COSC 3380

Name: _Paola Garibay___ **Seat # _F1_**

Project 2: Implementation - SQL

(100 points)

(Due date found in the COSC 3380 Detailed Syllabus!)

1.	□	18 points
2.	□	40 points
3.	□	42 points

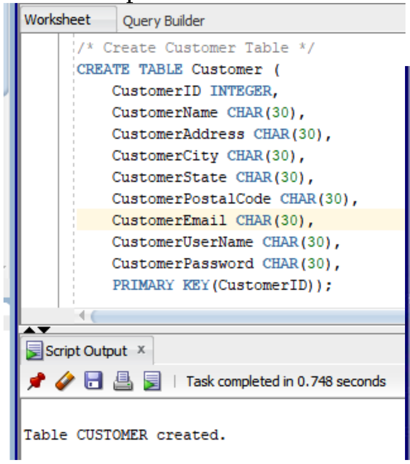
PLEASE ENTER YOUR GRADE IN THIS **BOX & ALSO on the CHECK SHEET:** □

1. (18 points)

a. (13 points)

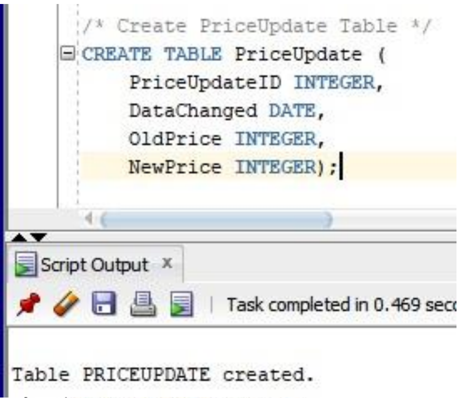
Using Project 1 Relations/Tables **(including VIEWs)** create them in the Oracle DBMS database. Create **Project 2.sql** that contains the Commented SQL commands.

In **Project 2.doc** run one command at the time and take a screenshot of the commented command and its output and insert them in this document.



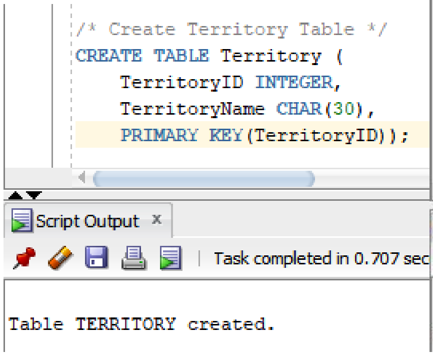
```
/* Create Customer Table */
CREATE TABLE Customer (
    CustomerID INTEGER,
    CustomerName CHAR(30),
    CustomerAddress CHAR(30),
    CustomerCity CHAR(30),
    CustomerState CHAR(30),
    CustomerPostalCode CHAR(30),
    CustomerEmail CHAR(30),
    CustomerUserName CHAR(30),
    CustomerPassword CHAR(30),
    PRIMARY KEY(CustomerID));
```

```
Task completed in 0.748 seconds

Table CUSTOMER created.
```



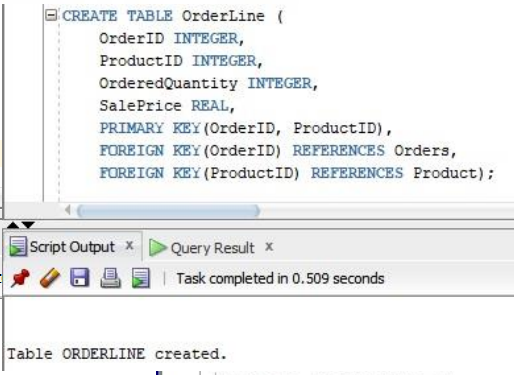
```
/* Create PriceUpdate Table */
CREATE TABLE PriceUpdate (
    PriceUpdateID INTEGER,
    DataChanged DATE,
    OldPrice INTEGER,
    NewPrice INTEGER);
```

```
Task completed in 0.469 sec

Table PRICEUPDATE created.
```



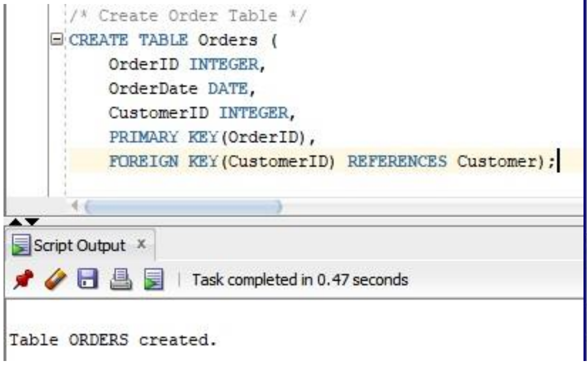
```
/* Create Territory Table */
CREATE TABLE Territory (
    TerritoryID INTEGER,
    TerritoryName CHAR(30),
    PRIMARY KEY(TerritoryID));
```

```
Task completed in 0.707 sec

Table TERRITORY created.
```



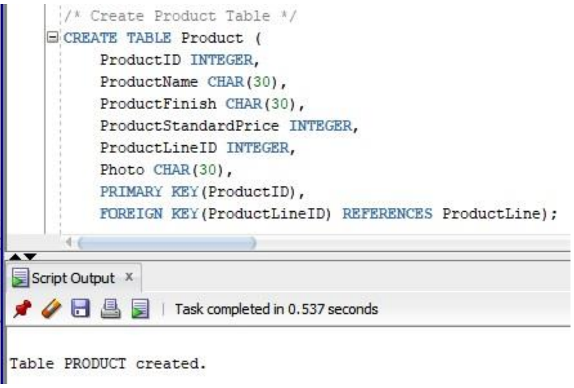
```
CREATE TABLE OrderLine (
    OrderID INTEGER,
    ProductID INTEGER,
    OrderedQuantity INTEGER,
    SalePrice REAL,
    PRIMARY KEY(OrderID, ProductID),
    FOREIGN KEY(OrderID) REFERENCES Orders,
    FOREIGN KEY(ProductID) REFERENCES Product);
```

```
Task completed in 0.509 seconds

Table ORDERLINE created.
```



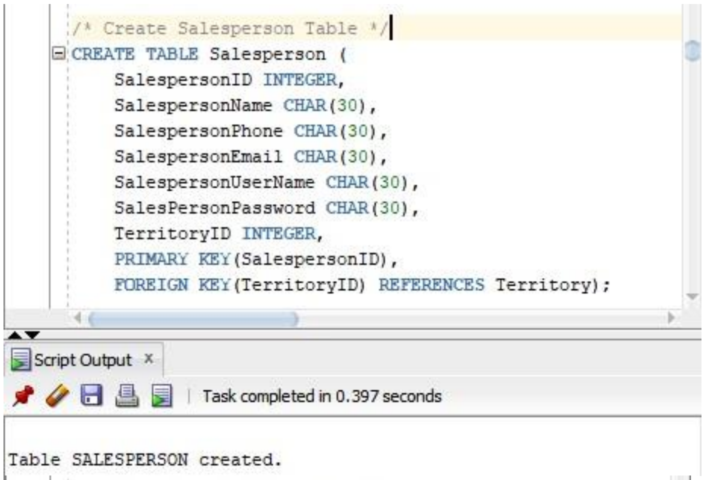
```
/* Create Order Table */
CREATE TABLE Orders (
    OrderID INTEGER,
    OrderDate DATE,
    CustomerID INTEGER,
    PRIMARY KEY(OrderID),
    FOREIGN KEY(CustomerID) REFERENCES Customer);
```

```
Task completed in 0.47 seconds

Table ORDERS created.
```



```
/* Create Product Table */
CREATE TABLE Product (
    ProductID INTEGER,
    ProductName CHAR(30),
    ProductFinish CHAR(30),
    ProductStandardPrice INTEGER,
    ProductLineID INTEGER,
    Photo CHAR(30),
    PRIMARY KEY(ProductID),
    FOREIGN KEY(ProductLineID) REFERENCES ProductLine);
```

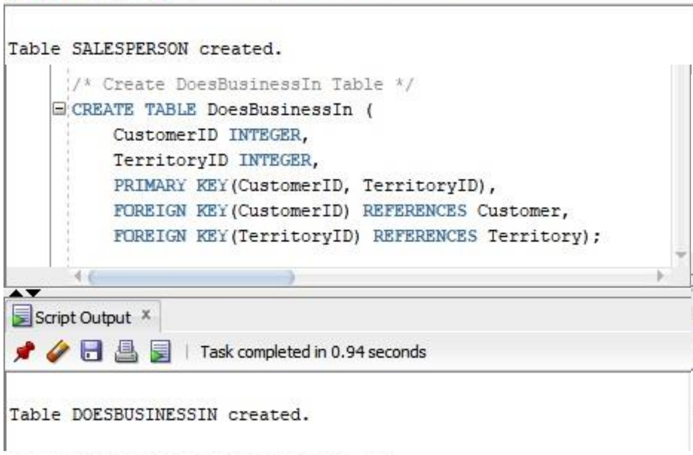
```
Task completed in 0.537 seconds

Table PRODUCT created.
```



```
/* Create Salesperson Table */
CREATE TABLE Salesperson (
    SalespersonID INTEGER,
    SalespersonName CHAR(30),
    SalespersonPhone CHAR(30),
    SalespersonEmail CHAR(30),
    SalespersonUserName CHAR(30),
    SalesPersonPassword CHAR(30),
    TerritoryID INTEGER,
    PRIMARY KEY(SalespersonID),
    FOREIGN KEY(TerritoryID) REFERENCES Territory);
```

Task completed in 0.397 seconds

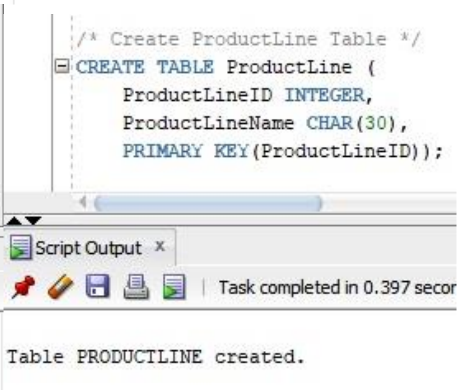
```
Table SALESPERSON created.
```



```
/* Create DoesBusinessIn Table */
CREATE TABLE DoesBusinessIn (
    CustomerID INTEGER,
    TerritoryID INTEGER,
    PRIMARY KEY(CustomerID, TerritoryID),
    FOREIGN KEY(CustomerID) REFERENCES Customer,
    FOREIGN KEY(TerritoryID) REFERENCES Territory);
```

