

1

MySQL
Script Files
to be Used
in this
Session

dbworld.sql

ccinfomdemo.sql

dbsales.sql

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Understanding Relational Data Models



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Lesson Concepts

- ▶ Relational Data Model
 - ▶ Relation or Table
 - ▶ Attributes/Fields (Columns)
 - ▶ Records (Rows)
 - ▶ Relationships
- ▶ Multiplicity

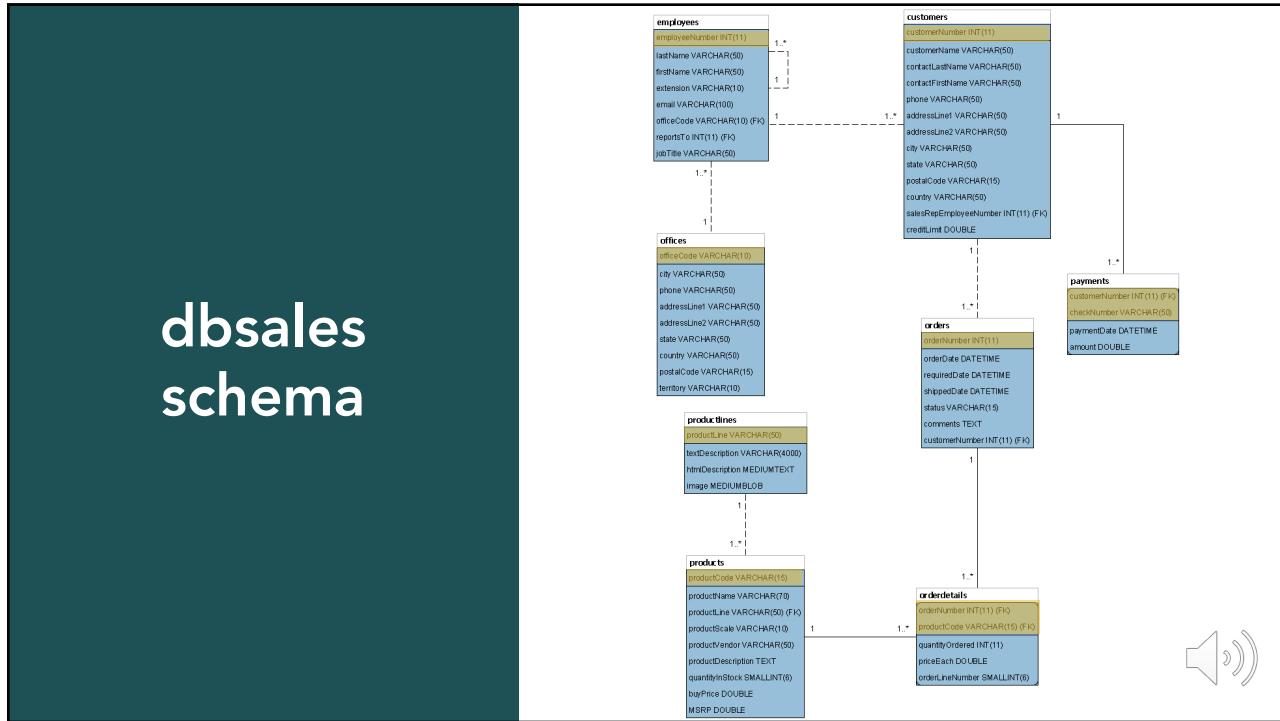


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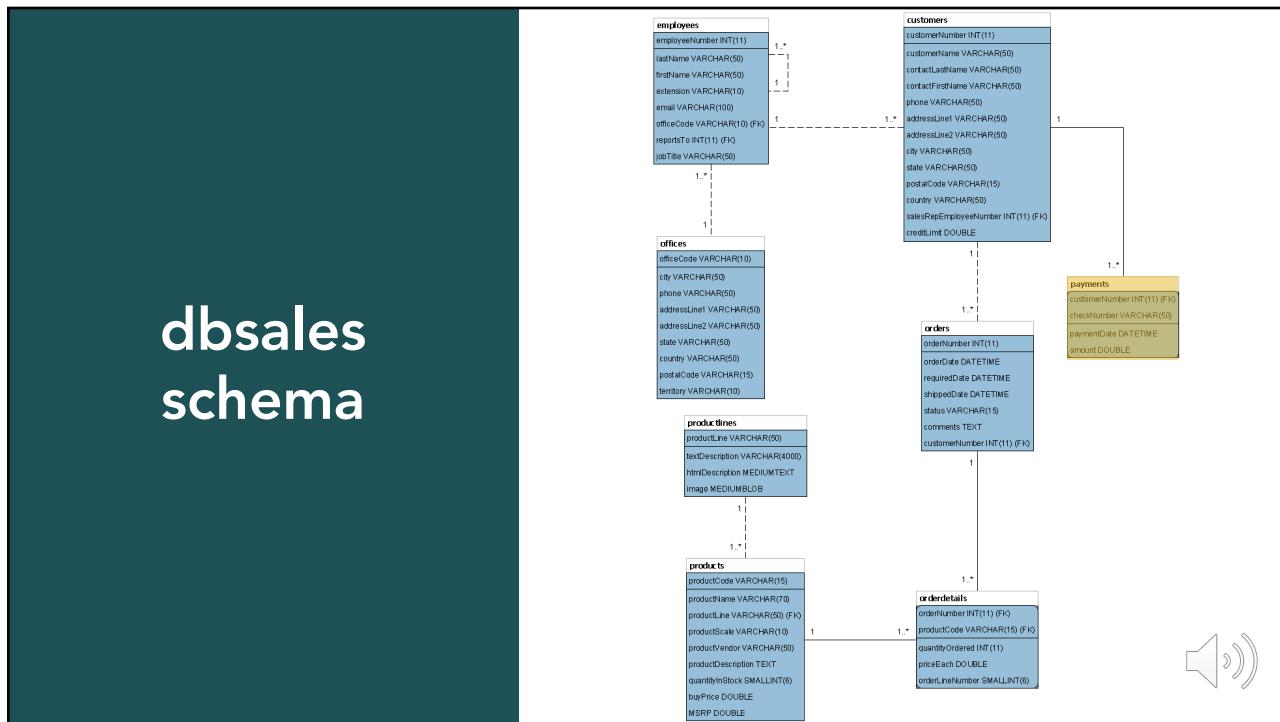
11

