

1:

```
SELECT DISTINCT country  
FROM Customers  
ORDER BY country;
```

'Australia'
'Austria'
'Belgium'
'Canada'
'Denmark'
'Finland'
'France'
'Germany'
'Hong Kong'
'Ireland'
'Israel'
'Italy'
'Japan'
'Netherlands'
'New Zealand'
'Norway'
'Philippines'
'Poland'
'Portugal'
'Russia'
'Singapore'
'South Africa'
'Spain'
'Sweden'
'Switzerland'
'UK'
'USA'

2:

```
SELECT EmployeeNumber, LastName, FirstName, Extension  
FROM Employees E  
INNER JOIN Offices O  
On E.officeCode = O.officeCode  
AND O.city = 'Boston';
```

'1188','Firrelli','Julie','x2173'
'1216','Patterson','Steve','x4334'

3:

```
SELECT ProductCode, ProductName, ProductVendor, QuantityInStock, ProductLine
FROM Products
WHERE quantityInStock >= 100 AND quantityInStock <= 600 ;
```

```
'S18_2248','1911 Ford Town Car','Motor City Art Classics','540','Vintage Cars'
'S18_2795','1928 Mercedes-Benz SSK','Gearbox Collectibles','548','Vintage Cars'
'S32_1374','1997 BMW F650 ST','Exoto Designs','178','Motorcycles'
'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_3167','F/A 18 Hornet 1/72','Motor City Art Classics','551','Planes'
'S72_3212','Pont Yacht','Unimax Art Galleries','414','Ships'
```

4:

```
SELECT ProductCode, ProductName, ProductVendor, BuyPrice, MSRP
FROM Products
WHERE MSRP = (SELECT MAX(MSRP)
FROM Products);
```

```
'S10_1949','1952 Alpine Renault 1300','Classic Metal Creations','98.58','214.30'
```

5:

```
SELECT ProductName, (MSRP - BuyPrice) AS Profit
FROM Products
WHERE (MSRP - BuyPrice) = (SELECT MIN((MSRP - BuyPrice))
FROM Products);
```

```
'1939 Chevrolet Deluxe Coupe','10.62'
```

6:

```
SELECT Country, COUNT(*)
FROM Customers
GROUP BY Country
HAVING COUNT(*) = 2;
```

```
'Sweden','2'
'Denmark','2'
'Portugal','2'
'Japan','2'
'Ireland','2'
'Belgium','2'
'Austria','2'
```

7:

```
SELECT o.ProductCode, p.ProductName, COUNT(*) AS OrderCount
```

```

FROM OrderDetails o
JOIN Products p
ON o.ProductCode = p.ProductCode
GROUP BY ProductCode
HAVING COUNT(*) = 25;

```

```

'S18_1589','1965 Aston Martin DB5','25'
'S18_1749','1917 Grand Touring Sedan','25'
'S18_2248','1911 Ford Town Car','25'
'S18_2870','1999 Indy 500 Monte Carlo SS','25'
'S18_3685','1948 Porsche Type 356 Roadster','25'
'S18_4409','1932 Alfa Romeo 8C2300 Spider Sport','25'
'S24_1046','1970 Chevy Chevelle SS 454','25'
'S24_1628','1966 Shelby Cobra 427 S/C','25'
'S24_2766','1949 Jaguar XK 120','25'
'S24_3191','1969 Chevrolet Camaro Z28','25'
'S24_3432','2002 Chevy Corvette','25'
'S24_3969','1936 Mercedes Benz 500k Roadster','25'

```

```

8:
SELECT EmployeeNumber, CONCAT(Firstname, Lastname) AS Name
FROM Employees
WHERE ReportsTo = (SELECT EmployeeNumber
FROM Employees
WHERE firstName = 'William' AND lastName = 'Patterson')
OR ReportsTo = (SELECT EmployeeNumber
FROM Employees
WHERE firstName = 'Mary' AND lastName = 'Patterson');

```

```

'1088','WilliamPatterson'
'1102','GerardBondur'
'1143','AnthonyBow'
'1621','MamiNishi'
'1611','AndyFixter'
'1612','PeterMarsh'
'1619','TomKing'