Task completed in 0.94 seconds

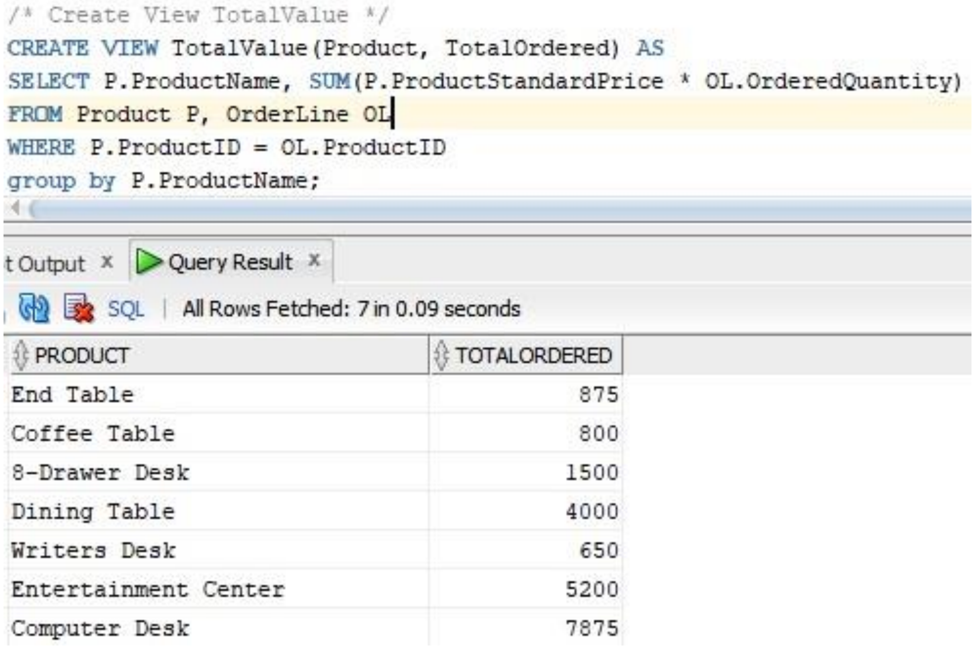
```
Table DOESBUSINESSIN created.
```



```
/* Create ProductLine Table */
CREATE TABLE ProductLine (
    ProductLineID INTEGER,
    ProductLineName CHAR(30),
    PRIMARY KEY(ProductLineID));
```

Task completed in 0.397 secor

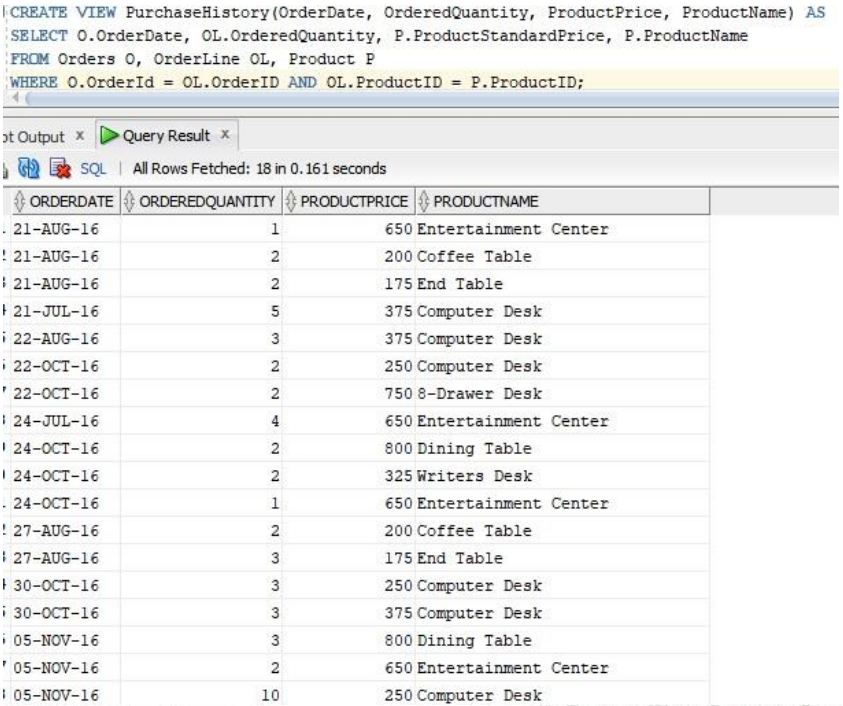
```
Table PRODUCTLINE created.
```



```
/* Create View TotalValue */
CREATE VIEW TotalValue(Product, TotalOrdered) AS
SELECT P.ProductName, SUM(P.ProductStandardPrice * OL.OrderedQuantity)
FROM Product P, OrderLine OL
WHERE P.ProductID = OL.ProductID
group by P.ProductName;
```

All Rows Fetched: 7 in 0.09 seconds

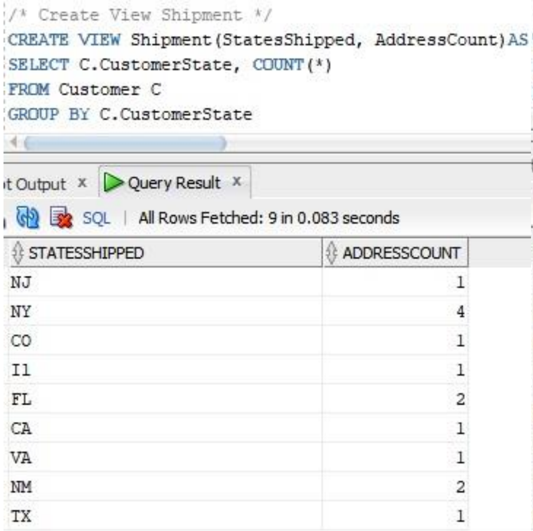
PRODUCT	TOTALORDERED
End Table	875
Coffee Table	800
8-Drawer Desk	1500
Dining Table	4000
Writers Desk	650
Entertainment Center	5200
Computer Desk	7875



```sql
CREATE VIEW PurchaseHistory(OrderDate, OrderedQuantity, ProductPrice, ProductName) AS
SELECT O.OrderDate, OL.OrderedQuantity, P.ProductStandardPrice, P.ProductName
FROM Orders O, OrderLine OL, Product P
WHERE O.OrderId = OL.OrderID AND OL.ProductID = P.ProductID;
```

All Rows Fetched: 18 in 0.161 seconds

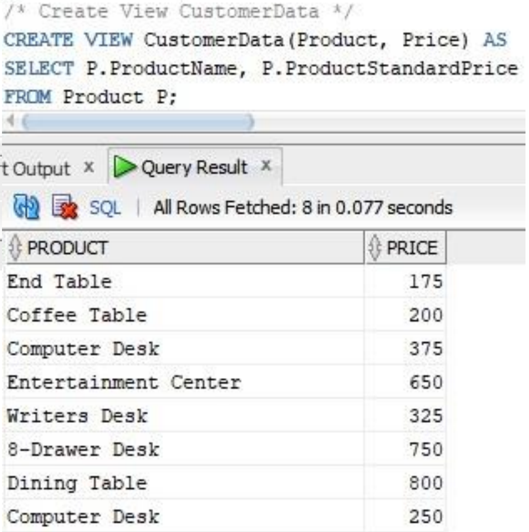
ORDERDATE	ORDEREDQUANTITY	PRODUCTPRICE	PRODUCTNAME
21-AUG-16	1	650	Entertainment Center
21-AUG-16	2	200	Coffee Table
21-AUG-16	2	175	End Table
21-JUL-16	5	375	Computer Desk
22-AUG-16	3	375	Computer Desk
22-OCT-16	2	250	Computer Desk
22-OCT-16	2	750	8-Drawer Desk
24-JUL-16	4	650	Entertainment Center
24-OCT-16	2	800	Dining Table
24-OCT-16	2	325	Writers Desk
24-OCT-16	1	650	Entertainment Center
27-AUG-16	2	200	Coffee Table
27-AUG-16	3	175	End Table
30-OCT-16	3	250	Computer Desk
30-OCT-16	3	375	Computer Desk
05-NOV-16	3	800	Dining Table
05-NOV-16	2	650	Entertainment Center
05-NOV-16	10	250	Computer Desk



```sql
/* Create View Shipment */
CREATE VIEW Shipment(StatesShipped, AddressCount)AS
SELECT C.CustomerState, COUNT(*)
FROM Customer C
GROUP BY C.CustomerState
```

All Rows Fetched: 9 in 0.083 seconds

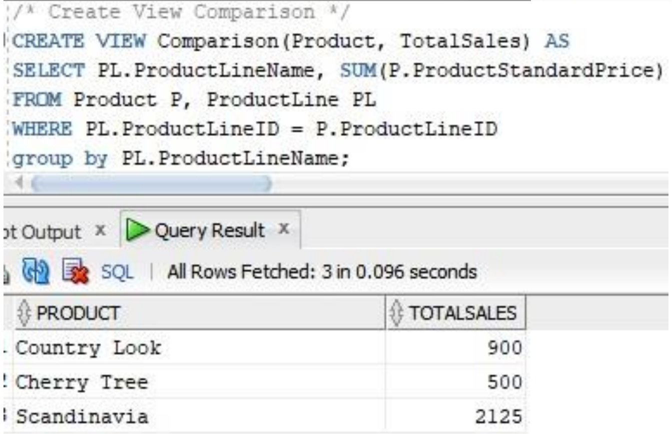
STATESSHIPPED	ADDRESSCOUNT
NJ	1
NY	4
CO	1
Il	1
FL	2
CA	1
VA	1
NM	2
TX	1



```sql
/* Create View CustomerData */
CREATE VIEW CustomerData(Product, Price) AS
SELECT P.ProductName, P.ProductStandardPrice
FROM Product P;
```

