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CSCI 3287  
Homework 3  
October 6, 2019

**Question 1:**

**Query:**

```
SELECT city
      FROM classicmodels.offices
     ORDER BY city ASC;
```

**Result:**

```
'Boston'
'London'
'NYC'
'Paris'
'San Francisco'
'Sydney'
'Tokyo'
```

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**Question 2:**

**Query:**

```
SELECT employeeNumber, lastName, firstName, extension
      FROM classicmodels.employees
     WHERE officeCode = 4;
```

**Result:**

```
'1102', 'Bondur', 'Gerard', 'x5408'
'1337', 'Bondur', 'Loui', 'x6493'
'1370', 'Hernandez', 'Gerard', 'x2028'
'1401', 'Castillo', 'Pamela', 'x2759'
'1702', 'Gerard', 'Martin', 'x2312'
```

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### Question 3:

#### Query:

```
SELECT productCode, productName, productVendor, quantityInStock, productLine
FROM classicmodels.products
WHERE (quantityInStock > 99 AND quantityInStock < 1001);
```

#### Result:

```
'S18_2248', '1911 Ford Town Car', 'Motor City Art Classics', '540', 'Vintage Cars'
'S18_2581', 'P-51-D Mustang', 'Gearbox Collectibles', '992', 'Planes'
'S18_2795', '1928 Mercedes-Benz SSK', 'Gearbox Collectibles', '548', 'Vintage Cars'
'S32_1374', '1997 BMW F650 ST', 'Exoto Designs', '178', 'Motorcycles'
'S32_3522', '1996 Peterbilt 379 Stake Bed with Outrigger', 'Red Start Diecast', '814',
'Trucks and Buses'
'S32_4289', '1928 Ford Phaeton Deluxe', 'Highway 66 Mini Classics', '136', 'Vintage Cars'
'S50_4713', '2002 Yamaha YZR M1', 'Autoart Studio Design', '600', 'Motorcycles'
'S700_1938', 'The Mayflower', 'Studio M Art Models', '737', 'Ships'
'S700_3167', 'F/A 18 Hornet 1/72', 'Motor City Art Classics', '551', 'Planes'
'S72_3212', 'Pont Yacht', 'Unimax Art Galleries', '414', 'Ships'
```

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### Question 4:

#### Query:

```
SELECT productCode, productName, productVendor, buyPrice, MSRP
FROM classicmodels.products
WHERE MSRP = (
    SELECT MIN(MSRP)
    FROM classicmodels.products);
```

#### Result:

```
'S24_1937', '1939 Chevrolet Deluxe Coupe', 'Motor City Art Classics', '22.57', '33.19'
```

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**Question 5:****Query:**

```
SELECT productName, (MSRP - buyPrice) as profit
FROM classicmodels.products
ORDER BY profit DESC
limit 1;
```

**Result:**

```
'1952 Alpine Renault 1300', '115.72'
```

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**Question 6:****Query:**

```
SELECT country, COUNT(*) as customers
FROM classicmodels.customers
GROUP BY country
HAVING COUNT(*) > 10
ORDER BY customers DESC;
```

**Result:**

```
'USA', '36'
'Germany', '13'
'France', '12'
```

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**Question 7:****Query:**

```
SELECT productName, O.productCode, COUNT(*) AS OrderCount
FROM classicmodels.products P JOIN classicmodels.orderdetails O
ON P.productCode = O.productCode
GROUP BY productCode
ORDER BY OrderCount DESC
limit 1;
```

**Result:**

```
'1992 Ferrari 360 Spider red', 'S18_3232', '53'
```

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**Question 8:****Query:**

```
SELECT employeeNumber, CONCAT(firstName, ' ', lastName) AS name
FROM classicmodels.employees
WHERE reportsTo = 1002 OR reportsTo = 1088;
```

**Result:**

```
'1056', 'Mary Patterson'
'1076', 'Jeff Firrelli'
'1611', 'Andy Fixter'
'1612', 'Peter Marsh'
'1619', 'Tom King'
```

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**Question 9:****Query:**

```
SELECT employeeNumber, lastName, firstName
FROM classicmodels.employees
WHERE employeeNumber IS NOT NULL AND reportsTo IS NULL;
```

**Result:**

```
'1002', 'Murphy', 'Diane'
```

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**Question 10:****Query:**

```
SELECT productName
FROM classicmodels.products
WHERE productName LIKE '%197%' AND productLine = 'Classic Cars';
```

**Result:**

```
'1972 Alfa Romeo GTA'
'1970 Plymouth Hemi Cuda'
'1976 Ford Gran Torino'
'1970 Triumph Spitfire'
'1970 Chevy Chevelle SS 454'
'1970 Dodge Coronet'
'1971 Alpine Renault 1600s'
```