dbsales schema



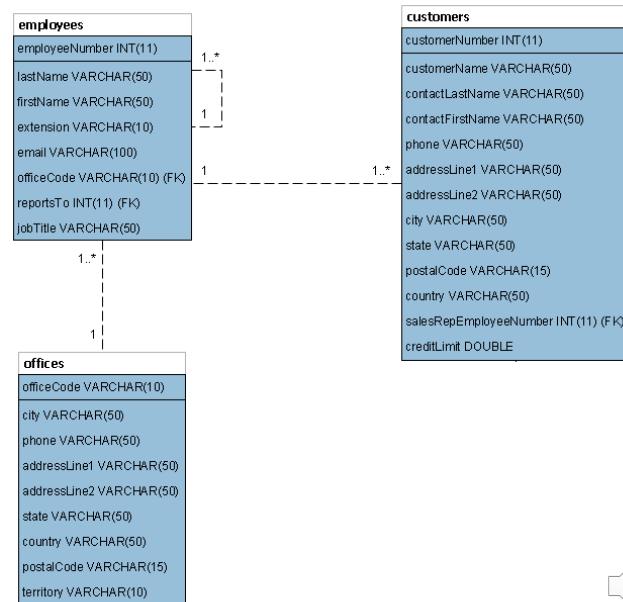
12

dbsales schema



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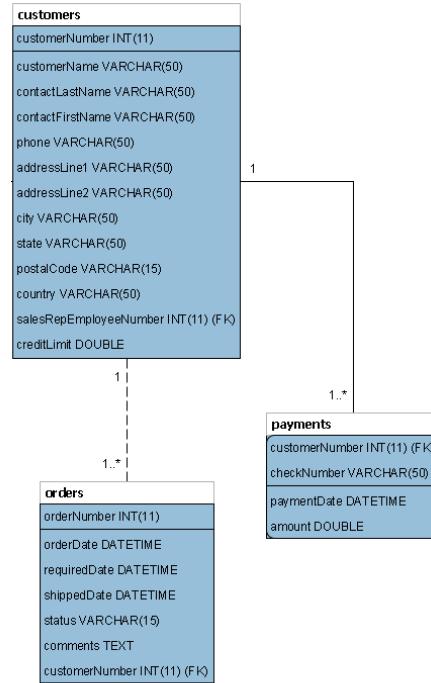
dbsales schema



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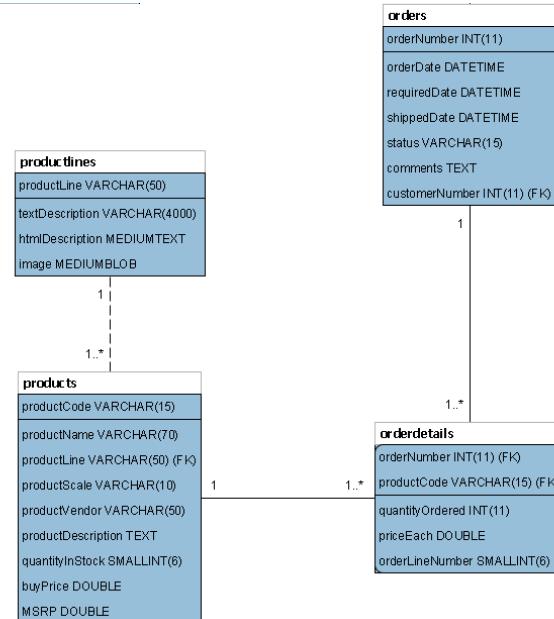
dbsales schema



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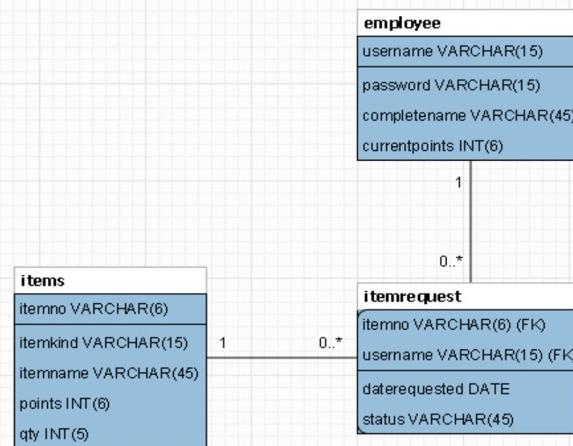


dbsales schema



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ccinfomdemo schema



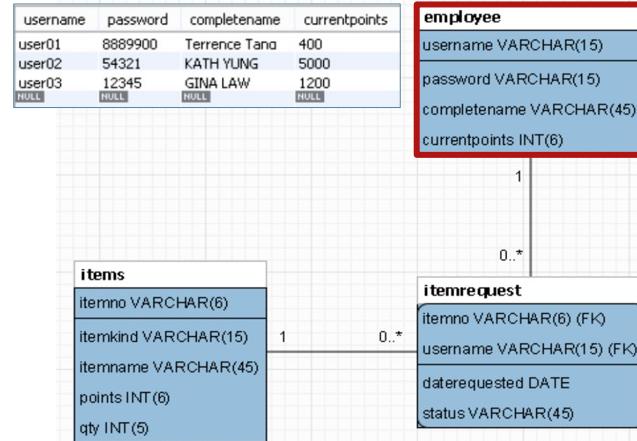
INFORMATION REQUIREMENT

Get the username of employees with more than 1,000 points



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ccinfomdemo schema



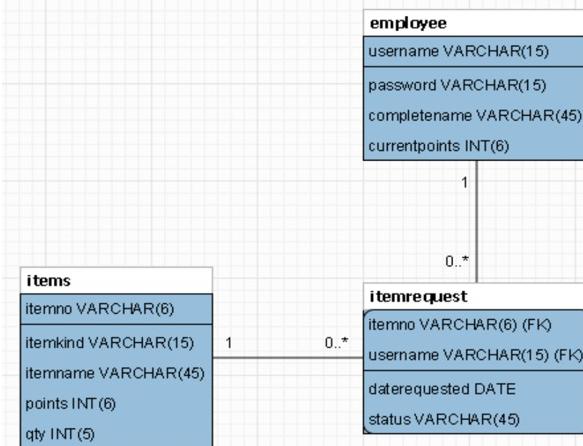
INFORMATION REQUIREMENT

Get the username of employees with more than 1,000 points



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ccinfomdemo schema



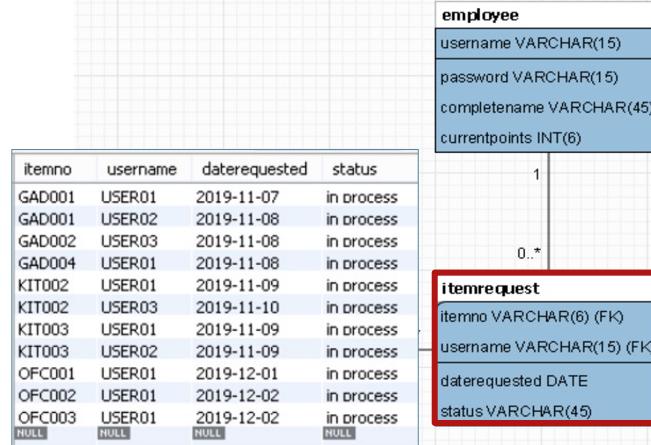
INFORMATION REQUIREMENT

Get the username and complete name of employees, that requested for kitchen items, include the name of the item requested.