All Rows Fetched: 8 in 0.077 seconds

PRODUCT	PRICE
End Table	175
Coffee Table	200
Computer Desk	375
Entertainment Center	650
Writers Desk	325
8-Drawer Desk	750
Dining Table	800
Computer Desk	250



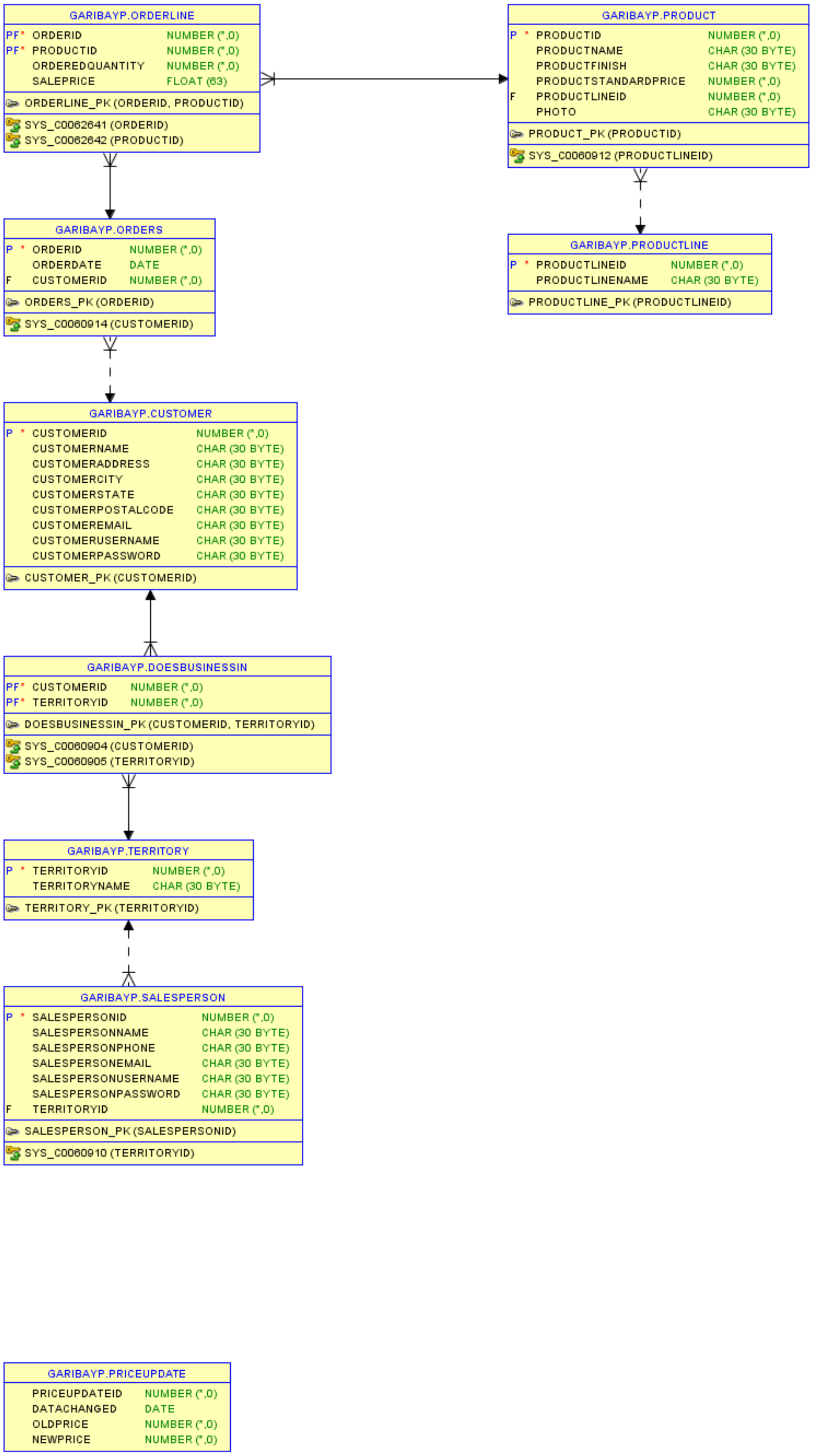
```sql
/* Create View Comparison */
CREATE VIEW Comparison(Product, TotalSales) AS
SELECT PL.ProductLineName, SUM(P.ProductStandardPrice)
FROM Product P, ProductLine PL
WHERE PL.ProductLineID = P.ProductLineID
group by PL.ProductLineName;
```

All Rows Fetched: 3 in 0.096 seconds

PRODUCT	TOTALSALES
Country Look	900
Cherry Tree	500
Scandinavia	2125

b. (5 points)

Request the Table Relationships Diagram for the ***Data***base and attach it in Project 2.doc (here).



GARIBAYP.ORDERLINE		
PF*	ORDERID	NUMBER (*,0)
PF*	PRODUCTID	NUMBER (*,0)
	ORDEREDQUANTITY	NUMBER (*,0)
	SALEPRICE	FLOAT (63)
	ORDERLINE_PK (ORDERID, PRODUCTID)	
	SYS_C0062641 (ORDERID)	
	SYS_C0062642 (PRODUCTID)	

GARIBAYP.PRODUCT		
P *	PRODUCTID	NUMBER (*,0)
	PRODUCTNAME	CHAR (30 BYTE)
	PRODUCTFINISH	CHAR (30 BYTE)
	PRODUCTSTANDARDPRICE	NUMBER (*,0)
F	PRODUCTLINEID	NUMBER (*,0)
	PHOTO	CHAR (30 BYTE)
	PRODUCT_PK (PRODUCTID)	
	SYS_C0060912 (PRODUCTLINEID)	

GARIBAYP.ORDERS		
P *	ORDERID	NUMBER (*,0)
	ORDERDATE	DATE
F	CUSTOMERID	NUMBER (*,0)
	ORDERS_PK (ORDERID)	
	SYS_C0060914 (CUSTOMERID)	

GARIBAYP.PRODUCTLINE		
P *	PRODUCTLINEID	NUMBER (*,0)
	PRODUCTLINENAME	CHAR (30 BYTE)
	PRODUCTLINE_PK (PRODUCTLINEID)	

GARIBAYP.CUSTOMER		
P *	CUSTOMERID	NUMBER (*,0)
	CUSTOMERNAME	CHAR (30 BYTE)
	CUSTOMERADDRESS	CHAR (30 BYTE)
	CUSTOMERCITY	CHAR (30 BYTE)
	CUSTOMERSTATE	CHAR (30 BYTE)
	CUSTOMERPOSTALCODE	CHAR (30 BYTE)
	CUSTOMEREMAIL	CHAR (30 BYTE)
	CUSTOMERUSERNAME	CHAR (30 BYTE)
	CUSTOMERPASSWORD	CHAR (30 BYTE)
	CUSTOMER_PK (CUSTOMERID)	

GARIBAYP.DOESBUSINESSIN		
PF*	CUSTOMERID	NUMBER (*,0)
PF*	TERRITORYID	NUMBER (*,0)
	DOESBUSINESSIN_PK (CUSTOMERID, TERRITORYID)	
	SYS_C0060904 (CUSTOMERID)	
	SYS_C0060905 (TERRITORYID)	

GARIBAYP.TERRITORY		
P *	TERRITORYID	NUMBER (*,0)
	TERRITORYNAME	CHAR (30 BYTE)
	TERRITORY_PK (TERRITORYID)	

GARIBAYP.SALESPERSON		
P *	SALESPERSONID	NUMBER (*,0)
	SALESPERSONNAME	CHAR (30 BYTE)
	SALESPERSONPHONE	CHAR (30 BYTE)
	SALESPERSONEMAIL	CHAR (30 BYTE)
	SALESPERSONUSERNAME	CHAR (30 BYTE)
	SALESPERSONPASSWORD	CHAR (30 BYTE)
F	TERRITORYID	NUMBER (*,0)
	SALESPERSON_PK (SALESPERSONID)	
	SYS_C0060910 (TERRITORYID)	

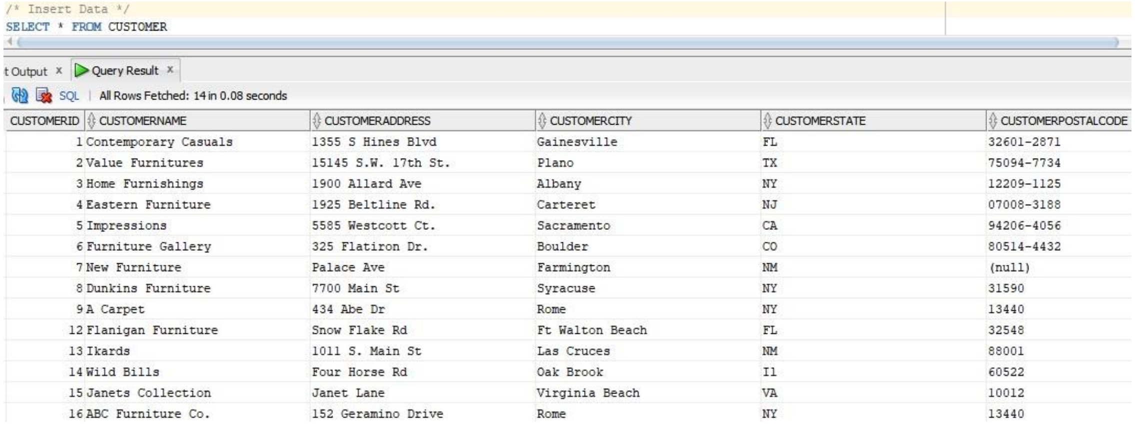
GARIBAYP.PRICEUPDATE	
PRICEUPDATEID	NUMBER (*,0)
DATACHANGED	DATE
OLDPRICE	NUMBER (*,0)
NEWPRICE	NUMBER (*,0)

2. (40 points)

The Client has supplied the following data. Use **SQL** to **insert these data** in the Oracle DBMS database created in **Project 1**.

