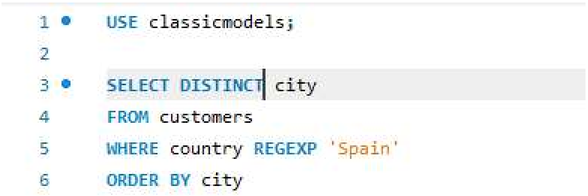
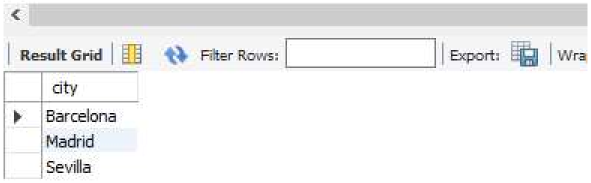
1)



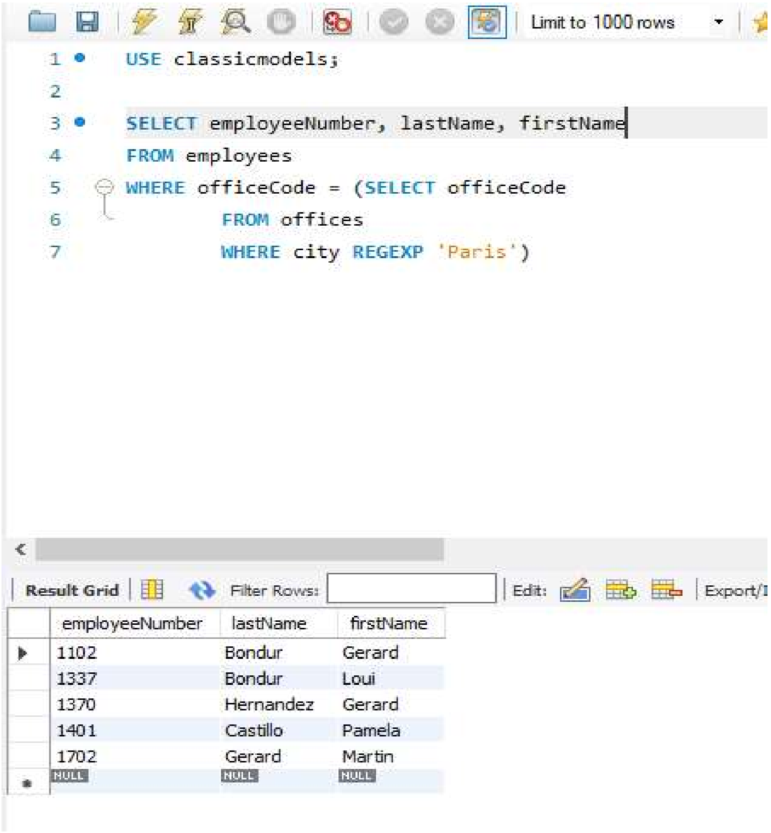
```
USE classicmodels;

SELECT DISTINCT city
FROM customers
WHERE country REGEXP 'Spain'
ORDER BY city
```



city
Barcelona
Madrid
Sevilla

2)

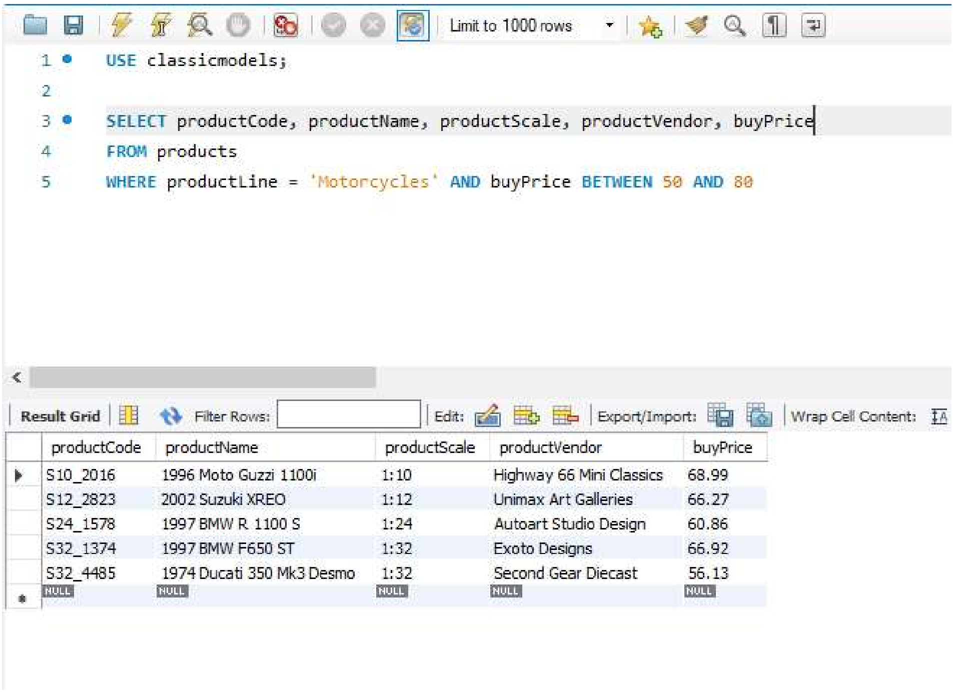


```
USE classicmodels;

SELECT employeeNumber, lastName, firstName
FROM employees
WHERE officeCode = (SELECT officeCode
        FROM offices
        WHERE city REGEXP 'Paris')
```

employeeNumber	lastName	firstName
1102	Bondur	Gerard
1337	Bondur	Loui
1370	Hernandez	Gerard
1401	Castillo	Pamela
1702	Gerard	Martin
NULL	NULL	NULL

