

USE classicmodels;

-- QUERY 1: Count the number of employees whose last name or first name starts
-- with the letter 'P'.

```
SELECT COUNT(*)  
FROM employees  
WHERE LOWER(firstName) LIKE 'p%' OR LOWER(lastName) LIKE 'p%';
```

COUNT(*)
5

-- QUERY 2: For how many letters of the alphabet are there more than one employee
-- whose last name starts with that letter? Hint: The substr function will be
-- useful here in a GROUP BY clause.

```
SELECT SUBSTR(UPPER(lastName),1,1) AS letter, COUNT(*) AS employeeCount  
FROM employees  
GROUP BY letter  
HAVING employeeCount > 1  
ORDER BY employeeCount DESC;
```

letter	employeeCount
B	4
P	3
F	3
M	2
J	2
T	2
K	2

-- QUERY 3: How many orders have not yet shipped?

```
SELECT COUNT(*) AS Orders_Not_Shipped  
FROM orders  
WHERE LOWER(status) = "in process";
```

Orders_Not_Shipped
6

-- QUERY 4: How many orders where shipped less than 2 days before they were required?

```

SELECT COUNT(*) AS Orders_Count
FROM orders
WHERE requiredDate-shippedDate<2;

```

Orders_Count
25

```

-- QUERY 5: For each distinct product line, what is the total dollar value
--           of orders placed?
SELECT prd_tbl.productLine, SUM(ord_tbl.priceEach*ord_tbl.quantityOrdered) AS
Total_Dollar_Value
FROM orderdetails AS ord_tbl JOIN products AS prd_tbl
    ON ord_tbl.productCode=prd_tbl.productCode
GROUP BY prd_tbl.productLine
ORDER BY Total_Dollar_Value DESC;

```

productLine	Total_Dollar_Value
Classic Cars	3853922.49
Vintage Cars	1797559.63
Motorcycles	1121426.12
Trucks and Buses	1024113.57
Planes	954637.54
Ships	663998.34
Trains	188532.92

```

-- QUERY 6: For the first three customers in alphabetal order by name, what is the
--           name of every product they have ordered?
-- SOLUTION PROCESS:
--           Step 1: Find first 3 customers sorted by name in the customers table
--           Step 2: Find all orders placed by these customers
--           Step 3: Find product codes for all these orders
--           Step 4: Find product names for all these product codes
--           Step 5: Project the customer name, product code, product name tuples
DROP TEMPORARY TABLE cust_order;
CREATE TEMPORARY TABLE cust_order (
    customerName VARCHAR(50),
    orderNumber INT(11)
);

INSERT INTO cust_order
(

```

```

SELECT cust.customerName, orders.orderNumber
FROM orders JOIN ( SELECT DISTINCT customerNumber, customerName
                    FROM customers
                    ORDER BY customerName LIMIT 3) AS cust
ON cust.customerNumber=orders.customerNumber);

```

```

SELECT * FROM cust_order;

```

```

SELECT DISTINCT cust_order.customerName, orderdetails.productCode, products.productName
FROM orderdetails JOIN cust_order
ON orderdetails.orderNumber=cust_order.orderNumber
JOIN products ON orderdetails.productCode=products.productCode;

```

customerName	productCode	productName
Alpha Cognac	S18_1129	1993 Mazda RX-7
Alpha Cognac	S18_1984	1995 Honda Civic
Alpha Cognac	S18_3232	1992 Ferrari 360 Spider red
Alpha Cognac	S10_4757	1972 Alfa Romeo GTA
Alpha Cognac	S18_1662	1980s Black Hawk Helicopter
Alpha Cognac	S18_3029	1999 Yamaha Speed Boat
Alpha Cognac	S18_3856	1941 Chevrolet Special Deluxe Cabriolet
Alpha Cognac	S24_2841	1900s Vintage Bi-Plane
Alpha Cognac	S24_3420	1937 Horch 930V Limousine
Alpha Cognac	S24_3816	1940 Ford Delivery Sedan
Alpha Cognac	S24_3949	Corsair F4U (Bird Cage)
Alpha Cognac	S700_2047	HMS Bounty
Alpha Cognac	S700_2466	America West Airlines B757-200
Alpha Cognac	S700_4002	American Airlines: MD-11S
Alpha Cognac	S72_1253	Boeing X-32A JSF
Alpha Cognac	S700_1938	The Mayflower
Alpha Cognac	S700_2610	The USS Constitution Ship
Alpha Cognac	S700_3505	The Titanic
Alpha Cognac	S700_3962	The Queen Mary
Alpha Cognac	S72_3212	Pont Yacht
Amica Models & Co.	S10_1949	1952 Alpine Renault 1300
Amica Models & Co.	S18_1097	1940 Ford Pickup Truck
Amica Models & Co.	S18_1342	1937 Lincoln Berline

Amica Models & Co.	S18_1367	1936 Mercedes-Benz 500K Special Roadster
Amica Models & Co.	S18_1749	1917 Grand Touring Sedan
Amica Models & Co.	S18_2248	1911 Ford Town Car
Amica Models & Co.	S18_2325	1932 Model A Ford J-Coupe
Amica Models & Co.	S18_2795	1928 Mercedes-Benz SSK
Amica Models & Co.	S18_2949	1913 Ford Model T Speedster
Amica Models & Co.	S18_2957	1934 Ford V8 Coupe
Amica Models & Co.	S18_3136	18th Century Vintage Horse Carriage
Amica Models & Co.	S18_3320	1917 Maxwell Touring Car
Amica Models & Co.	S18_4409	1932 Alfa Romeo 8C2300 Spider Sport
Amica Models & Co.	S24_1937	1939 Chevrolet Deluxe Coupe
Amica Models & Co.	S24_2022	1938 Cadillac V-16 Presidential Limousine
Amica Models & Co.	S24_3969	1936 Mercedes Benz 500k Roadster
Amica Models & Co.	S24_4258	1936 Chrysler Airflow
Amica Models & Co.	S12_1108	2001 Ferrari Enzo
Amica Models & Co.	S12_3148	1969 Corvair Monza
Amica Models & Co.	S12_3891	1969 Ford Falcon
Amica Models & Co.	S18_3140	1903 Ford Model A
Amica Models & Co.	S18_3259	Collectable Wooden Train
Amica Models & Co.	S18_4522	1904 Buick Runabout
Amica Models & Co.	S24_2011	18th century schooner
Amica Models & Co.	S700_1938	The Mayflower
Amica Models & Co.	S72_3212	Pont Yacht