Customer

CustomerID, CustomerName, CustomerAddress, CustomerCity, CustomerState, CustomerPostalCode, CustomerEmail, CustomerUserName, CustomerPassword
1, 'Contemporary Casuals', '1355 S Hines Blvd', 'Gainesville', 'FL', '32601-2871'
2, 'Value Furnitures', '15145 S.W. 17th St.', 'Plano', 'TX', '75094-7734'
3, 'Home Furnishings', '1900 Allard Ave', 'Albany', 'NY', '12209-1125'**,**
'homefurnishings?@gmail.com', 'CUSTOMER1', 'CUSTOMER1#'
4, 'Eastern Furniture', '1925 Beltline Rd.', 'Carteret', 'NJ', '07008-3188'
5, 'Impressions', '5585 Westcott Ct.', 'Sacramento', 'CA', '94206-4056'
6, 'Furniture Gallery', '325 Flatiron Dr.', 'Boulder', 'CO', '80514-4432'
7, 'New Furniture', 'Palace Ave', 'Farmington', 'NM', ''
8, 'Dunkins Furniture', '7700 Main St', 'Syracuse', 'NY', '31590'
9, 'A Carpet', '434 Abe Dr', 'Rome', 'NY', '13440'
12, 'Flanigan Furniture', 'Snow Flake Rd', 'Ft Walton Beach', 'FL', '32548'
13, 'Ikards', '1011 S. Main St', 'Las Cruces', 'NM', '88001'
14, 'Wild Bills', 'Four Horse Rd', 'Oak Brook', 'Il', '60522'
15, 'Janet's Collection', 'Janet Lane', 'Virginia Beach', 'VA', '10012'
16, 'ABC Furniture Co.', '152 Geramino Drive', 'Rome', 'NY', '13440'



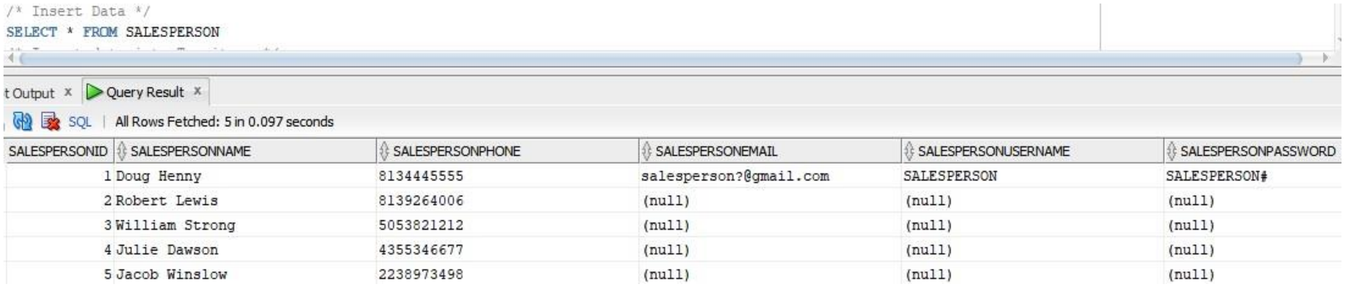
```
/* Insert Data */
SELECT * FROM CUSTOMER
```

All Rows Fetched: 14 in 0.08 seconds

CUSTOMERID	CUSTOMERNAME	CUSTOMERADDRESS	CUSTOMERCITY	CUSTOMERSTATE	CUSTOMERPOSTALCODE
1	Contemporary Casuals	1355 S Hines Blvd	Gainesville	FL	32601-2871
2	Value Furnitures	15145 S.W. 17th St.	Plano	TX	75094-7734
3	Home Furnishings	1900 Allard Ave	Albany	NY	12209-1125
4	Eastern Furniture	1925 Beltline Rd.	Carteret	NJ	07008-3188
5	Impressions	5585 Westcott Ct.	Sacramento	CA	94206-4056
6	Furniture Gallery	325 Flatiron Dr.	Boulder	CO	80514-4432
7	New Furniture	Palace Ave	Farmington	NM	(null)
8	Dunkins Furniture	7700 Main St	Syracuse	NY	31590
9	A Carpet	434 Abe Dr	Rome	NY	13440
12	Flanigan Furniture	Snow Flake Rd	Ft Walton Beach	FL	32548
13	Ikards	1011 S. Main St	Las Cruces	NM	88001
14	Wild Bills	Four Horse Rd	Oak Brook	Il	60522
15	Janets Collection	Janet Lane	Virginia Beach	VA	10012
16	ABC Furniture Co.	152 Geramino Drive	Rome	NY	13440

Salesperson

SalespersonID, SalespersonName, SalespersonPhone, SalespersonEmail, SalespersonUserName, SalespersonPassword,TerritoryID
1, 'Doug Henny', '8134445555', **'salesperson?@gmail.com'**, '**SALESPERSON**',
'**SALESPERSON#**',1
2, 'Robert Lewis', '8139264006', '', '', '', 2
3, 'William Strong', '5053821212', '', '', '', 3
4, 'Julie Dawson', '4355346677', '', '', '', 4
5, 'Jacob Winslow', '2238973498', '', '', '', 5



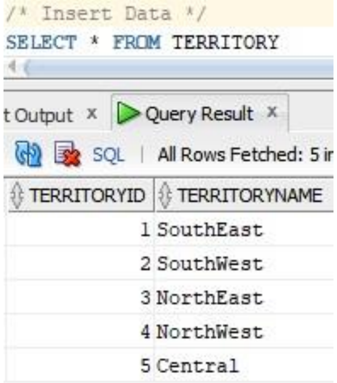
```
/* Insert Data */
SELECT * FROM SALESPERSON
```

All Rows Fetched: 5 in 0.097 seconds

SALESPERSONID	SALESPERSONNAME	SALESPERSONPHONE	SALESPERSONEMAIL	SALESPERSONUSERNAME	SALESPERSONPASSWORD
1	Doug Henny	8134445555	salesperson?@gmail.com	SALESPERSON	SALESPERSON#
2	Robert Lewis	8139264006	(null)	(null)	(null)
3	William Strong	5053821212	(null)	(null)	(null)
4	Julie Dawson	4355346677	(null)	(null)	(null)
5	Jacob Winslow	2238973498	(null)	(null)	(null)

Territory

TerritoryID, TerritoryName
1, 'SouthEast'
2, 'SouthWest'
3, 'NorthEast'
4, 'NorthWest'
5, 'Central'



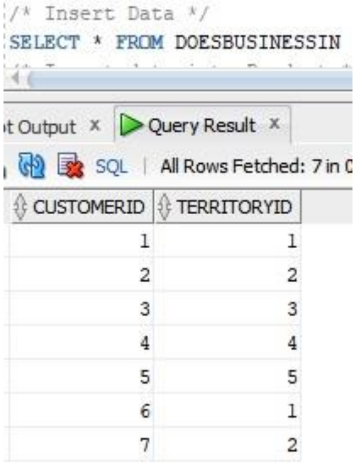
```
/* Insert Data */
SELECT * FROM TERRITORY
```

All Rows Fetched: 5 i

TERRITORYID	TERRITORYNAME
1	SouthEast
2	SouthWest
3	NorthEast
4	NorthWest
5	Central

DoesBusinessIn

CustomerID, TerritoryID
1, 1
2, 2
3, 3
4, 4
5, 5
6, 1
7, 2



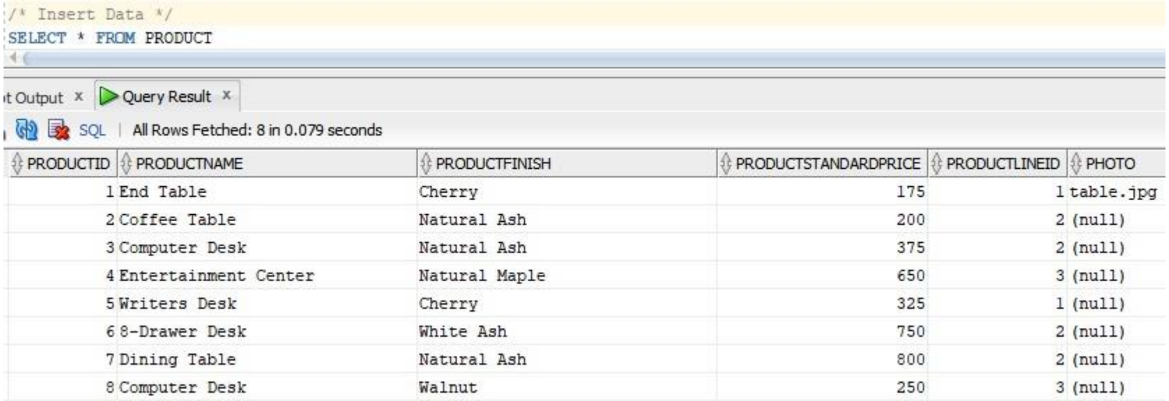
```
/* Insert Data */
SELECT * FROM DOESBUSINESSIN
```

All Rows Fetched: 7 in

CUSTOMERID	TERRITORYID
1	1
2	2
3	3
4	4
5	5
6	1
7	2

Product

<u>ProductID</u>, ProductName, ProductFinish, ProductStandardPrice, ProductLineID, **Photo**
1, 'End Table', 'Cherry', 175, 1, **table.jpg**
2, 'Coffee Table', 'Natural Ash', 200, 2
3, 'Computer Desk', 'Natural Ash', 375, 2
4, 'Entertainment Center', 'Natural Maple', 650, 3
5, 'Writers Desk', 'Cherry', 325, 1
6, '8-Drawer Desk', 'White Ash', 750, 2
7, 'Dining Table', 'Natural Ash', 800, 2
8, 'Computer Desk', 'Walnut', 250, 3



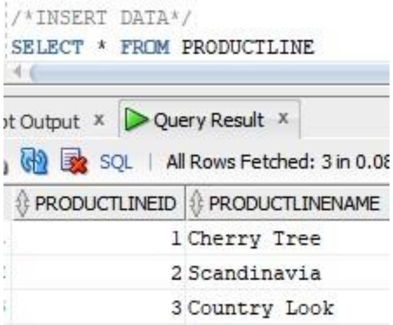
```
/* Insert Data */
SELECT * FROM PRODUCT
```