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ccinfomdemo schema



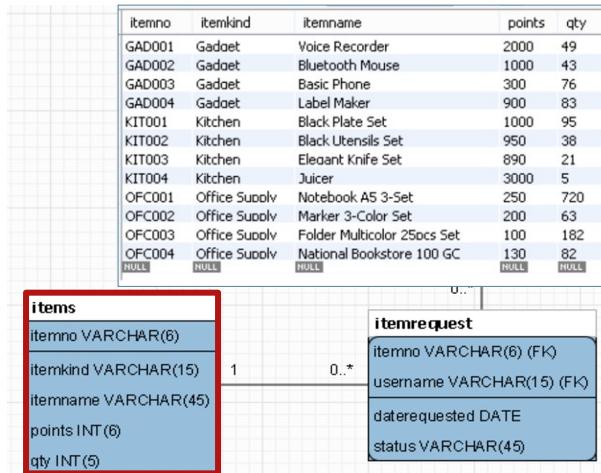
INFORMATION REQUIREMENT

Get the username and complete name of employees, that requested for kitchen items, include the name of the item requested.



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ccinfomdemo schema



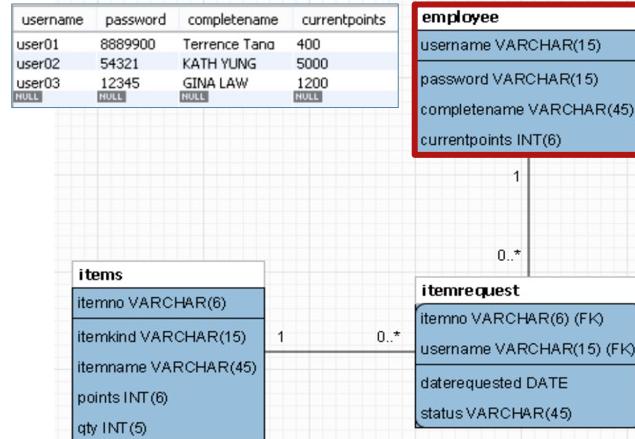
INFORMATION REQUIREMENT

Get the username and complete name of employees, that requested for kitchen items, include the name of the item requested.



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ccinfomdemo schema



INFORMATION REQUIREMENT

Get the username and complete name of employees, that requested for kitchen items, include the name of the item requested.



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Thinking Discipline in Writing SQL Statements



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Sequence of Clauses in an SQL SELECT Statement

CLAUSE	DESCRIPTION
SELECT	What data will appear in the information result
FROM	Where will the data be coming from
WHERE	What conditions will be used to filter the data
ORDER BY	What fields will the information be sorted on



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Recommended Sequence of Thinking

CLAUSE	DESCRIPTION
1. FROM	Identify where will the data you need come from
2. WHERE	Identify what conditions you need to filter the data
3. SELECT	Identify the fields needed to represent the information requirement
4. ORDER BY	Identify what fields in the SELECT clause, you want the information to be sorted on