3)

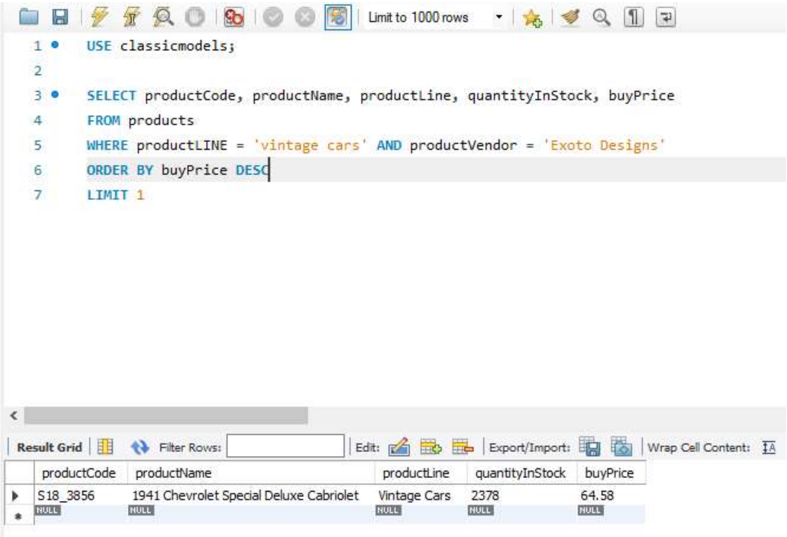


```sql
USE classicmodels;

SELECT productCode, productName, productScale, productVendor, buyPrice
FROM products
WHERE productLine = 'Motorcycles' AND buyPrice BETWEEN 50 AND 80
```

productCode	productName	productScale	productVendor	buyPrice
S10_2016	1996 Moto Guzzi 1100i	1:10	Highway 66 Mini Classics	68.99
S12_2823	2002 Suzuki XREO	1:12	Unimax Art Galleries	66.27
S24_1578	1997 BMW R 1100 S	1:24	Autoart Studio Design	60.86
S32_1374	1997 BMW F650 ST	1:32	Exoto Designs	66.92
S32_4485	1974 Ducati 350 Mk3 Desmo	1:32	Second Gear Diecast	56.13
NULL	NULL	NULL	NULL	NULL

4)

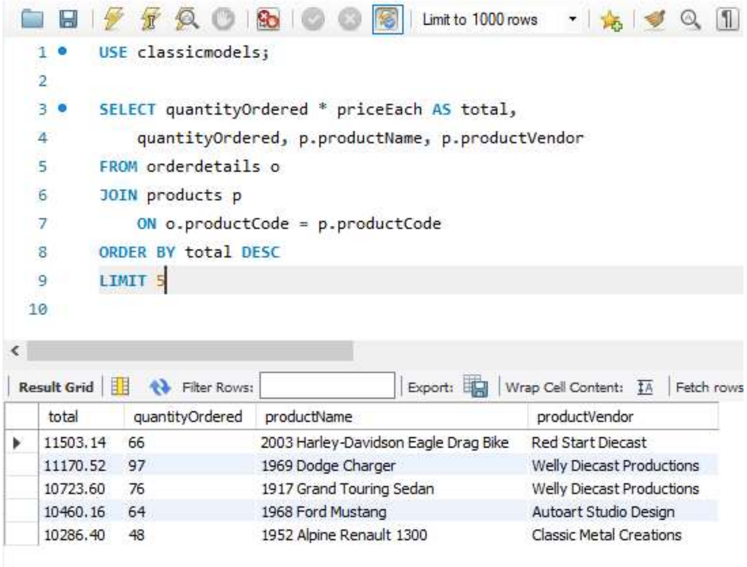


```sql
USE classicmodels;

SELECT productCode, productName, productLine, quantityInStock, buyPrice
FROM products
WHERE productLINE = 'vintage cars' AND productVendor = 'Exoto Designs'
ORDER BY buyPrice DESC
LIMIT 1
```

productCode	productName	productLine	quantityInStock	buyPrice
S18_3856	1941 Chevrolet Special Deluxe Cabriolet	Vintage Cars	2378	64.58
NULL	NULL	NULL	NULL	NULL

5)