All Rows Fetched: 8 in 0.079 seconds

PRODUCTID	PRODUCTNAME	PRODUCTFINISH	PRODUCTSTANDARDPRICE	PRODUCTLINEID	PHOTO
1	End Table	Cherry	175	1	table.jpg
2	Coffee Table	Natural Ash	200	2	(null)
3	Computer Desk	Natural Ash	375	2	(null)
4	Entertainment Center	Natural Maple	650	3	(null)
5	Writers Desk	Cherry	325	1	(null)
6	8-Drawer Desk	White Ash	750	2	(null)
7	Dining Table	Natural Ash	800	2	(null)
8	Computer Desk	Walnut	250	3	(null)

ProductLine

<u>ProductLineID</u>, ProductLineName
1, 'Cherry Tree'
2, 'Scandinavia'
3, 'Country Look'



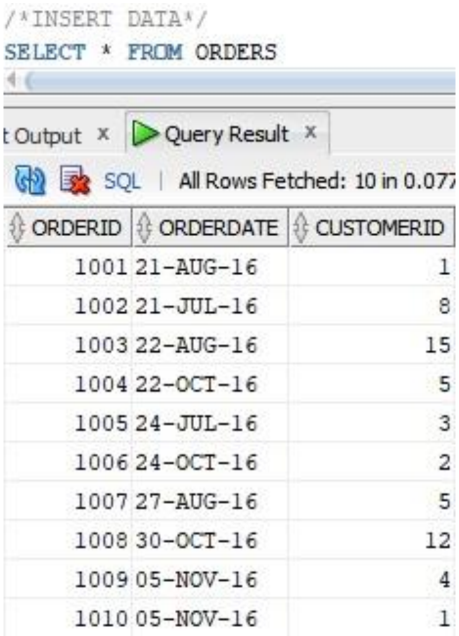
```
/*INSERT DATA*/
SELECT * FROM PRODUCTLINE
```

All Rows Fetched: 3 in 0.08

PRODUCTLINEID	PRODUCTLINENAME
1	Cherry Tree
2	Scandinavia
3	Country Look

Order

<u>OrderID</u>, OrderDate, CustomerID
1001, '21/Aug/16', 1
1002, '21/Jul/16', 8
1003, '22/ Aug/16', 15
1004, '22/Oct/16', 5
1005, '24/Jul/16', 3
1006, '24/Oct/16', 2
1007, '27/ Aug/16', 5
1008, **'30/Oct/16', 12**
1009, **'05/Nov/16', 4**
1010, **'05/Nov/16', 1**



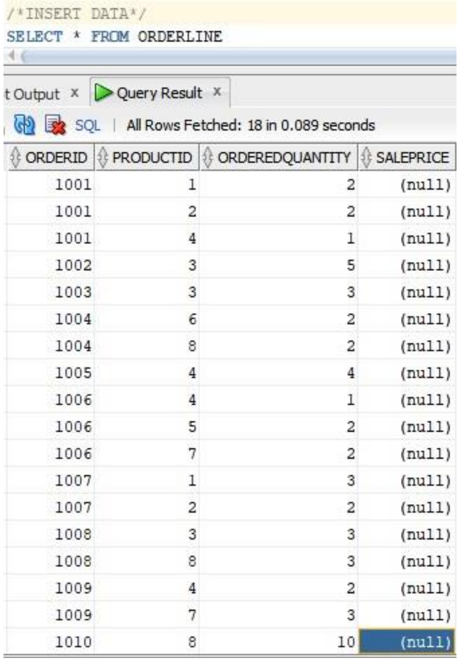
```
/*INSERT DATA*/
SELECT * FROM ORDERS
```

All Rows Fetched: 10 in 0.077

ORDERID	ORDERDATE	CUSTOMERID
1001	21-AUG-16	1
1002	21-JUL-16	8
1003	22-AUG-16	15
1004	22-OCT-16	5
1005	24-JUL-16	3
1006	24-OCT-16	2
1007	27-AUG-16	5
1008	30-OCT-16	12
1009	05-NOV-16	4
1010	05-NOV-16	1

OrderLine

OrderID, ProductID, OrderedQuantity, SalePrice
1001, 1, 2
1001, 2, 2
1001, 4, 1
1002, 3, 5
1003, 3, 3
1004, 6, 2
1004, 8, 2
1005, 4, 4
1006, 4, 1
1006, 5, 2
1006, 7, 2
1007, 1, 3
1007, 2, 2
1008, 3, 3
1008, 8, 3
1009, 4, 2
1009, 7, 3
1010, 8, 10



```
/*INSERT DATA*/
SELECT * FROM ORDERLINE
```

All Rows Fetched: 18 in 0.089 seconds

ORDERID	PRODUCTID	ORDEREDQUANTITY	SALEPRICE
1001	1	2	(null)
1001	2	2	(null)
1001	4	1	(null)
1002	3	5	(null)
1003	3	3	(null)
1004	6	2	(null)
1004	8	2	(null)
1005	4	4	(null)
1006	4	1	(null)
1006	5	2	(null)
1006	7	2	(null)
1007	1	3	(null)
1007	2	2	(null)
1008	3	3	(null)
1008	8	3	(null)
1009	4	2	(null)
1009	7	3	(null)
1010	8	10	(null)

PriceUpdate

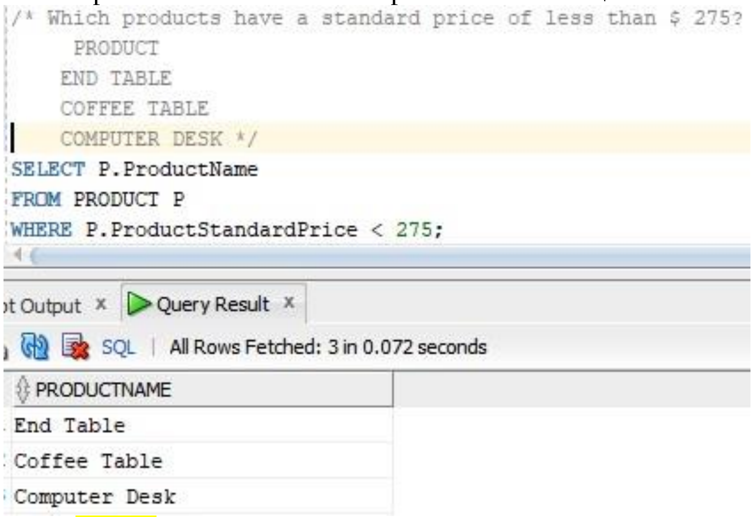
PriceUpdateID, DateChanged, OldPrice, NewPrice

3. (42 points)

The Client wishes that you create the **SQL** code for the following queries (please make sure you SQL COMMENT each query and produce the **screenshots for SQL COMMENT, SQL COMMAND, and SQL OUTPUT each, to be placed in Project 2.doc**):

1. (3 points)

Which products have a standard price of less than $ 275?

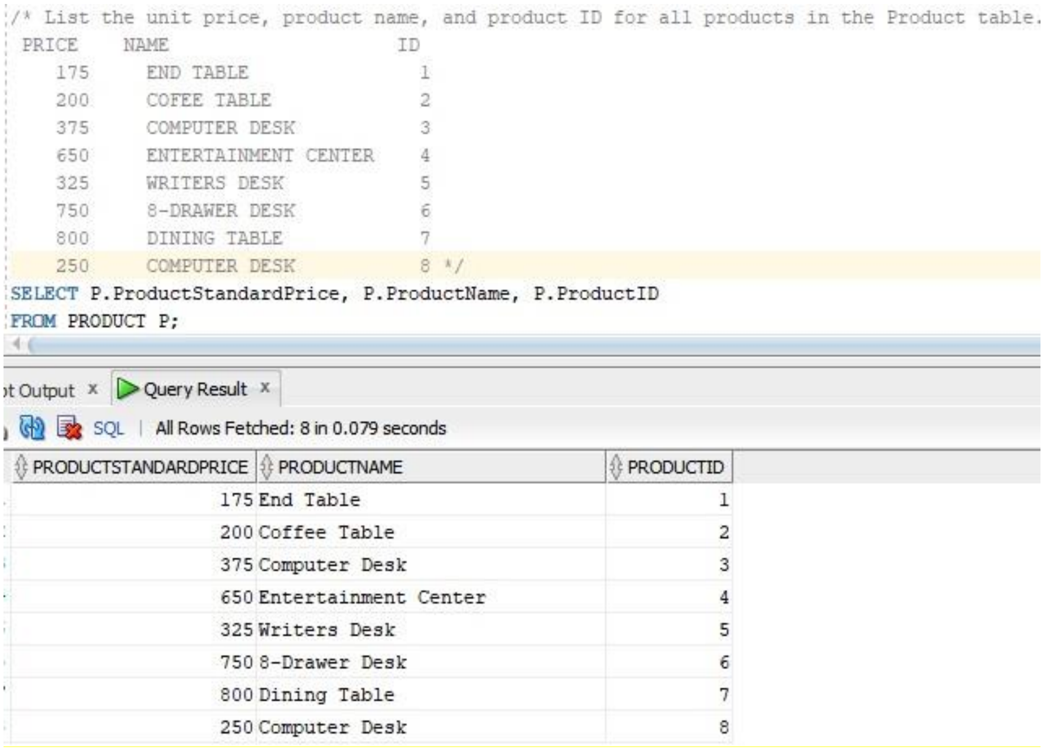


```
/* Which products have a standard price of less than $ 275?
     PRODUCT
    END TABLE
    COFFEE TABLE
    COMPUTER DESK */
SELECT P.ProductName
FROM PRODUCT P
WHERE P.ProductStandardPrice < 275;
```

```
All Rows Fetched: 3 in 0.072 seconds

PRODUCTNAME
End Table
Coffee Table
Computer Desk
```

2. (3 points)

List the unit price, product name, and product ID for all products in the Product table.