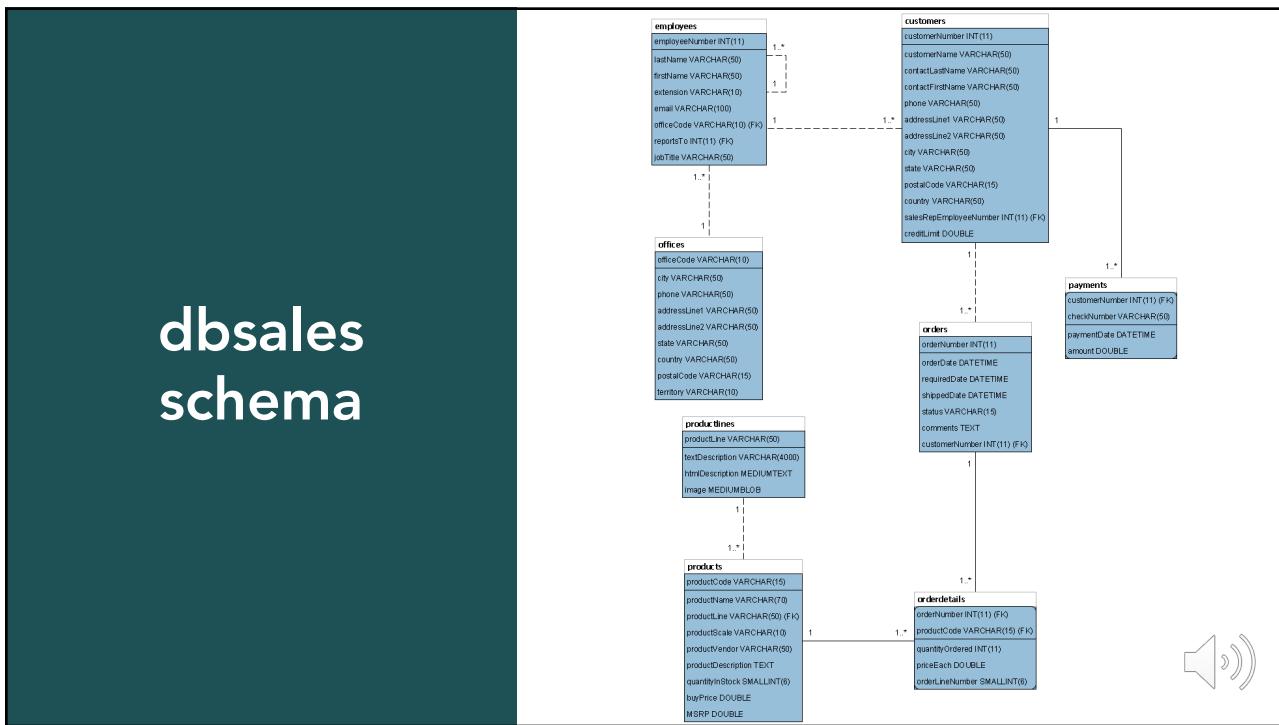


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dbsales schema



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Practice Exercise

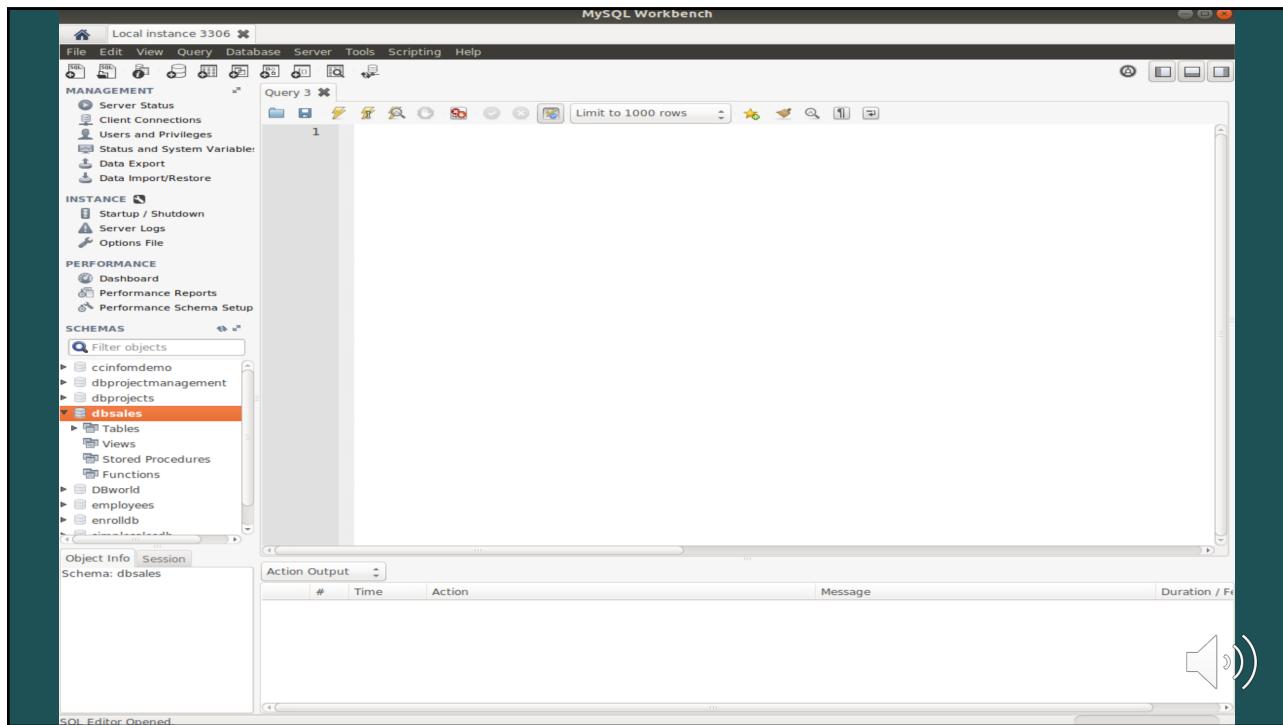
1. Create a new database using the script file "dbsales.sql".
2. Using the dbsales database/schema, write the SQL statement that will satisfy each data requirement in the succeeding slide.



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Practice Exercise

1. Generate a list of customers from Singapore.
(Returns 3 rows)
2. Get the list of orders which were not fulfilled on time.
(Returns 2 rows)
3. Get the total amount of payments made in 2003.
(Returns 1 row)
4. Get the total number of customers per country.
(Returns 27 rows)
5. Get the number of products per vendor.
(Returns 13 rows)



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SQL Practice Exercises

1. Generate a list of customers from Singapore.



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dbsales schema



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SQL Practice Exercises

1. Generate a list of customers from Singapore.

```
SELECT      *
FROM        customers
WHERE       country = 'Singapore';
```



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#	customerNumber	customerName	contactLastName	contactFirstName	phone	addressLine1
1	148	Dragon Souveniers, Ltd.	Natividad	Eric	+65 221 7555	Bronz Sok.
2	166	Handji Gifts& Co	Victorino	Wendy	+65 224 1555	106 Linden Road Sandow
3	206	Asian Shopping Network, Co	Walker	Brydey	+612 9411 1555	Suntec Tower Three
*	NULL	NULL	NULL	NULL	NULL	NULL

Returns 3 Rows



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SQL Writing Practice Exercise

1. Generate a list of customers from Singapore.

```
SELECT      customernumber, customername, city
FROM        customers
WHERE       country = 'Singapore';
```



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SQL Writing Practice Exercise

1. Generate a list of customers from Singapore.

```
SELECT      c.customernumber, c.customername, c.city
FROM        customers c
WHERE       country = 'Singapore';
```

We use an alias to explicitly specify the table where a field would come from, especially in cases where two or more tables have field/s with the same name.



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SQL Writing Practice Exercise

1. Generate a list of customers from Singapore.

```
SELECT      customernumber, customername,
            addressline1, addressline2, city
FROM        customers
WHERE       country = 'Singapore';
```



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#	customernumber	customername	addressline1	addressline2	city
1	148	Dragon Souveniers, Ltd.	Bronz Sok.	Bronz Apt. 3/6 Tesvikiye	Singapore
2	166	Handji Gifts& Co	106 Linden Road Sandown	2nd Floor	Singapore
3	206	Asian Shopping Network, Co	Suntec Tower Three	8 Temasek	Singapore

Returns 3 Rows



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SQL Writing Practice Exercise

1. Generate a list of customers from Singapore.

```
SELECT      customernumber, customername,
            addressline1, addressline2, city
FROM        customers
WHERE       country = 'Singapore'
ORDER BY    customername;
```



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SQL Writing Practice Exercise

1. Generate a list of customers from Singapore.

```
SELECT      customernumber, customername,
            addressline1, addressline2, city
FROM        customers
WHERE       country = 'Singapore'
ORDER BY    customername ASC;
```

ASC: ascending

DESC: descending



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SQL Practice Exercises

2. Get the list of orders which were not fulfilled on time.

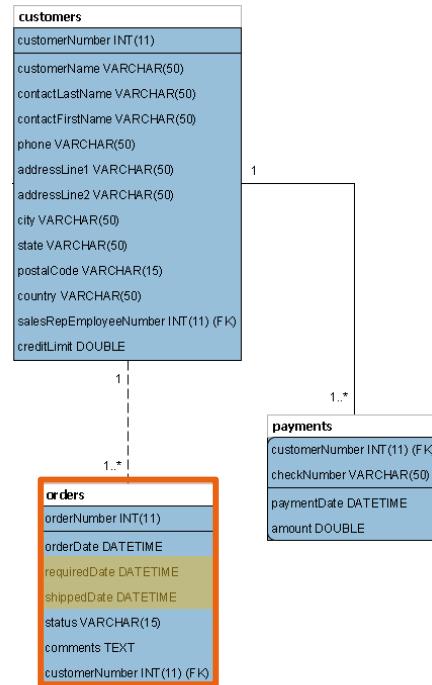


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dbsales schema



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The screenshot shows the MySQL Workbench interface. On the left, the 'SCHEMAS' tree view is expanded to show the 'dbsales' schema, with the 'orders' table selected. A red circle highlights the 'Edit' icon next to the table name in the tree. The main area displays a 'Query 3' window with the SQL query: 'SELECT * FROM dbsales.orders;'. Below the query is a 'Result Grid' showing 14 rows of data from the 'orders' table. The columns are: #, orderNumber, orderDate, requiredDate, shippedDate, status, comments, and custc. The 'status' column contains values like 'Shipped' and 'NULL', and the 'comments' column contains various notes about order fulfillment.