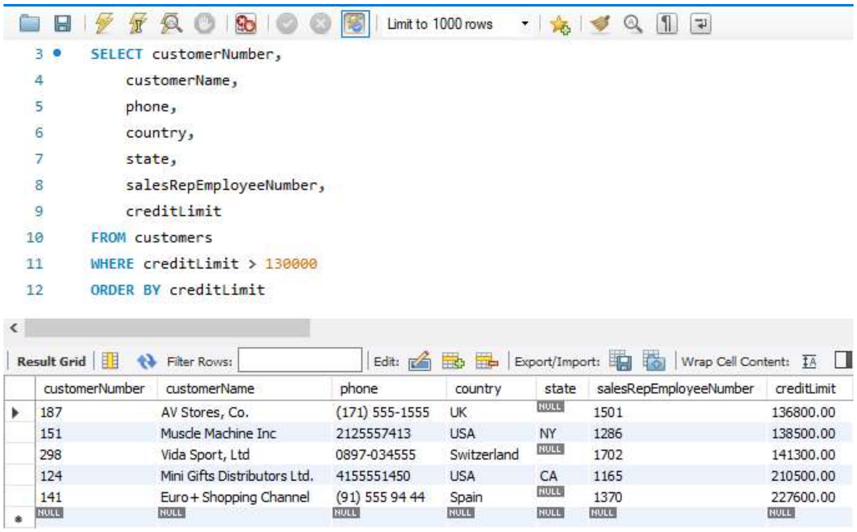


```sql
USE classicmodels;

SELECT quantityOrdered * priceEach AS total,
    quantityOrdered, p.productName, p.productVendor
FROM orderdetails o
JOIN products p
    ON o.productCode = p.productCode
ORDER BY total DESC
LIMIT 5
```

total	quantityOrdered	productName	productVendor
11503.14	66	2003 Harley-Davidson Eagle Drag Bike	Red Start Diecast
11170.52	97	1969 Dodge Charger	Welly Diecast Productions
10723.60	76	1917 Grand Touring Sedan	Welly Diecast Productions
10460.16	64	1968 Ford Mustang	Autoart Studio Design
10286.40	48	1952 Alpine Renault 1300	Classic Metal Creations

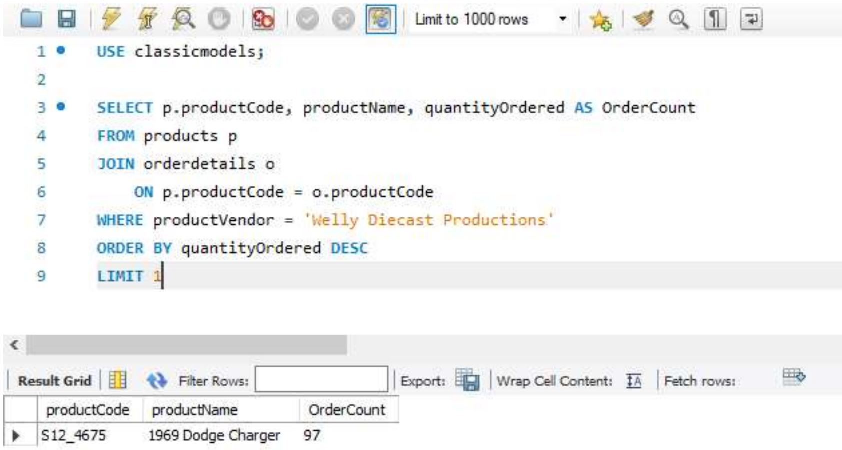
6)



```sql
SELECT customerNumber,
    customerName,
    phone,
    country,
    state,
    salesRepEmployeeNumber,
    creditLimit
FROM customers
WHERE creditLimit > 130000
ORDER BY creditLimit
```

customerNumber	customerName	phone	country	state	salesRepEmployeeNumber	creditLimit
187	AV Stores, Co.	(171) 555-1555	UK	NULL	1501	136800.00
151	Muscle Machine Inc	2125557413	USA	NY	1286	138500.00
298	Vida Sport, Ltd	0897-034555	Switzerland	NULL	1702	141300.00
124	Mini Gifts Distributors Ltd.	4155551450	USA	CA	1165	210500.00
141	Euro+ Shopping Channel	(91) 555 94 44	Spain	NULL	1370	227600.00
NULL	NULL	NULL	NULL	NULL	NULL	NULL

7)

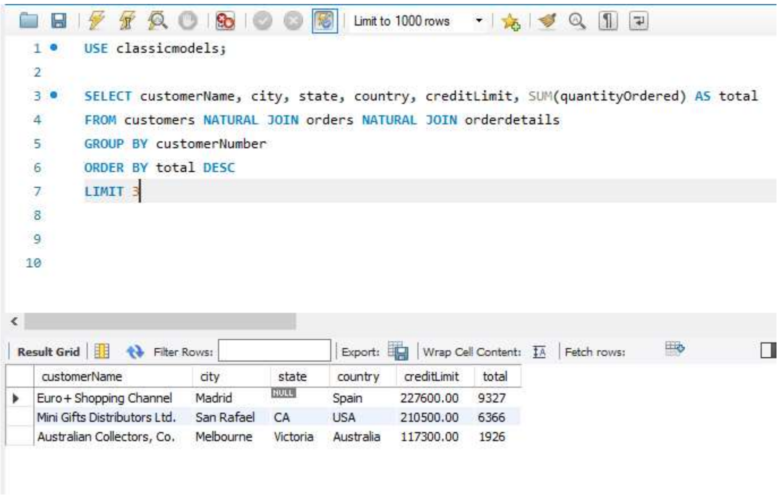


```
USE classicmodels;

SELECT p.productCode, productName, quantityOrdered AS OrderCount
FROM products p
JOIN orderdetails o
    ON p.productCode = o.productCode
WHERE productVendor = 'Welly Diecast Productions'
ORDER BY quantityOrdered DESC
LIMIT 1
```

productCode	productName	OrderCount
S12_4675	1969 Dodge Charger	97

8)