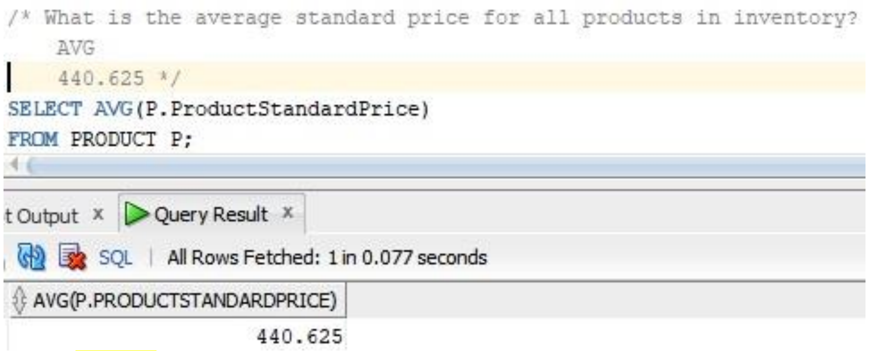


```
/* List the unit price, product name, and product ID for all products in the Product table.
 PRICE     NAME                        ID
    175       END TABLE                  1
    200       COFEE TABLE                2
    375       COMPUTER DESK              3
    650       ENTERTAINMENT CENTER       4
    325       WRITERS DESK               5
    750       8-DRAWER DESK              6
    800       DINING TABLE               7
    250       COMPUTER DESK              8 */
SELECT P.ProductStandardPrice, P.ProductName, P.ProductID
FROM PRODUCT P;
```

```
All Rows Fetched: 8 in 0.079 seconds

PRODUCTSTANDARDPRICE PRODUCTNAME          PRODUCTID
                 175 End Table                    1
                 200 Coffee Table                 2
                 375 Computer Desk                3
                 650 Entertainment Center         4
                 325 Writers Desk                 5
                 750 8-Drawer Desk                6
                 800 Dining Table                 7
                 250 Computer Desk                8
```

3. (3 points)

What is the average standard price for all products in inventory?



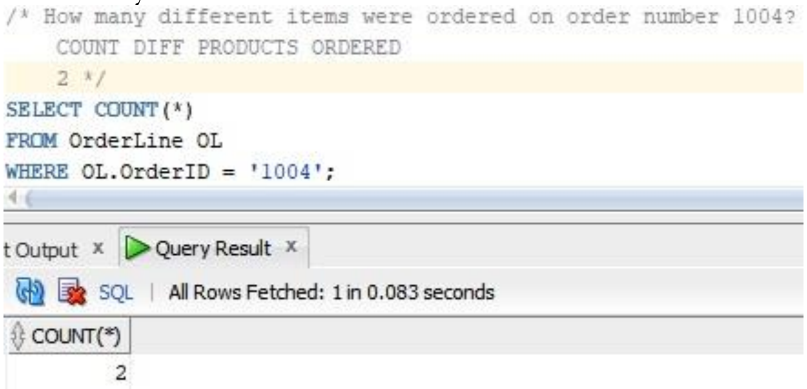
```
/* What is the average standard price for all products in inventory?
    AVG
    440.625 */
SELECT AVG(P.ProductStandardPrice)
FROM PRODUCT P;
```

All Rows Fetched: 1 in 0.077 seconds

AVG(P.PRODUCTSTANDARDPRICE)
440.625

4. (3 points)

How many different items were ordered on order number 1004?



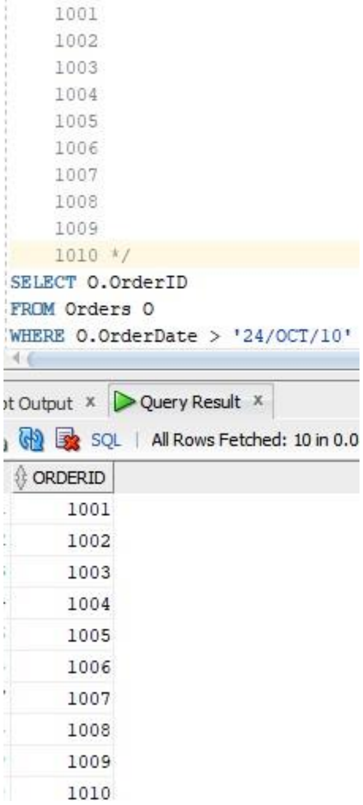
```
/* How many different items were ordered on order number 1004?
    COUNT DIFF PRODUCTS ORDERED
    2 */
SELECT COUNT(*)
FROM OrderLine OL
WHERE OL.OrderID = '1004';
```

All Rows Fetched: 1 in 0.083 seconds

COUNT(*)
2

5. (3 points)

Which orders have been placed since 10/ 24/ 2010?



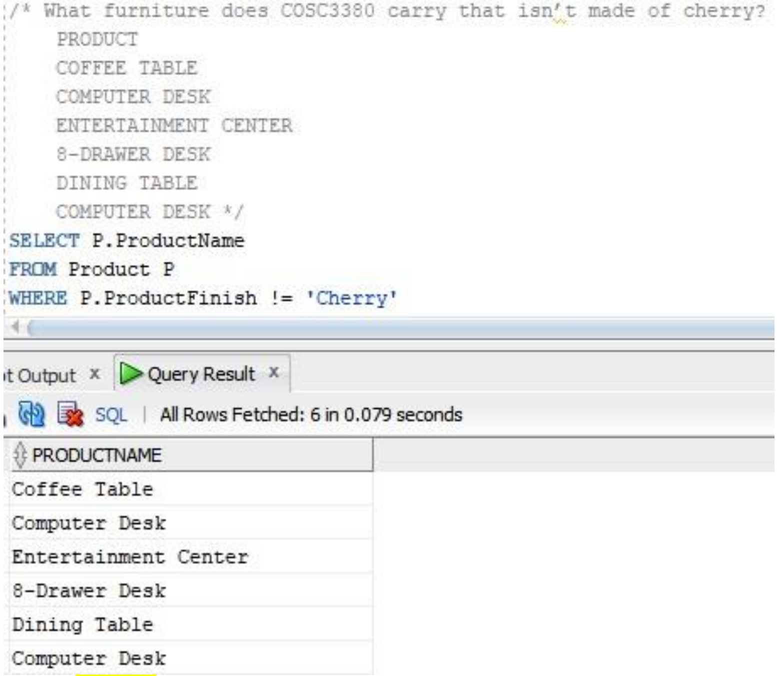
```
    1001
    1002
    1003
    1004
    1005
    1006
    1007
    1008
    1009
    1010 */
SELECT O.OrderID
FROM Orders O
WHERE O.OrderDate > '24/OCT/10'
```

All Rows Fetched: 10 in 0.0

ORDERID
1001
1002
1003
1004
1005
1006
1007
1008
1009
1010

6. (3 points)

What furniture does **COSC3380** carry that isn't made of cherry?



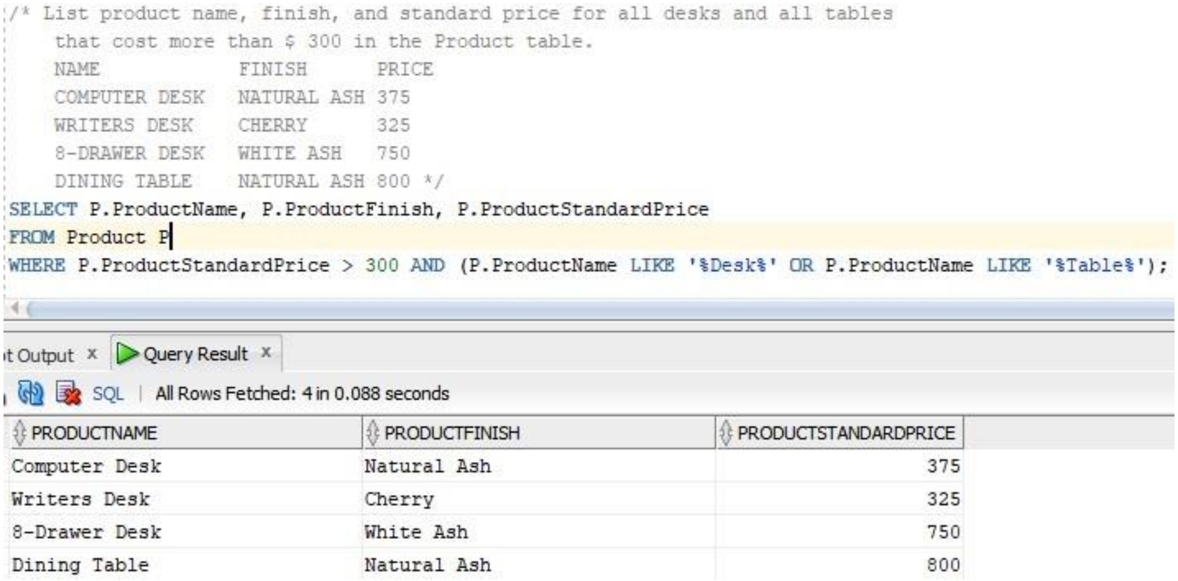
```
/* What furniture does COSC3380 carry that isn't made of cherry?
    PRODUCT
    COFFEE TABLE
    COMPUTER DESK
    ENTERTAINMENT CENTER
    8-DRAWER DESK
    DINING TABLE
    COMPUTER DESK */
SELECT P.ProductName
FROM Product P
WHERE P.ProductFinish != 'Cherry'
```

All Rows Fetched: 6 in 0.079 seconds

PRODUCTNAME
Coffee Table
Computer Desk
Entertainment Center
8-Drawer Desk
Dining Table
Computer Desk

7. (3 points)

List product name, finish, and standard price for all desks and all tables that cost more than $ 300 in the Product table.