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**Question 11:****Query:**

```
SELECT MONTHNAME(orderDate) as 'Month (2005)', COUNT(D.orderNumber) as 'Total
Orders'
FROM classicmodels.orders O, classicmodels.orderdetails D,
classicmodels.products P
WHERE O.orderNumber = D.orderNumber AND D.productCode = P.productCode
      AND P.productLine = 'Classic Cars'
      AND EXTRACT(Year FROM O.orderDate) = 2005
GROUP BY D.orderNumber
ORDER BY COUNT(D.orderNumber) DESC
LIMIT 1;
```

**Result:**

'May', '14'

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**Question 12:****Query:**

```
SELECT DISTINCT lastName, firstName, employeeNumber
FROM classicmodels.employees E LEFT OUTER JOIN classicmodels.customers C
ON E.employeeNumber = C.salesRepEmployeeNumber
WHERE E.jobTitle = 'Sales Rep' AND
      C.salesRepEmployeeNumber IS NULL;
```

**Result:**

'King', 'Tom', '1619'  
'Kato', 'Yoshimi', '1625'

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**Question 13:****Query:**

```
SELECT DISTINCT customerName, C.customerNumber
FROM classicmodels.customers C LEFT OUTER JOIN classicmodels.orders O
ON C.customerNumber = O.customerNumber
WHERE C.country = 'Germany'
AND O.customerNumber IS NULL;
```

**Result:**

```
'Natürlich Autos', '223'
'Messner Shopping Network', '247'
'Franken Gifts, Co', '273'
'Der Hund Imports', '307'
'Cramer Spezialitäten, Ltd', '335'
'Kommission Auto', '361'
'Stuttgart Collectable Exchange', '409'
'Feuer Online Stores, Inc', '443'
'Warburg Exchange', '459'
'Mit Vergnügen & Co.', '477'
```

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**Question 14:****Query:**

```
SELECT customerName, SUM(D.quantityOrdered) as 'totalQuantity'
FROM classicmodels.customers C, classicmodels.orders O, classicmodels.orderdetails D
WHERE C.customerNumber = O.customerNumber AND O.orderNumber =
D.orderNumber
GROUP BY customerName
HAVING totalQuantity > 1700
ORDER BY totalQuantity DESC;
```

**Result:**

```
'Euro+ Shopping Channel', '9327'
'Mini Gifts Distributors Ltd.', '6366'
'Australian Collectors, Co.', '1926'
'La Rochelle Gifts', '1832'
'AV Stores, Co.', '1778'
'Muscle Machine Inc', '1775'
```

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**Question 15:**

**Query:**

```
CREATE TABLE TopCustomers
(
    CustomerNumber Integer NOT NULL,
    ContactDate Date NOT NULL,
    OrderTotal Decimal(9,2) NOT NULL,
    CONSTRAINT CustomerNumber_PK PRIMARY KEY (CustomerNumber)
);
```

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**Question 16:**

**Query:**

```
INSERT INTO TopCustomers (CustomerNumber, ContactDate, OrderTotal)
VALUES (101, '2019-10-10', 140000),
(102, '2019-10-10', 150000),
(103, '2019-10-10', 130000),
(104, '2019-10-10', 120000),
(105, '2019-10-10', 170000),
(106, '2019-10-10', 160000),
(107, '2019-10-10', 150000),
(108, '2019-10-10', 120000),
(109, '2019-10-10', 110000),
(110, '2019-10-10', 100000);

SELECT * FROM TopCustomers
WHERE OrderTotal > 140000;
```

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**Question 17:****Query:**

```
SELECT * FROM TopCustomers  
WHERE OrderTotal > 140000;
```

**Result:**

```
'105','2019-10-10','170000.00'  
'106','2019-10-10','160000.00'  
'102','2019-10-10','150000.00'  
'107','2019-10-10','150000.00'  
'101','2019-10-10','140000.00'  
'103','2019-10-10','130000.00'  
'104','2019-10-10','120000.00'  
'108','2019-10-10','120000.00'  
'109','2019-10-10','110000.00'  
'110','2019-10-10','100000.00'
```

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**Question 18:****Query:**

```
ALTER TABLE TopCustomers  
ADD OrderCount INTEGER NOT NULL;
```

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**Question 19:****Query:**

```
UPDATE TopCustomers  
SET OrderCount = FLOOR(RAND() * 18);
```

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**Question 20:****Query:**

```
SELECT * FROM TopCustomers  
ORDER BY OrderCount DESC;
```

**Result:**

```
'103','2019-10-10','130000.00','17'  
'106','2019-10-10','160000.00','16'  
'101','2019-10-10','140000.00','15'  
'104','2019-10-10','120000.00','14'  
'102','2019-10-10','150000.00','12'  
'107','2019-10-10','150000.00','7'  
'110','2019-10-10','100000.00','6'  
'108','2019-10-10','120000.00','4'  
'105','2019-10-10','170000.00','1'  
'109','2019-10-10','110000.00','0'
```

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**Question 21:****Query:**

```
DROP TABLE TopCustomers;
```