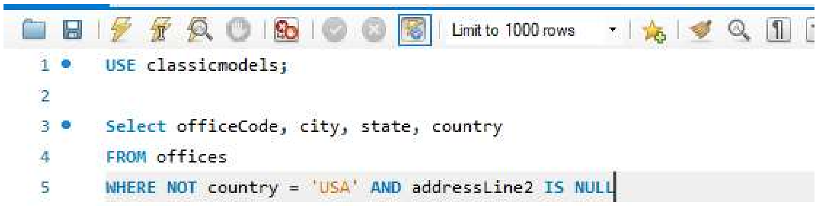


```
USE classicmodels;

SELECT customerName, city, state, country, creditLimit, SUM(quantityOrdered) AS total
FROM customers NATURAL JOIN orders NATURAL JOIN orderdetails
GROUP BY customerNumber
ORDER BY total DESC
LIMIT 3
```

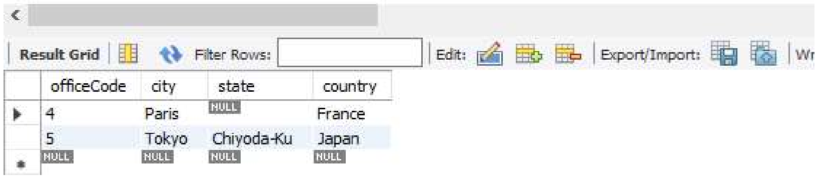
customerName	city	state	country	creditLimit	total
Euro+ Shopping Channel	Madrid	NULL	Spain	227600.00	9327
Mini Gifts Distributors Ltd.	San Rafael	CA	USA	210500.00	6366
Australian Collectors, Co.	Melbourne	Victoria	Australia	117300.00	1926

9)



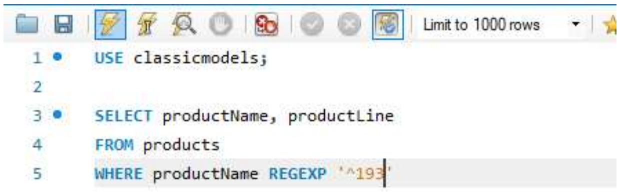
```sql
USE classicmodels;

Select officeCode, city, state, country
FROM offices
WHERE NOT country = 'USA' AND addressLine2 IS NULL
```



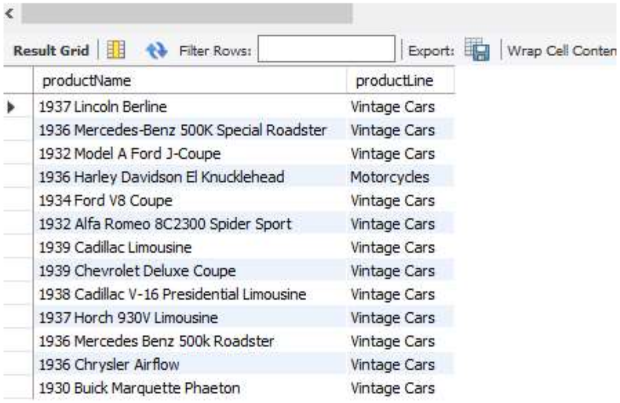
officeCode	city	state	country
4	Paris	NULL	France
5	Tokyo	Chiyoda-Ku	Japan
NULL	NULL	NULL	NULL

10)



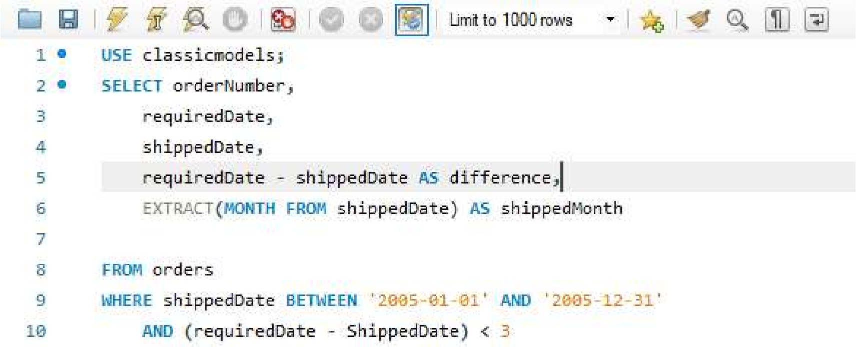
```sql
USE classicmodels;

SELECT productName, productLine
FROM products
WHERE productName REGEXP '^193'
```