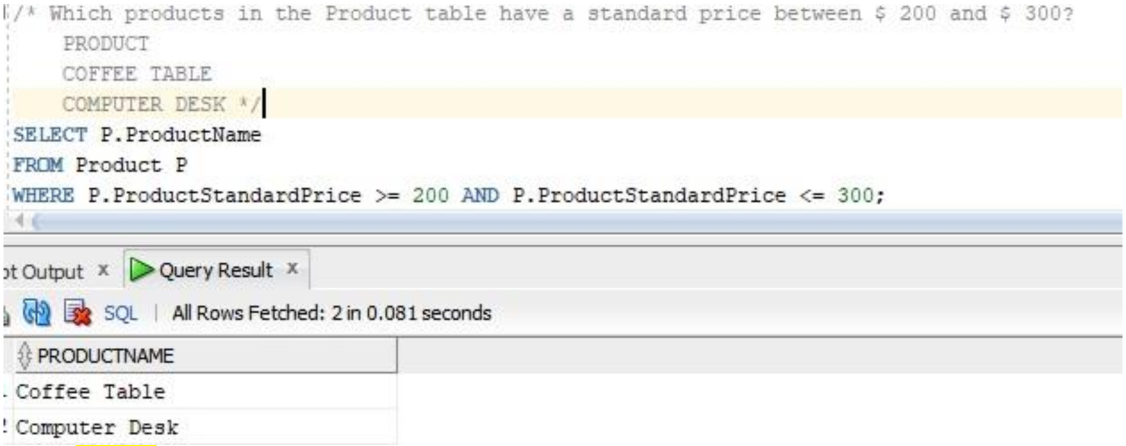
```
/* List product name, finish, and standard price for all desks and all tables
    that cost more than $ 300 in the Product table.
    NAME            FINISH      PRICE
    COMPUTER DESK   NATURAL ASH 375
    WRITERS DESK    CHERRY      325
    8-DRAWER DESK   WHITE ASH   750
    DINING TABLE    NATURAL ASH 800 */
SELECT P.ProductName, P.ProductFinish, P.ProductStandardPrice
FROM Product P
WHERE P.ProductStandardPrice > 300 AND (P.ProductName LIKE '%Desk%' OR P.ProductName LIKE '%Table%');
```

All Rows Fetched: 4 in 0.088 seconds

PRODUCTNAME	PRODUCTFINISH	PRODUCTSTANDARDPRICE
Computer Desk	Natural Ash	375
Writers Desk	Cherry	325
8-Drawer Desk	White Ash	750
Dining Table	Natural Ash	800

8. (3 points)

Which products in the Product table have a standard price between $ 200 and $ 300?



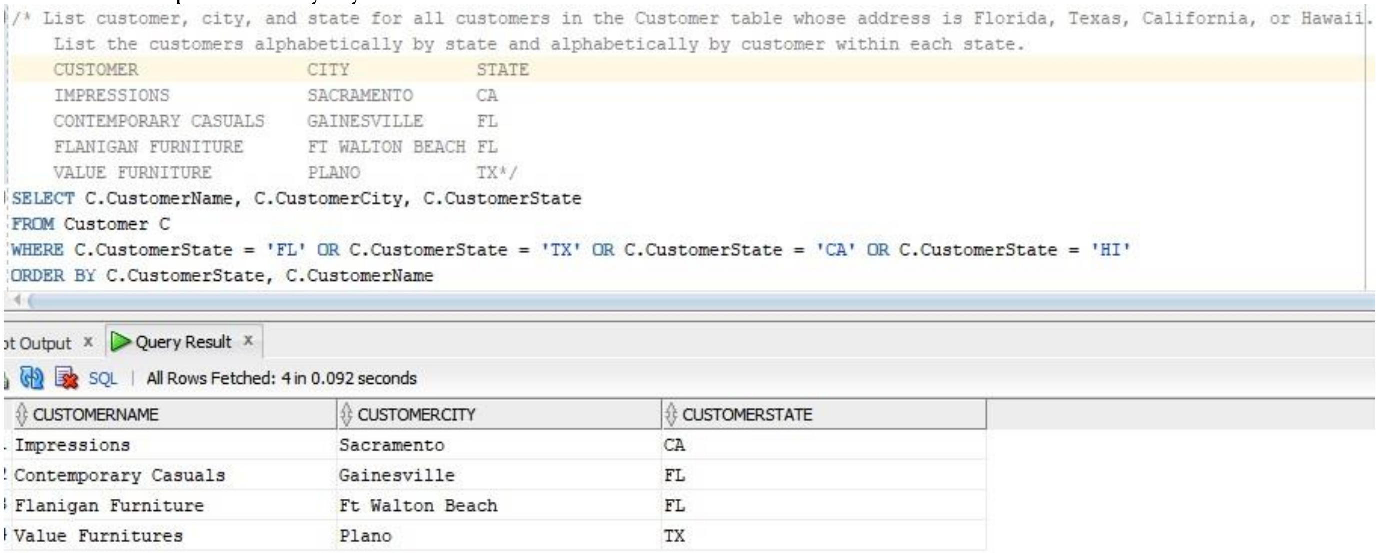
```
/* Which products in the Product table have a standard price between $ 200 and $ 300?
    PRODUCT
    COFFEE TABLE
    COMPUTER DESK */
SELECT P.ProductName
FROM Product P
WHERE P.ProductStandardPrice >= 200 AND P.ProductStandardPrice <= 300;
```

All Rows Fetched: 2 in 0.081 seconds

PRODUCTNAME
Coffee Table
Computer Desk

9. (3 points)

List customer, city, and state for all customers in the Customer table whose address is Florida, Texas, California, or Hawaii. List the customers alphabetically by state and alphabetically by customer within each state.



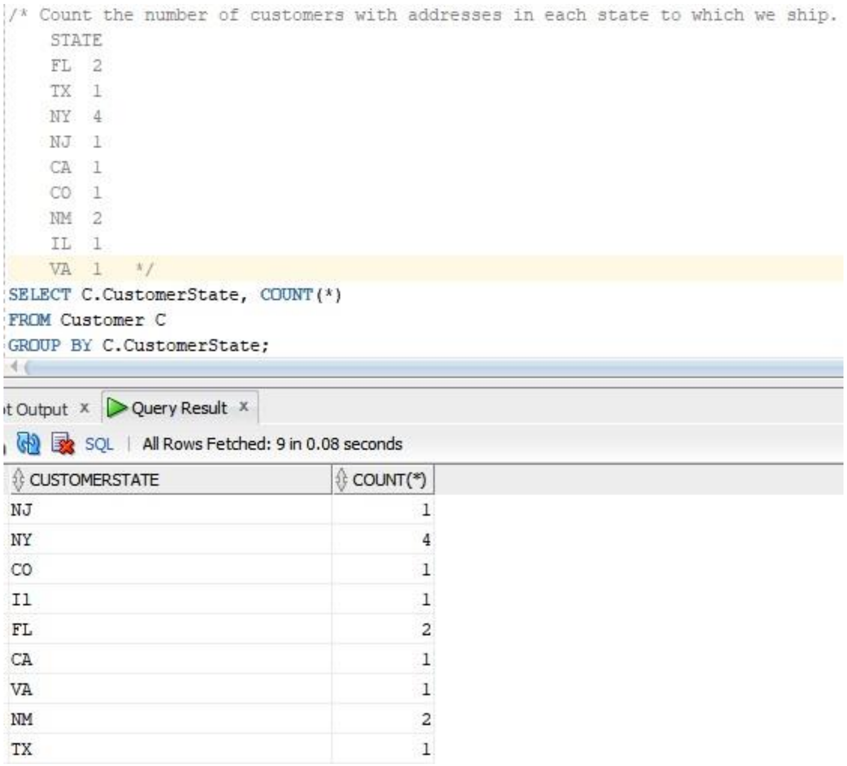
```
/* List customer, city, and state for all customers in the Customer table whose address is Florida, Texas, California, or Hawaii.
   List the customers alphabetically by state and alphabetically by customer within each state.
   CUSTOMER               CITY            STATE
   IMPRESSIONS            SACRAMENTO      CA
   CONTEMPORARY CASUALS   GAINESVILLE     FL
   FLANIGAN FURNITURE     FT WALTON BEACH FL
   VALUE FURNITURE        PLANO           TX*/
SELECT C.CustomerName, C.CustomerCity, C.CustomerState
FROM Customer C
WHERE C.CustomerState = 'FL' OR C.CustomerState = 'TX' OR C.CustomerState = 'CA' OR C.CustomerState = 'HI'
ORDER BY C.CustomerState, C.CustomerName
```

All Rows Fetched: 4 in 0.092 seconds

CUSTOMERNAME	CUSTOMERCITY	CUSTOMERSTATE
Impressions	Sacramento	CA
Contemporary Casuals	Gainesville	FL
Flanigan Furniture	Ft Walton Beach	FL
Value Furnitures	Plano	TX

10. (3 points)

Count the number of customers with addresses in each state to which we ship.



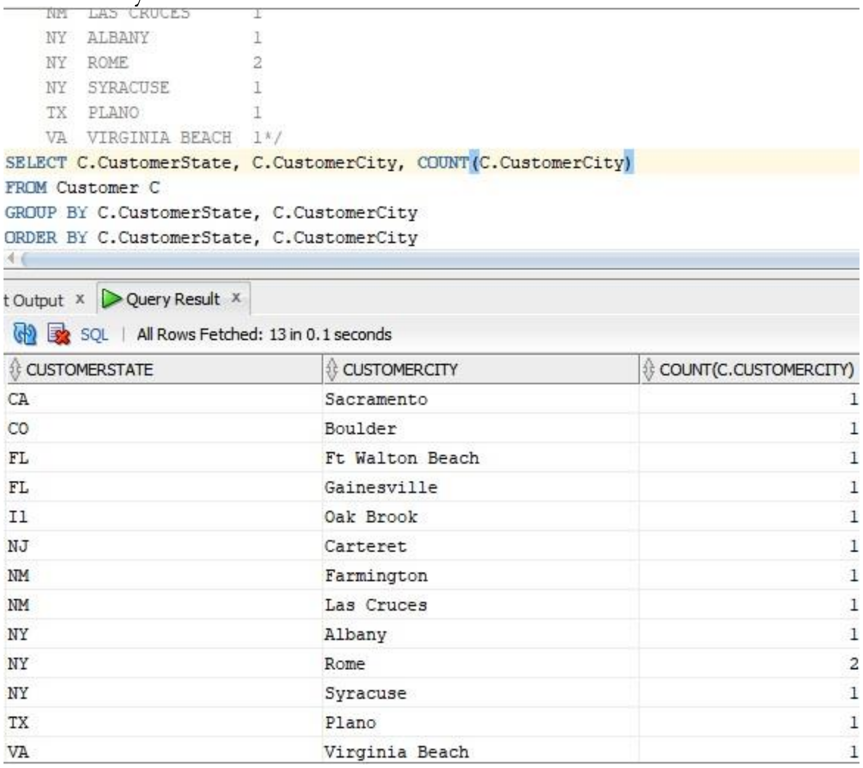
```
/* Count the number of customers with addresses in each state to which we ship.
    STATE
    FL  2
    TX  1
    NY  4
    NJ  1
    CA  1
    CO  1
    NM  2
    IL  1
    VA  1   */
SELECT C.CustomerState, COUNT(*)
FROM Customer C
GROUP BY C.CustomerState;
```

All Rows Fetched: 9 in 0.08 seconds

CUSTOMERSTATE	COUNT(*)
NJ	1
NY	4
CO	1
Il	1
FL	2
CA	1
VA	1
NM	2
TX	1

11. (3 points)

Count the number of customers with addresses in each city to which we ship. List the cities by state.



