Results Messages

	lastname	Number Of Orders
1	Dolgopyatova	1
2	Suurs	2
3	King	3
4	Davis	3
5	Funk	4
6	Cameron	5
7	Lew	7

DOMAS-PC\SQLEXPRESS (11.0 RTM) | Domas-PC\Domas (55) | TSQL2012 | 00:00:00 | 8 rows

Ln 4 Col 33 Ch 33 INS

12:13 AM 2/25/2017

Question 5:

Windows7 [Running]

SQLQuery2.sql - DOMAS-PC\SQLEXPRESS.TSQL2012 (Domas-PC\Domas (55))* - Microsoft SQL Server Management Studio

File Edit View Query Project Debug Tools Window Help

TSQL2012 Execute Debug

Object Explorer

- country (nvarchar(15), not null)
- phone (nvarchar(24), not null)
- fax (nvarchar(24), null)
- Keys
- Constraints
- Triggers
- Indexes
- Statistics
- Sales.OrderDetails
 - Columns
 - orderid (PK, FK, int, not null)
 - productid (PK, FK, int, not null)
 - unitprice (money, not null)
 - qty (smallint, not null)
 - discount (numeric(4,3), not null)
 - Keys
 - Constraints
 - Triggers
 - Indexes
 - Statistics

SQLQuery3.sql - D...as-PC\Domas (54))*

```
O.custid = C.custid AND  
C.country = 'Germany'  
GROUP BY P.productid, P.productname, OD.qty, C.country  
ORDER BY P.productname ASC
```

SQLQuery2.sql - D...as-PC\Domas (55))*

Results

	productname	Number Of Orders	Total Quantity	country
1	Product ACRVI	1	30	Germany
2	Product ACRVI	1	40	Germany
3	Product ACRVI	1	60	Germany
4	Product AOZBW	1	16	Germany
5	Product APITJ	1	15	Germany
6	Product APITJ	1	8	Germany
7	Product APITJ	1	40	Germany

MAS-PC\SQLEXPRESS (11.0 RTM) Domas-PC\Domas (55) TSQL2012 00:00:00 281 rows

Ready Ln 9 Col 24 Ch 24 INS

Question 6:

Windows7 [Running]

SQLQuery2.sql - DOMAS-PC\SQLEXPRESS.TSQL2012 (Domas-PC\Domas (55))* - Microsoft SQL Server Management Studio

File Edit View Query Project Debug Tools Window Help

TSQL2012 Execute Debug

Object Explorer

- Connect
- qty (smallint, not null)
- discount (numeric(4,3), not null)
- Keys
- Constraints
- Triggers
- Indexes
- Statistics
- Sales.Orders
- Columns
 - orderid (PK, int, not null)
 - custid (FK, int, null)
 - empid (FK, int, not null)
 - orderdate (datetime, not null)
 - requireddate (datetime, not null)
 - shippeddate (datetime, null)
 - shipperid (FK, int, not null)
 - freight (money, not null)
 - shipname (nvarchar(40), not null)
 - shipaddress (nvarchar(60), not null)
 - shipcity (nvarchar(15), not null)

SQLQuery3.sql - D...as-PC\Domas (54))*

SQLQuery2.sql - D...as-PC\Domas (55))*

```
SELECT C.companyname, COUNT(*) AS [Number Of Orders]
FROM Sales.Customers AS C, Sales.Orders AS O
WHERE C.custid = O.custid AND
(O.orderdate >= '07/01/2006' AND O.orderdate < '09/01/2006')
GROUP BY C.companyname
ORDER BY C.companyname ASC
```

Results

	companyname	Number Of Orders
1	Customer AZJED	1
2	Customer CCKOT	1
3	Customer CQRAA	1
4	Customer CYZTN	1
5	Customer ENQZT	2
6	Customer FAPSM	1
7	Customer FVXPQ	1

DOMAS-PC\SQLEXPRESS (11.0 RTM) | Domas-PC\Domas (55) | TSQL2012 | 00:00:00 | 34 rows

Ready Ln 7 Col 1 Ch 1 INS

6:09 PM 3/25/2017

Question 7:

Windows7 [Running]

SQLQuery2.sql - DOMAS-PC\SQLEXPRESS.TSQL2012 (Domas-PC\Domas (52))* - Microsoft SQL Server Management Studio

File Edit View Query Project Debug Tools Window Help

TSQL2012 Execute Debug

Object Explorer

- Connect
- ases
- stem Databases
- QL2012
 - Database Diagrams
 - Tables
 - System Tables
 - FileTables
 - dbo.Nums
 - HR.Employees
 - Production.Categories
 - Production.Products
 - Columns
 - productid (PK, int, not null)
 - productname (nvarchar(50), not null)
 - supplierid (FK, int, not null)
 - categoryid (FK, int, not null)
 - unitprice (money, not null)
 - discontinued (bit, not null)
 - Keys
 - Constraints

SQLQuery2.sql - D...as-PC\Domas (52))* SQLQuery4.sql - D...as-PC\Domas (56))*

```
SELECT OD.productid, P.productname
FROM Production.Products AS P, Sales.OrderDetails AS OD,
Sales.Orders AS O
WHERE P.productid = OD.productid AND
OD.orderid = O.orderid AND
O.orderid NOT IN ( SELECT orderid FROM Sales.Orders
WHERE (O.orderdate >= '06/01/2006' AND O.orderdate < '06/01/2007') )
GROUP BY OD.productid, P.productname
ORDER BY OD.productid ASC
```

100 %

Results Messages

	productid	productname
1	1	Product HHYDP
2	2	Product RECZE
3	3	Product IMEHJ
4	4	Product KSBRM
5	5	Product EPEIM
6	6	Product VAIIV
7	7	Product HMLNI

Q... DOMAS-PC\SQLEXPRESS (11.0 RTM) Domas-PC\Domas (52) TSQL2012 00:00:00 77 rows

Ready Ln 7 Col 46 Ch 31 INS

7:29 PM 3/25/2017

Question 8a:

Windows7 [Running]

SQLQuery2.sql - DOMAS-PC\SQLEXPRESS.TSQL2012 (Domas-PC\Domas (52))* - Microsoft SQL Server Management Studio

File Edit View Query Project Debug Tools Window Help

TSQL2012 Execute Debug

Object Explorer

- Connect
- HR.Employees
- Production.Categories
- Production.Products
 - Columns
 - productid (PK, int, not null)
 - productname (nvarchar)
 - supplierid (FK, int, not null)
 - categoryid (FK, int, not null)
 - unitprice (money, not null)
 - discontinued (bit, not null)
 - Keys
 - Constraints
 - Triggers
 - Indexes
 - Statistics
- Production.Suppliers
 - Columns
 - supplierid (PK, int, not null)
 - companyname (nvarchar)
 - contactname (nvarchar)

SQLQuery2.sql - D...as-PC\Domas (52))* SQLQuery4.sql - D...as-PC\Domas (56))*

```
SELECT S.companyname, SUM(OD.unitprice * OD.qty) AS [Order Amount]
FROM Production.Suppliers AS S, Sales.OrderDetails AS OD,
Production.Products AS P, Sales.Orders AS O
WHERE OD.productid = P.productid AND
P.supplierid = S.supplierid AND
OD.orderid = O.orderid
GROUP BY S.supplierid, S.companyname
ORDER BY [Order Amount] DESC
```

Results Messages

	companyname	Order Amount
1	Supplier LVJUA	163135.00
2	Supplier SVIYA	155946.55
3	Supplier OAVQT	126582.00
4	Supplier GQRCV	115386.05
5	Supplier JNNES	69636.60
6	Supplier OGLRK	66266.70
7	Supplier ZWZDM	52929.00

DOMAS-PC\SQLEXPRESS (11.0 RTM) | Domas-PC\Domas (52) | TSQL2012 | 00:00:00 | 29 rows

Ready Ln 1 Col 7 Ch 7 INS

8:15 PM 3/25/2017

Question 8b:

Windows7 [Running]