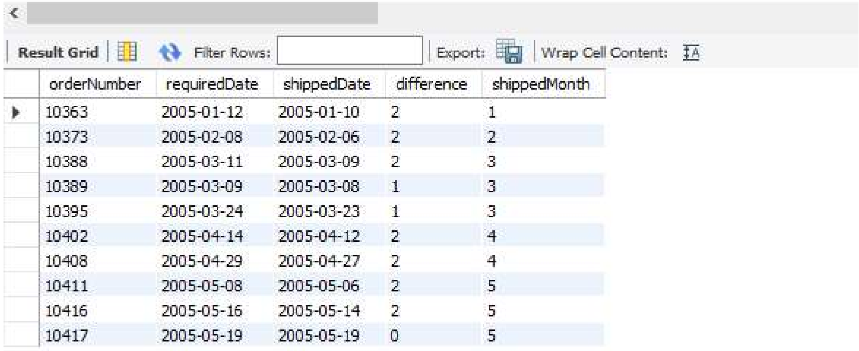
productName	productLine
1937 Lincoln Berline	Vintage Cars
1936 Mercedes-Benz 500K Special Roadster	Vintage Cars
1932 Model A Ford J-Coupe	Vintage Cars
1936 Harley Davidson El Knucklehead	Motorcycles
1934 Ford V8 Coupe	Vintage Cars
1932 Alfa Romeo 8C2300 Spider Sport	Vintage Cars
1939 Cadillac Limousine	Vintage Cars
1939 Chevrolet Deluxe Coupe	Vintage Cars
1938 Cadillac V-16 Presidential Limousine	Vintage Cars
1937 Horch 930V Limousine	Vintage Cars
1936 Mercedes Benz 500k Roadster	Vintage Cars
1936 Chrysler Airflow	Vintage Cars
1930 Buick Marquette Phaeton	Vintage Cars

11)



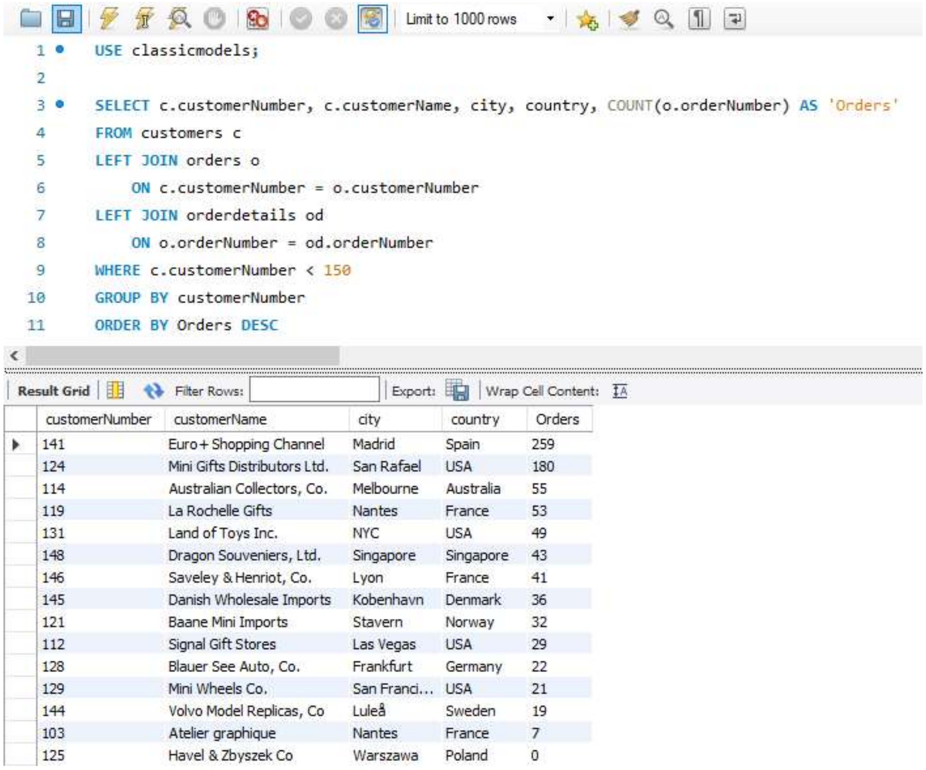
```sql
USE classicmodels;
SELECT orderNumber,
    requiredDate,
    shippedDate,
    requiredDate - shippedDate AS difference,
    EXTRACT(MONTH FROM shippedDate) AS shippedMonth

FROM orders
WHERE shippedDate BETWEEN '2005-01-01' AND '2005-12-31'
    AND (requiredDate - ShippedDate) < 3
```



orderNumber	requiredDate	shippedDate	difference	shippedMonth
10363	2005-01-12	2005-01-10	2	1
10373	2005-02-08	2005-02-06	2	2
10388	2005-03-11	2005-03-09	2	3
10389	2005-03-09	2005-03-08	1	3
10395	2005-03-24	2005-03-23	1	3
10402	2005-04-14	2005-04-12	2	4
10408	2005-04-29	2005-04-27	2	4
10411	2005-05-08	2005-05-06	2	5
10416	2005-05-16	2005-05-14	2	5
10417	2005-05-19	2005-05-19	0	5

12)