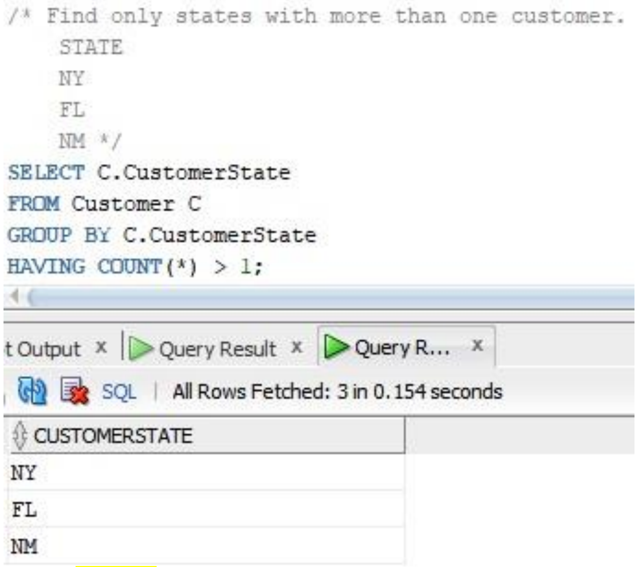
```
    NM  LAS CRUCES      1
    NY  ALBANY          1
    NY  ROME            2
    NY  SYRACUSE        1
    TX  PLANO           1
    VA  VIRGINIA BEACH  1*/
SELECT C.CustomerState, C.CustomerCity, COUNT(C.CustomerCity)
FROM Customer C
GROUP BY C.CustomerState, C.CustomerCity
ORDER BY C.CustomerState, C.CustomerCity
```

All Rows Fetched: 13 in 0.1 seconds

CUSTOMERSTATE	CUSTOMERCITY	COUNT(C.CUSTOMERCITY)
CA	Sacramento	1
CO	Boulder	1
FL	Ft Walton Beach	1
FL	Gainesville	1
Il	Oak Brook	1
NJ	Carteret	1
NM	Farmington	1
NM	Las Cruces	1
NY	Albany	1
NY	Rome	2
NY	Syracuse	1
TX	Plano	1
VA	Virginia Beach	1

12. (3 points)

Find only states with more than one customer.



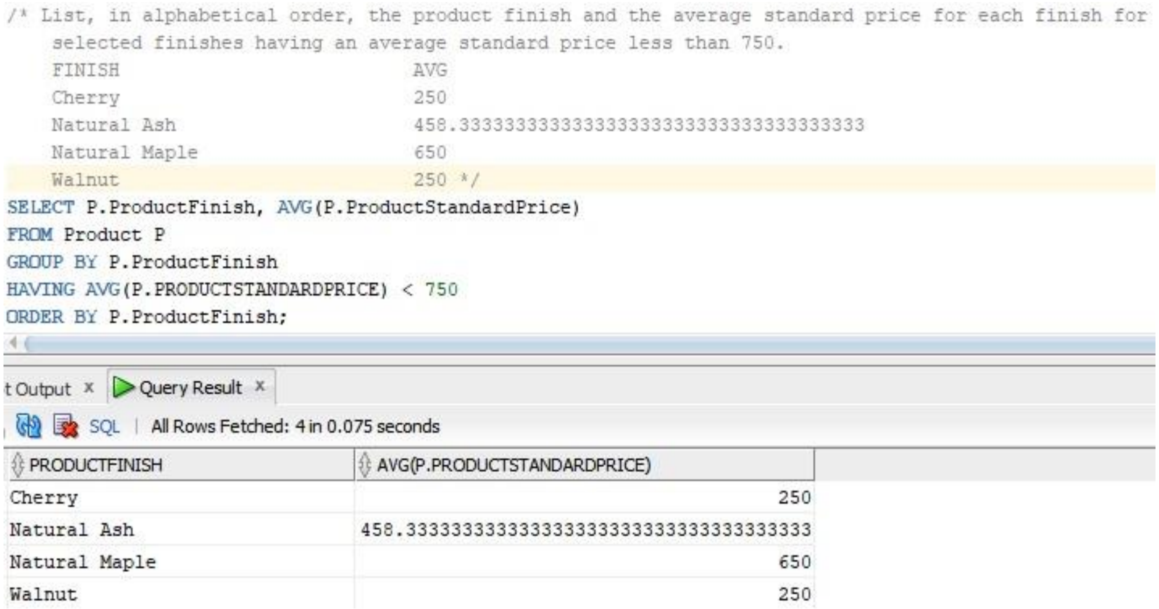
```
/* Find only states with more than one customer.
    STATE
    NY
    FL
    NM */
SELECT C.CustomerState
FROM Customer C
GROUP BY C.CustomerState
HAVING COUNT(*) > 1;
```

All Rows Fetched: 3 in 0.154 seconds

CUSTOMERSTATE
NY
FL
NM

13. (3 points)

List, in alphabetical order, the product finish and the average standard price for each finish for selected finishes having an average standard price less than 750.



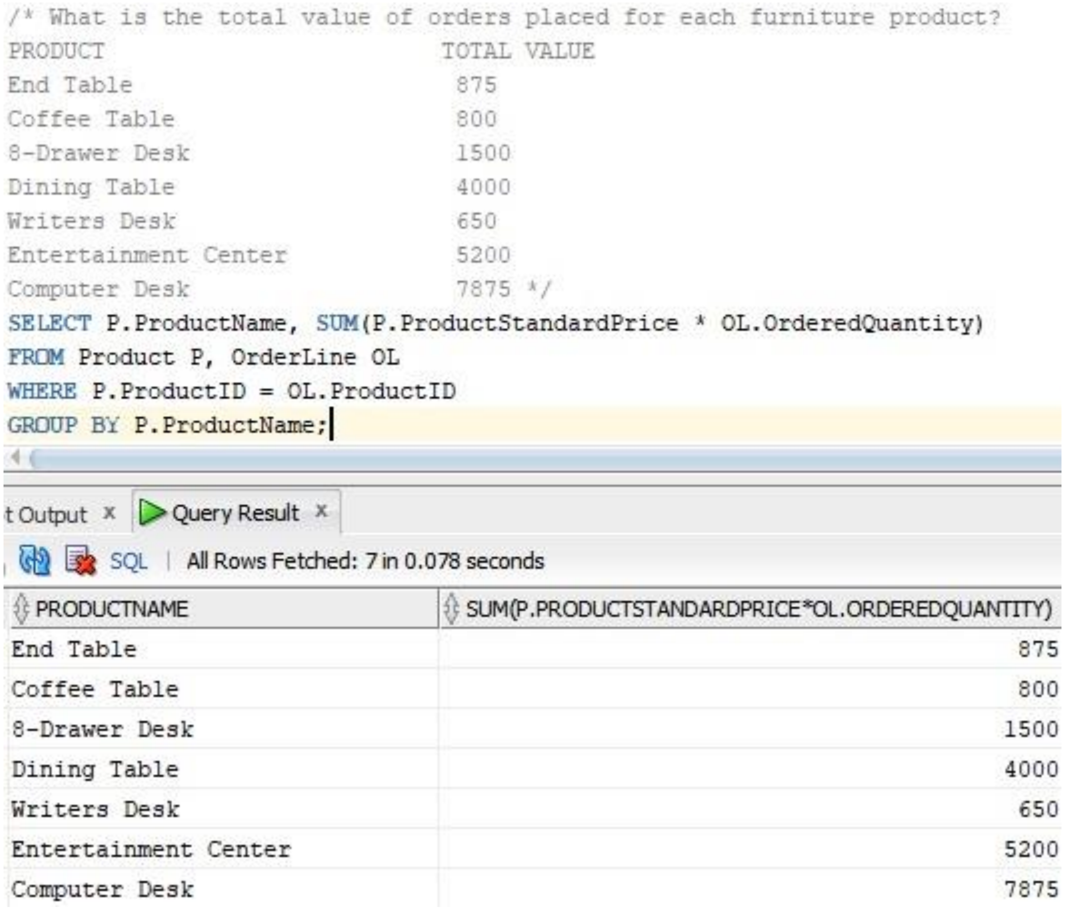
```
/* List, in alphabetical order, the product finish and the average standard price for each finish for
   selected finishes having an average standard price less than 750.
   FINISH                          AVG
   Cherry                          250
   Natural Ash                     458.3333333333333333333333333333333333333
   Natural Maple                   650
   Walnut                          250 */
SELECT P.ProductFinish, AVG(P.ProductStandardPrice)
FROM Product P
GROUP BY P.ProductFinish
HAVING AVG(P.PRODUCTSTANDARDPRICE) < 750
ORDER BY P.ProductFinish;
```

All Rows Fetched: 4 in 0.075 seconds

PRODUCTFINISH	AVG(P.PRODUCTSTANDARDPRICE)
Cherry	250
Natural Ash	458.3333333333333333333333333333333333333
Natural Maple	650
Walnut	250

14. (3 points)

What is the total value of orders placed for each furniture product?



```
/* What is the total value of orders placed for each furniture product?
PRODUCT                        TOTAL VALUE
End Table                       875
Coffee Table                    800
8-Drawer Desk                   1500
Dining Table                    4000
Writers Desk                    650
Entertainment Center            5200
Computer Desk                   7875 */
SELECT P.ProductName, SUM(P.ProductStandardPrice * OL.OrderedQuantity)
FROM Product P, OrderLine OL
WHERE P.ProductID = OL.ProductID
GROUP BY P.ProductName;
```

All Rows Fetched: 7 in 0.078 seconds

PRODUCTNAME	SUM(P.PRODUCTSTANDARDPRICE*OL.ORDEREDQUANTITY)
End Table	875
Coffee Table	800
8-Drawer Desk	1500
Dining Table	4000
Writers Desk	650
Entertainment Center	5200
Computer Desk	7875