#	orderNumber	orderDate	requiredDate	shippedDate	status	comments	custc
1	10100	2003-01-06 00:00:00	2003-01-13 00:00:00	2003-01-10 00:00:00	Shipped	NULL	363
2	10101	2003-01-09 00:00:00	2003-01-18 00:00:00	2003-01-11 00:00:00	Shipped	Check on availability.	128
3	10102	2003-01-10 00:00:00	2003-01-18 00:00:00	2003-01-14 00:00:00	Shipped	NULL	181
4	10103	2003-01-29 00:00:00	2003-02-07 00:00:00	2003-02-02 00:00:00	Shipped	NULL	121
5	10104	2003-01-31 00:00:00	2003-02-09 00:00:00	2003-02-01 00:00:00	Shipped	NULL	141
6	10105	2003-02-11 00:00:00	2003-02-21 00:00:00	2003-02-12 00:00:00	Shipped	NULL	145
7	10106	2003-02-17 00:00:00	2003-02-24 00:00:00	2003-02-21 00:00:00	Shipped	NULL	278
8	10107	2003-02-24 00:00:00	2003-03-03 00:00:00	2003-02-26 00:00:00	Shipped	Difficult to negotiate with customer. ...	131
9	10108	2003-03-03 00:00:00	2003-03-12 00:00:00	2003-03-08 00:00:00	Shipped	NULL	385
10	10109	2003-03-10 00:00:00	2003-03-19 00:00:00	2003-03-11 00:00:00	Shipped	Customer requested that FedEx Gr...	486
11	10110	2003-03-18 00:00:00	2003-03-24 00:00:00	2003-03-20 00:00:00	Shipped	NULL	187
12	10111	2003-03-25 00:00:00	2003-03-31 00:00:00	2003-03-30 00:00:00	Shipped	NULL	129
13	10112	2003-03-24 00:00:00	2003-04-03 00:00:00	2003-03-29 00:00:00	Shipped	Customer requested that ad mater...	144
14	10113	2003-03-26 00:00:00	2003-04-02 00:00:00	2003-03-27 00:00:00	Shipped	NULL	

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SQL Practice Exercises

2. Get the list of orders which were **not fulfilled on time**.

```
SELECT      *
FROM        orders
WHERE       requireddate < shippeddate;
```

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SQL Practice Exercises

2. Get the list of orders which were **not fulfilled on time**.

```
SELECT      *
FROM        orders
WHERE       shippeddate > requireddate;
```



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#	orderNumber	orderDate	requiredDate	shippedDate	status	comments
1	10165	2003-10-22 00:00:00	2003-10-31 00:00:00	2003-12-26 00:00:00	Shipped	This order was on hold because cu...
2	10427	2016-09-15 16:01:36	2013-01-01 00:00:00	2016-09-27 00:00:00	In Process	Test Order

Returns 2 Rows



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SQL Practice Exercises

2. Get the list of orders which were not fulfilled on time.

```
SELECT      *
FROM        orders
WHERE       requireddate < shippeddate
ORDER BY    ordernumber;
```



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SQL Practice Exercises

3. Get the total amount of payments made in 2003.

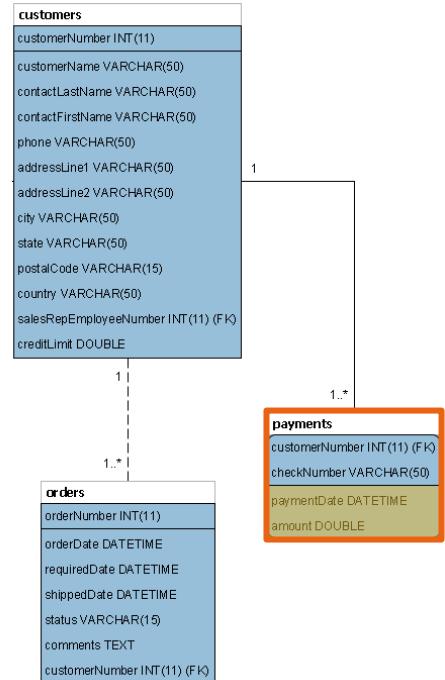


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dbsales schema



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SQL Practice Exercises

- Get the total amount of payments made in 2003.

```

SELECT      SUM(amount)
FROM        payments
WHERE       YEAR(paymentdate) = 2003;
  
```



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SQL Practice Exercises

3. Get the **total amount of payments** made in 2003.

```
SELECT      SUM(amount)
FROM        payments
WHERE       YEAR(paymentdate) = 2003;
```



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SQL Practice Exercises

3. Get the total amount of payments **made in 2003**.

```
SELECT      SUM(amount)
FROM        payments
WHERE       YEAR(paymentdate) = 2003;
```

YEAR(date)



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#	SUM(amount)
1	3250217.7000000007