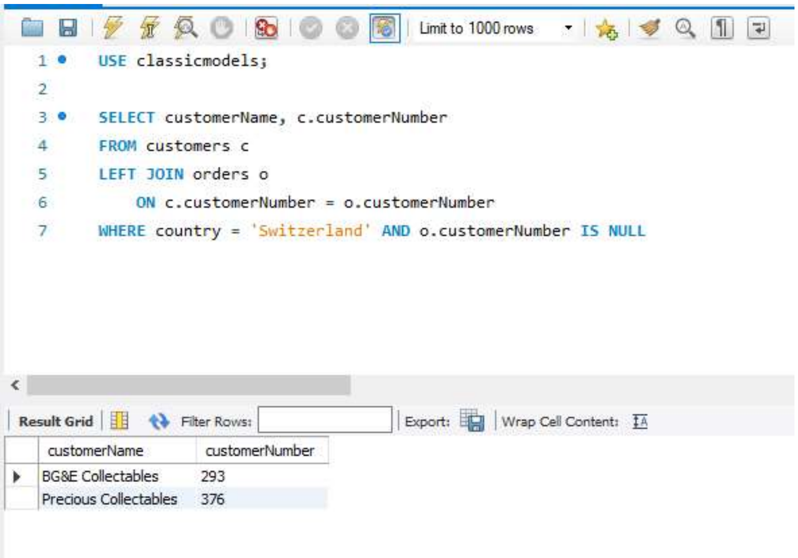


```sql
USE classicmodels;

SELECT c.customerNumber, c.customerName, city, country, COUNT(o.orderNumber) AS 'Orders'
FROM customers c
LEFT JOIN orders o
    ON c.customerNumber = o.customerNumber
LEFT JOIN orderdetails od
    ON o.orderNumber = od.orderNumber
WHERE c.customerNumber < 150
GROUP BY customerNumber
ORDER BY Orders DESC
```

customerNumber	customerName	city	country	Orders
141	Euro+ Shopping Channel	Madrid	Spain	259
124	Mini Gifts Distributors Ltd.	San Rafael	USA	180
114	Australian Collectors, Co.	Melbourne	Australia	55
119	La Rochelle Gifts	Nantes	France	53
131	Land of Toys Inc.	NYC	USA	49
148	Dragon Souveniers, Ltd.	Singapore	Singapore	43
146	Saveley & Henriot, Co.	Lyon	France	41
145	Danish Wholesale Imports	Kobenhavn	Denmark	36
121	Baane Mini Imports	Stavern	Norway	32
112	Signal Gift Stores	Las Vegas	USA	29
128	Blauer See Auto, Co.	Frankfurt	Germany	22
129	Mini Wheels Co.	San Franci...	USA	21
144	Volvo Model Replicas, Co	Luleå	Sweden	19
103	Atelier graphique	Nantes	France	7
125	Havel & Zbyszek Co	Warszawa	Poland	0

13)

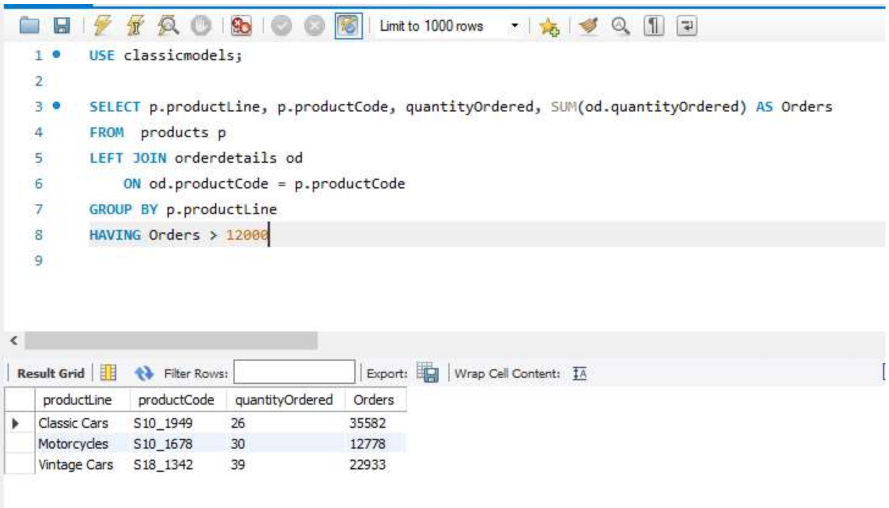


```
USE classicmodels;

SELECT customerName, c.customerNumber
FROM customers c
LEFT JOIN orders o
    ON c.customerNumber = o.customerNumber
WHERE country = 'Switzerland' AND o.customerNumber IS NULL
```

customerName	customerNumber
BG&E Collectables	293
Precious Collectables	376

14)



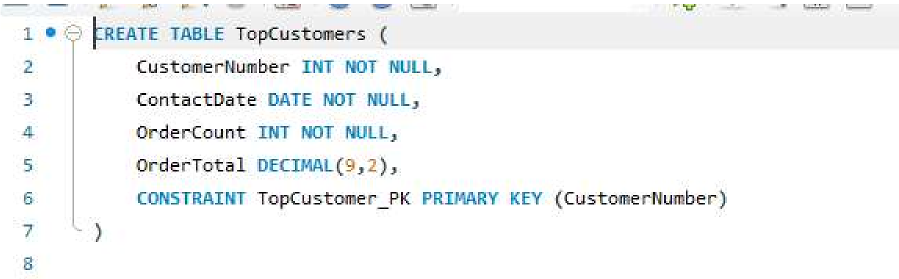
```
USE classicmodels;

SELECT p.productLine, p.productCode, quantityOrdered, SUM(od.quantityOrdered) AS Orders
FROM  products p
LEFT JOIN orderdetails od
    ON od.productCode = p.productCode
GROUP BY p.productLine
HAVING Orders > 12000