SQLQuery2.sql - DOMAS-PC\SQLEXPRESS.TSQL2012 (Domas-PC\Domas (52))* - Microsoft SQL Server Management Studio

File Edit View Query Project Debug Tools Window Help

TSQL2012 Execute Debug

Object Explorer

- Connect
- HR.Employees
- Production.Categories
- Production.Products
 - Columns
 - productid (PK, int, not r
 - productname (nvarchar
 - supplierid (FK, int, not r
 - categoryid (FK, int, not
 - unitprice (money, not n
 - discontinued (bit, not n
 - Keys
 - Constraints
 - Triggers
 - Indexes
 - Statistics
- Production.Suppliers
 - Columns
 - supplierid (PK, int, not r
 - companyname (nvarchar
 - contactname (nvarchar

SQLQuery2.sql - D...as-PC\Domas (52))* SQLQuery4.sql - D...as-PC\Domas (56))*

```
SELECT TOP (3) S.companyname, SUM(OD.unitprice * OD.qty) AS [Order Amount]
FROM Production.Suppliers AS S, Sales.OrderDetails AS OD,
Production.Products AS P, Sales.Orders AS O
WHERE OD.productid = P.productid AND
P.supplierid = S.supplierid AND
OD.orderid = O.orderid
GROUP BY S.supplierid, S.companyname
ORDER BY [Order Amount] DESC
```

Results Messages

	companyname	Order Amount
1	Supplier LVJUA	163135.00
2	Supplier SVIYA	155946.55
3	Supplier OAVQT	126582.00

DOMAS-PC\SQLEXPRESS (11.0 RTM) | Domas-PC\Domas (52) | TSQL2012 | 00:00:00 | 3 rows

Ready Ln 1 Col 16 Ch 16 INS

8:08 PM 3/25/2017

Question 9:

Windows7 [Running]

SQLQuery1.sql - DOMAS-PC\SQLEXPRESS.TSQL2012 (Domas-PC\Domas (54))* - Microsoft SQL Server Management Studio

File Edit View Query Project Debug Tools Window Help

TSQL2012 Execute Debug

Object Explorer

- Connect
- phone (nvarchar(24),
- fax (nvarchar(24), nul
- Keys
- Constraints
- Triggers
- Indexes
- Statistics
- Sales.OrderDetails
- Columns
 - orderid (PK, FK, int, n
 - productid (PK, FK, int
 - unitprice (money, no
 - qty (smallint, not nul
 - discount (numeric(4,
- Keys
- Constraints
- Triggers
- Indexes
- Statistics
- Sales.Orders

SQLQuery1.sql - D...as-PC\Domas (54))*

```
SELECT C.companyname, C.address, C.city, C.region, C.postalcode,
C.country, O.orderdate
FROM Sales.Customers AS C, Sales.Orders AS O,
Sales.OrderDetails AS OD, Production.Products AS P,
Production.Categories AS CA
WHERE C.custid = O.custid AND
O.orderid = OD.orderid AND
OD.productid = P.productid AND
P.categoryid = CA.categoryid AND
CA.categoryname = 'Confections' AND
(O.orderdate >= '08/01/2006' AND O.orderdate < '09/01/2006')
ORDER BY C.companyname
```

Results

	companyname	address	city	region	postalcode	country
1	Customer IRRVL	Taucherstraße 1234	Cunewalde	NULL	10126	Germany
2	Customer JUWXK	Av. dos Lusíadas, 6789	Sao Paulo	SP	10087	Brazil
3	Customer LHANT	Strada Provinciale 7890	Reggio Emilia	NULL	10038	Italy
4	Customer NYUHS	6789 Milton Dr.	Albuquerque	NM	10109	USA
5	Customer OXFRU	Magazinweg 8901	Frankfurt a.M.	NULL	10095	Germany
6	Customer PZNLA	Heerstr. 4567	Leipzig	NULL	10125	Germany

DOMAS-PC\SQLEXPRESS (11.0 RTM) | Domas-PC\Domas (54) | TSQL2012 | 00:00:00 | 10 rows

Ready Ln 2 Col 10 Ch 10 INS

9:51 AM 3/26/2017