```

```

9:
SELECT EmployeeNumber, LastName, FirstName
FROM Employees
WHERE ReportsTo is NULL;

```

```

'1002','Murphy','Diane'

```

10:

```
SELECT ProductName
FROM Products
WHERE ProductLine = 'Classic Cars'
AND ProductName LIKE '196%';
```

```
'1962 LanciaA Delta 16V'
'1968 Ford Mustang'
'1969 Corvair Monza'
'1968 Dodge Charger'
'1969 Ford Falcon'
'1969 Dodge Charger'
'1965 Aston Martin DB5'
'1969 Dodge Super Bee'
'1966 Shelby Cobra 427 S/C'
'1969 Chevrolet Camaro Z28'
'1961 Chevrolet Impala'
```

11:

```
SELECT MONTHNAME(OrderDate), COUNT(*)
FROM Orders
WHERE YEAR(OrderDate) = 2004
GROUP BY MONTHNAME(OrderDate)
HAVING COUNT(*) = (SELECT MAX(MonthCounts.c)
FROM(SELECT MONTHNAME(OrderDate) AS n, COUNT(*) AS c
FROM Orders
WHERE YEAR(OrderDate) = 2004
GROUP BY MONTHNAME(OrderDate)) AS MonthCounts);
```

```
'November','33'
```

12:

```
SELECT LastName, FirstName
FROM Employees E
LEFT OUTER JOIN Customers C
ON E.employeeNumber = C.salesRepEmployeeNumber
WHERE CustomerName is NULL
AND JobTitle='Sales Rep';
```

```
'King','Tom'
'Kato','Yoshimi'
```

13:

```
SELECT c.CustomerName
```

```
FROM Orders o
RIGHT OUTER JOIN Customers c
ON o.CustomerNumber = c.CustomerNumber
WHERE OrderNumber is NULL
AND Country = 'Switzerland';
```

```
'BG&E Collectables'
'Precious Collectables'
```

```
14:
SELECT c.CustomerName, SUM(QuantityOrdered)
FROM OrderDetails od
JOIN Orders o
ON od.OrderNumber = o.OrderNumber
JOIN Customers c
ON o.CustomerNumber = c.CustomerNumber
GROUP BY CustomerName
HAVING SUM(quantityOrdered) > 1700;
```

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

```
15:
CREATE TABLE IF NOT EXISTS TopCustomers(
CustomerNumber int NOT NULL,
ContactDate DATE NOT NULL,
OrderTotal decimal(9,2) NOT NULL default 0,
CONSTRAINT PKTopCustomers PRIMARY KEY(CustomerNumber)
);
```

```
16:
INSERT INTO TopCustomers
SELECT c.CustomerNumber, CURRENT_date(), SUM(priceEach * quantityOrdered)
FROM Customers c, Orders o, OrderDetails d
WHERE c.CustomerNumber = o.CustomerNumber
AND o.OrderNumber = d.OrderNumber
GROUP BY c.CustomerNumber
HAVING SUM(priceEach * quantityOrdered) > 150000;
```

```
17:
```

```
SELECT *  
FROM TopCustomers  
ORDER BY OrderTotal desc;
```

```
'141','2022-02-23','820689.54'  
'124','2022-02-23','591827.34'  
'114','2022-02-23','180585.07'  
'151','2022-02-23','177913.95'  
'119','2022-02-23','158573.12'  
'148','2022-02-23','156251.03'  
'323','2022-02-23','154622.08'
```

```
18:  
ALTER TABLE TopCustomers  
ADD COLUMN OrderCount int AFTER OrderTotal;
```

```
19:  
SET SQL_SAFE_UPDATES=0;  
UPDATE TopCustomers  
SET OrderCount = RAND()*(18);
```

```
20:  
SELECT *  
FROM TopCustomers  
ORDER BY OrderCount desc;
```

```
'141','2022-02-23','820689.54','15'  
'323','2022-02-23','154622.08','15'  
'151','2022-02-23','177913.95','14'  
'148','2022-02-23','156251.03','12'  
'114','2022-02-23','180585.07','10'  
'119','2022-02-23','158573.12','7'  
'124','2022-02-23','591827.34','4'
```

```
21:  
DROP TABLE IF EXISTS TopCustomers;
```