```

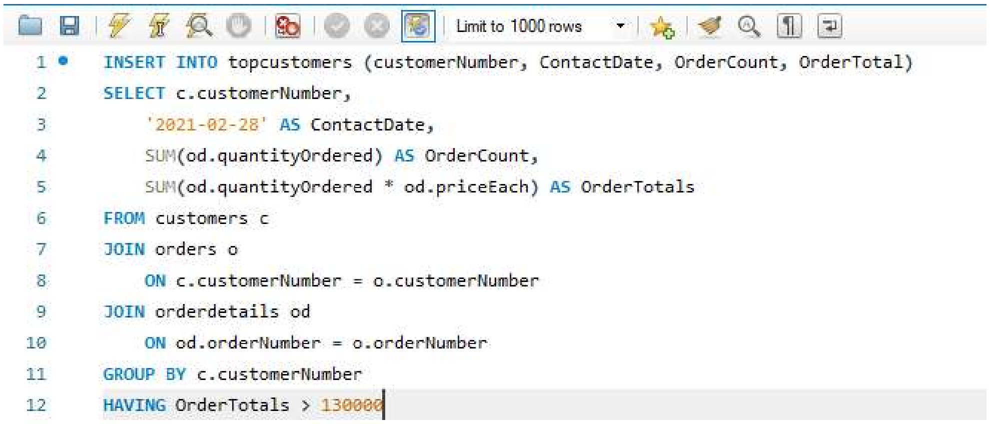
productLine	productCode	quantityOrdered	Orders
Classic Cars	S10_1949	26	35582
Motorcycles	S10_1678	30	12778
Vintage Cars	S18_1342	39	22933

15)



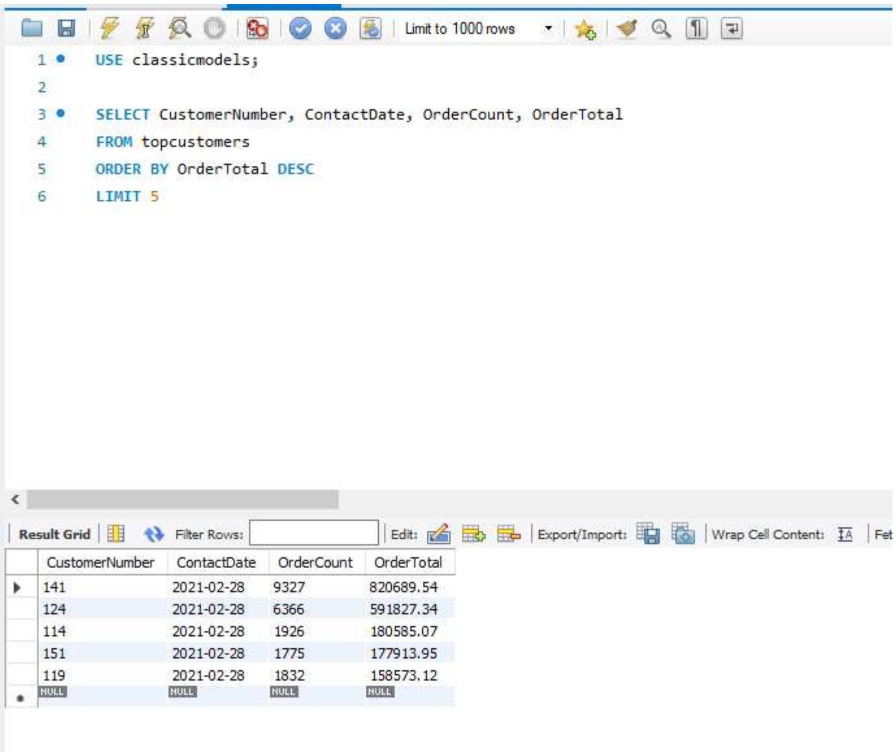
```
CREATE TABLE TopCustomers (
    CustomerNumber INT NOT NULL,
    ContactDate DATE NOT NULL,
    OrderCount INT NOT NULL,
    OrderTotal DECIMAL(9,2),
    CONSTRAINT TopCustomer_PK PRIMARY KEY (CustomerNumber)
)
```

16)



```
INSERT INTO topcustomers (customerNumber, ContactDate, OrderCount, OrderTotal)
SELECT c.customerNumber,
    '2021-02-28' AS ContactDate,
    SUM(od.quantityOrdered) AS OrderCount,
    SUM(od.quantityOrdered * od.priceEach) AS OrderTotals
FROM customers c
JOIN orders o
    ON c.customerNumber = o.customerNumber
JOIN orderdetails od
    ON od.orderNumber = o.orderNumber
GROUP BY c.customerNumber
HAVING OrderTotals > 130000
```

17)

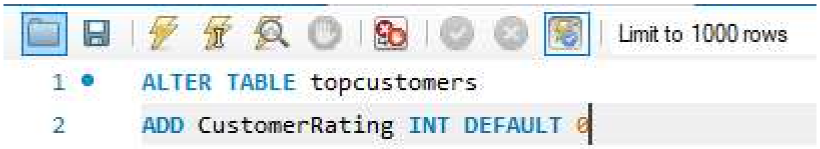


```sql
USE classicmodels;

SELECT CustomerNumber, ContactDate, OrderCount, OrderTotal
FROM topcustomers
ORDER BY OrderTotal DESC
LIMIT 5
```