Returns 1 Row



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SQL Practice Exercises

3. Get the total amount of payments made in 2003.

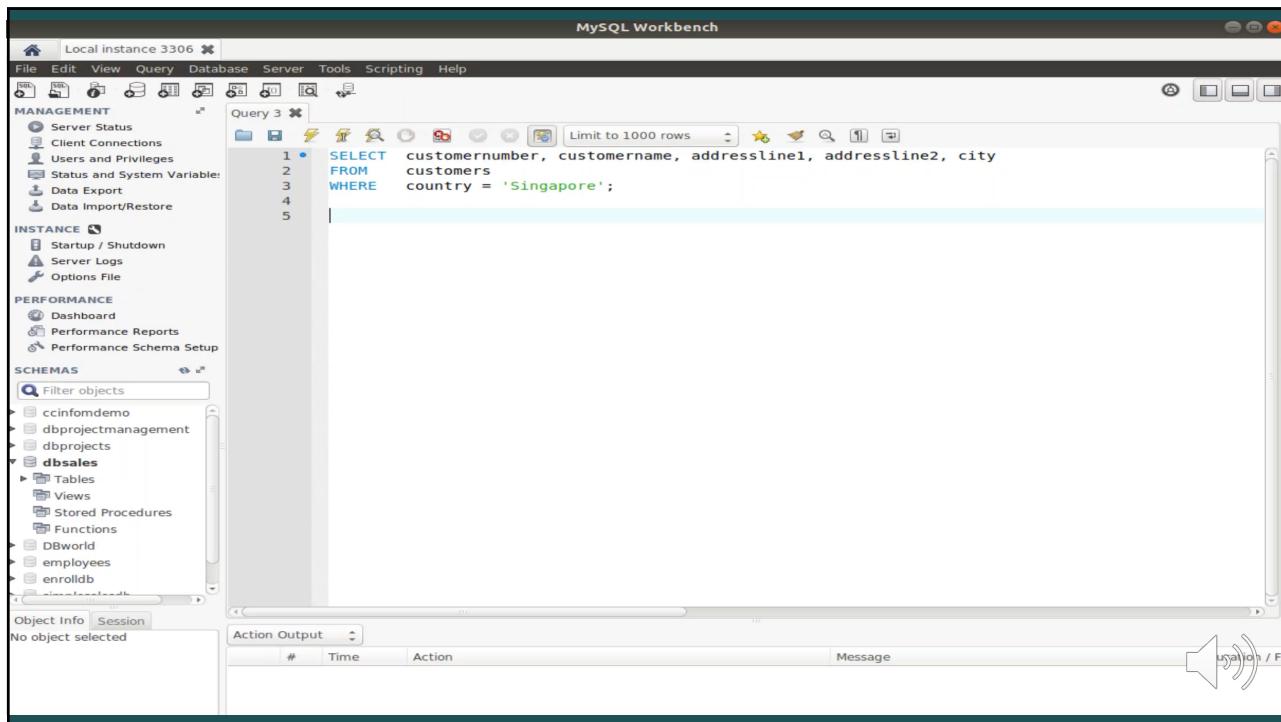
```
SELECT      SUM(amount) AS totalpayments
FROM        payments
WHERE       YEAR(paymentdate) = 2003;
```



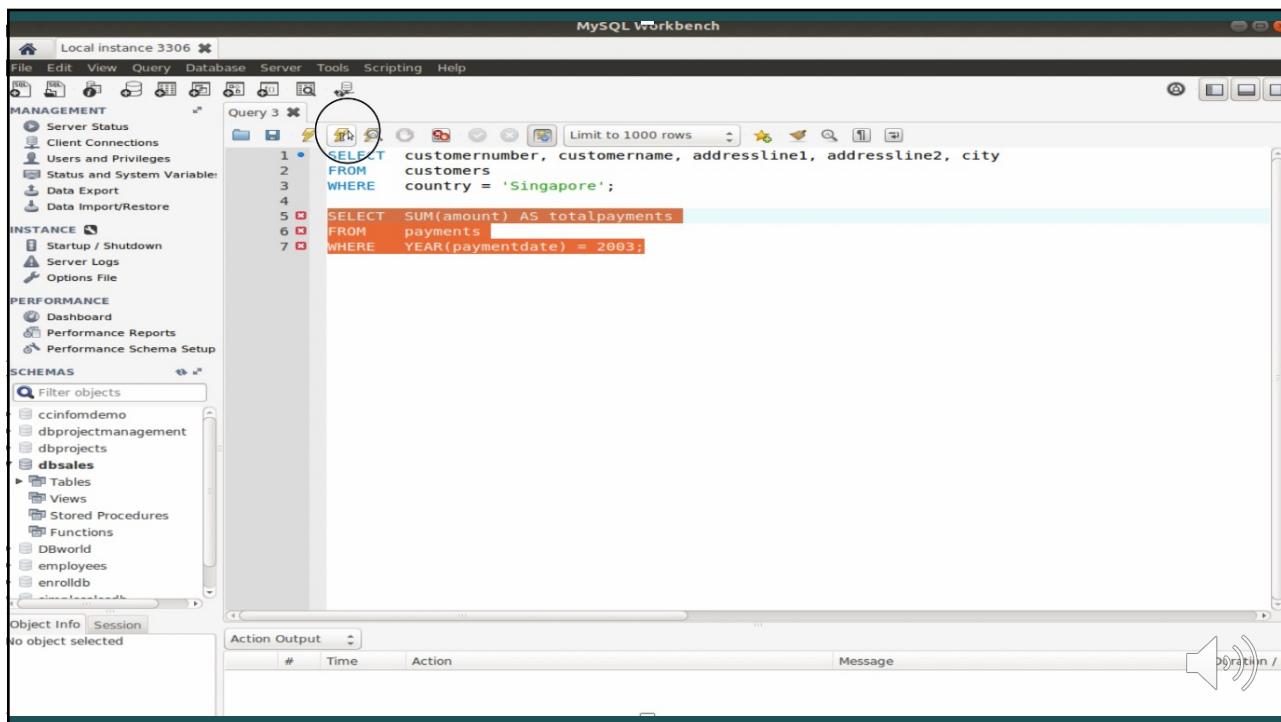
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```

MySQL Workbench
File Edit View Query Database Server Tools Scripting Help
MANAGEMENT
INSTANCE
PERFORMANCE
SCHEMAS
Query 3
SELECT customernumber, customername, addressline1, addressline2, city
FROM customers
WHERE country = 'Singapore';
SELECT SUM(amount) AS totalpayments
FROM payments
WHERE YEAR(paymentdate) = 2003;
Result Grid
# totalpayments
1 3250217.700000007
Result 1
Action Output
# Time Action Message
1 22:16:23 SELECT SUM(amount) AS totalpayments FROM payments... 1 row(s) returned

```

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SQL Practice Exercises

3. Get the total amount of payments made in 2003.