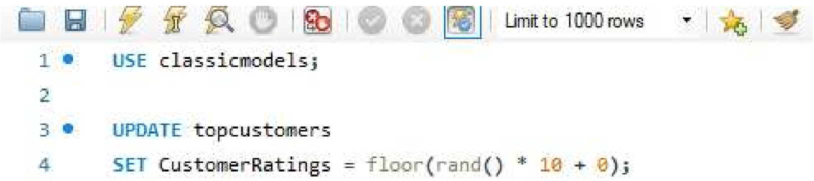
CustomerNumber	ContactDate	OrderCount	OrderTotal
141	2021-02-28	9327	820689.54
124	2021-02-28	6366	591827.34
114	2021-02-28	1926	180585.07
151	2021-02-28	1775	177913.95
119	2021-02-28	1832	158573.12
NULL	NULL	NULL	NULL

18)



```sql
ALTER TABLE topcustomers
ADD CustomerRating INT DEFAULT 0
```

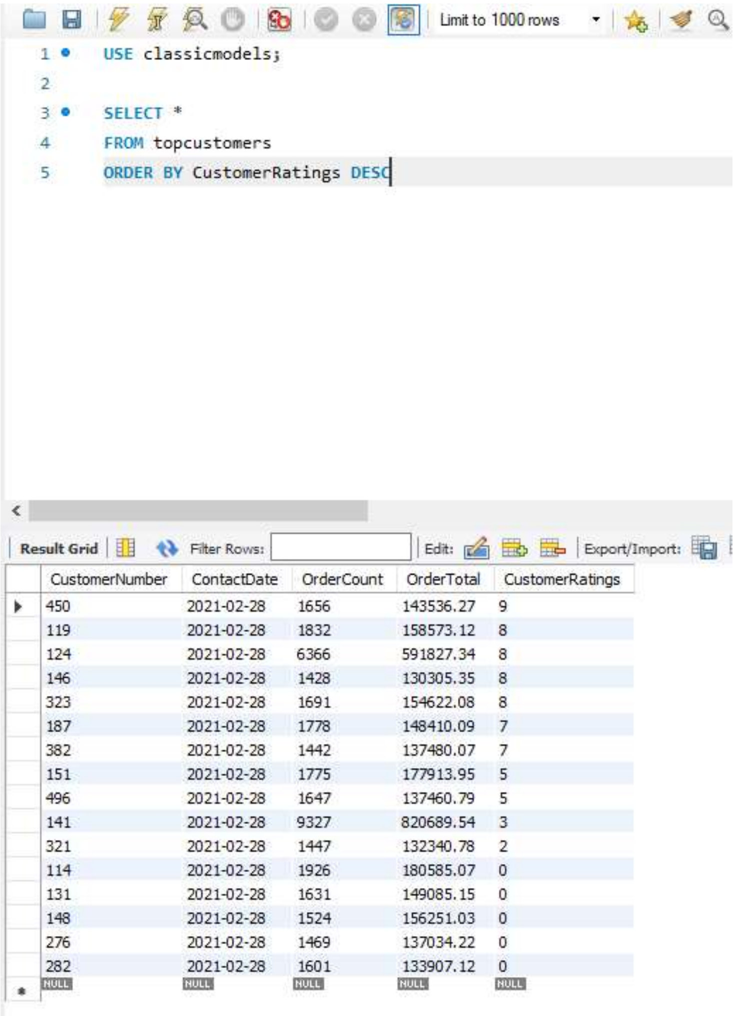
19)



```sql
USE classicmodels;

UPDATE topcustomers
SET CustomerRatings = floor(rand() * 10 + 0);
```

20)

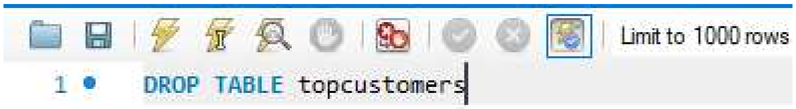


```sql
USE classicmodels;

SELECT *
FROM topcustomers
ORDER BY CustomerRatings DESC
```

CustomerNumber	ContactDate	OrderCount	OrderTotal	CustomerRatings
450	2021-02-28	1656	143536.27	9
119	2021-02-28	1832	158573.12	8
124	2021-02-28	6366	591827.34	8
146	2021-02-28	1428	130305.35	8
323	2021-02-28	1691	154622.08	8
187	2021-02-28	1778	148410.09	7
382	2021-02-28	1442	137480.07	7
151	2021-02-28	1775	177913.95	5
496	2021-02-28	1647	137460.79	5
141	2021-02-28	9327	820689.54	3
321	2021-02-28	1447	132340.78	2
114	2021-02-28	1926	180585.07	0
131	2021-02-28	1631	149085.15	0
148	2021-02-28	1524	156251.03	0
276	2021-02-28	1469	137034.22	0
282	2021-02-28	1601	133907.12	0
NULL	NULL	NULL	NULL	NULL

21)



```sql
DROP TABLE topcustomers
```