```

SELECT      FORMAT(SUM(amount),2) AS totalpayments
FROM        payments
WHERE       YEAR(paymentdate) = 2003;

```

FORMAT(number, decimal places)

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#	totalpayments
1	3,250,217.70

Returns 1 Row



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SQL Practice Exercises

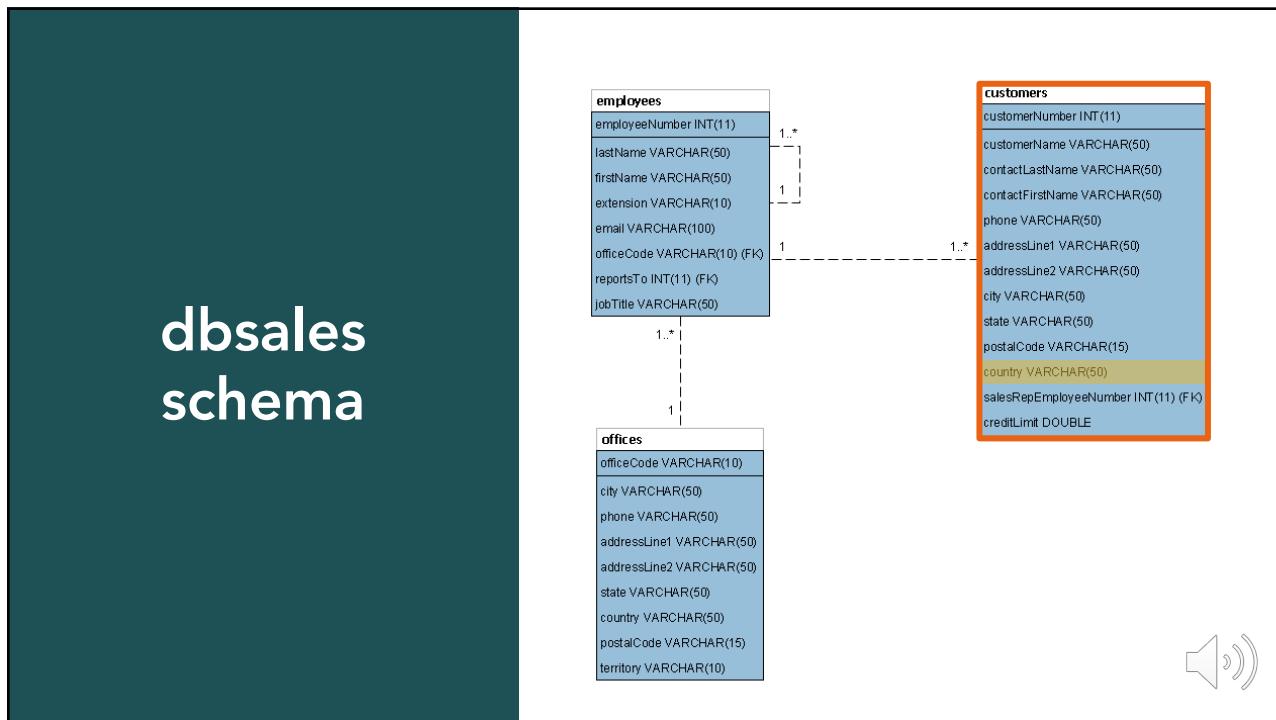
4. Get the total number of customers per country.



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SQL Practice Exercises

- Get the total number of customers per country.

```

SELECT      country, COUNT(customernumber) AS numofcustomers
FROM        customers
GROUP BY    country;

```



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SQL Practice Exercises

4. Get the **total number of customers** per country.

```
SELECT      country, COUNT(customernumber) AS numofcustomers  
FROM        customers  
GROUP BY    country;
```



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SQL Practice Exercises

4. Get the total number of customers **per country**.

```
SELECT      country, COUNT(customernumber) AS numofcustomers  
FROM        customers  
GROUP BY    country;
```



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SQL Practice Exercises

4. Get the total number of customers per country.

```
SELECT      country, COUNT(customernumber) AS numofcustomers
FROM        customers
GROUP BY    country;
```

Always pair a summative function with GROUP BY.

GROUP BY should match the SELECT clause.



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#	country	numofcustomers
1	Australia	5
2	Austria	2
3	Belgium	2
4	Canada	3
5	Denmark	2
6	Finland	3
7	France	12
8	Germany	13
9	Hong Kong	1
10	Ireland	2
11	Israel	1
12	Italy	4
13	Japan	2
14	Netherlands	1
15	New Zealand	4

Returns 27 Rows



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SQL Practice Exercises

4. Get the total number of customers per country.

```
SELECT      country, COUNT(customernumber) AS numofcustomers
FROM        customers
GROUP BY    country
ORDER BY    country;
```



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SQL Practice Exercises

5. Get the number of products per vendor.

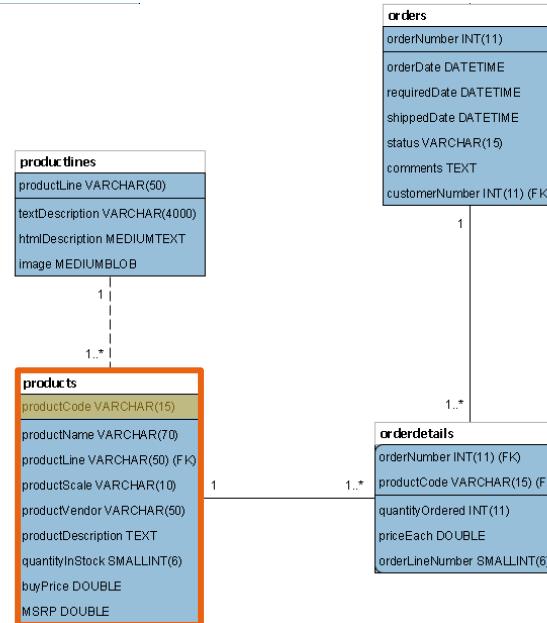


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dbsales schema



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SQL Practice Exercises

- Get the number of products per vendor.

```

SELECT      productvendor, COUNT(productcode) AS numofproducts
FROM        products
GROUP BY    productvendor
ORDER BY    productvendor;
  
```



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SQL Practice Exercises

5. Get the **number of products** per vendor.

```
SELECT      productvendor, COUNT(productcode) AS numofproducts
FROM        products
GROUP BY    productvendor
ORDER BY    productvendor;
```



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SQL Practice Exercises

5. Get the number of products **per vendor**.

```
SELECT      productvendor, COUNT(productcode) AS numofproducts
FROM        products
GROUP BY    productvendor
ORDER BY    productvendor;
```



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SQL Practice Exercises

5. Get the number of products per vendor.

```
SELECT      productvendor, COUNT(productcode) AS numofproducts
FROM        products
GROUP BY    productvendor
ORDER BY    productvendor;
```



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#	productvendor	numofproducts
1	Autoart Studio Design	8
2	Carousel DieCast Legends	9
3	Classic Metal Creations	10
4	Exoto Designs	9
5	Gearbox Collectibles	9
6	Highway 66 Mini Classics	9
7	Min Lin Diecast	8
8	Motor City Art Classics	9
9	Red Start Diecast	7
10	Second Gear Diecast	8
11	Studio M Art Models	8
12	Unimax Art Galleries	8
13	Welly Diecast Productions	8

Returns 13 Rows



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Questions?

PLEASE FEEL FREE TO USE YOUR MICROPHONE.



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End of Lesson Exercise

1. Generate a report showing the customers (customer number and complete name), the country they are located and the complete name of the sales representative handling her/him.



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Recommended Sequence of Thinking

CLAUSE	DESCRIPTION
1. FROM	Identify where will the data you need come from
2. WHERE	Identify what conditions you need to filter the data
3. SELECT	Identify the fields needed to represent the information requirement
4. ORDER BY	Identify what fields in the SELECT clause, you want the information to be sorted on

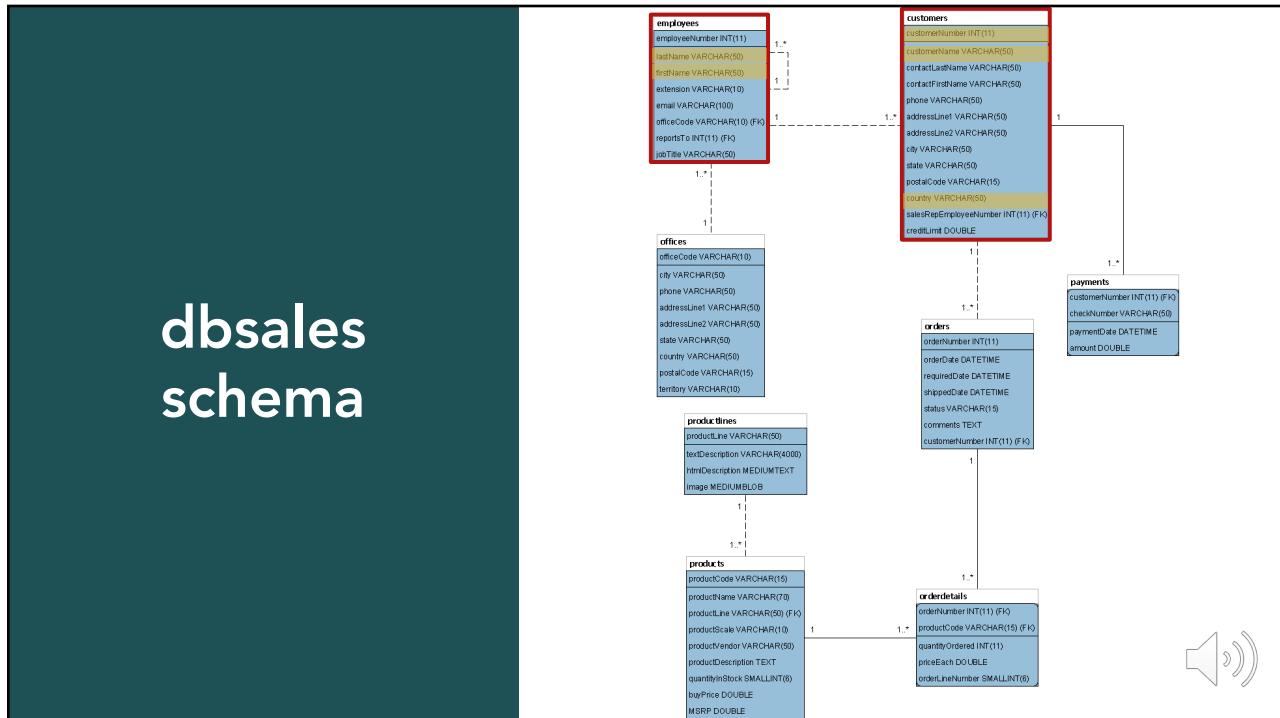


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dbsales schema



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End of Lesson Exercise

1. Generate a report showing the customers (customer number and complete name), the country they are located and the complete name of the sales representative handling her/him.

```
FROM      customers c
          employees e
```



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End of Lesson Exercise

1. Generate a report showing the customers (customer number and complete name), the country they are located and the complete name of the sales representative handling her/him.

```
FROM      customers c
JOIN      employees e ON c.salesRepEmployeeNumber =
          e.employeeNumber
```



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Recommended Sequence of Thinking

CLAUSE	DESCRIPTION
1. FROM	Identify where will the data you need come from
2. WHERE	Identify what conditions you need to filter the data
3. SELECT	Identify the fields needed to represent the information requirement
4. ORDER BY	Identify what fields in the SELECT clause, you want the information to be sorted on



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No other conditions to be satisfied.



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Recommended Sequence of Thinking

CLAUSE	DESCRIPTION
1. FROM	Identify where will the data you need come from
2. WHERE	Identify what conditions you need to filter the data
3. SELECT	Identify the fields needed to represent the information requirement
4. ORDER BY	Identify what fields in the SELECT clause, you want the information to be sorted on



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End of Lesson Exercise

1. Generate a report showing the customers (customer number and complete name), the country they are located and the complete name of the sales representative handling her/him.

```
SELECT      c.customerNumber, c.customerName, c.country,
            e.firstName, e.lastName
FROM        customers c
JOIN        employees e ON c.salesRepEmployeeNumber =
            e.employeeNumber
```



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Recommended Sequence of Thinking

CLAUSE	DESCRIPTION
1. FROM	Identify where will the data you need come from
2. WHERE	Identify what conditions you need to filter the data
3. SELECT	Identify the fields needed to represent the information requirement
4. ORDER BY	Identify what fields in the SELECT clause, you want the information to be sorted on



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End of Lesson Exercise

1. Generate a report showing the customers (customer number and complete name), the country they are located and the complete name of the sales representative handling her/him.

```

SELECT      c.customerNumber, c.customerName, c.country,
            e.firstName, e.lastName
FROM        customers c
JOIN        employees e ON c.salesRepEmployeeNumber =
            e.employeeNumber
ORDER BY    c.customerNumber;
  
```



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customerNu...	customerName	country	firstName	lastName
103	Atelier graphique	France	Gerard	Hernandez
112	Signal Gift Stores	USA	Leslie	Thompson
114	Australian Collectors, Co.	Australia	Andy	Fixter
119	La Rochelle Gifts	France	Gerard	Hernandez
121	Baane Mini Imports	Norway	Barry	Jones
124	Mini Gifts Distributors Ltd.	USA	Leslie	Jennings
128	Blauer See Auto, Co.	Germany	Barry	Jones
129	Mini Wheels Co.	USA	Leslie	Jennings
131	Land of Toys Inc.	USA	George	Vanauf
141	Euro+ Shopping Channel	Spain	Gerard	Hernandez
144	Volvo Model Replicas, Co	Sweden	Barry	Jones
145	Danish Wholesale Imports	Denmark	Pamela	Castillo
146	Saveley & Henriot, Co.	France	Loui	Bondur
148	Dragon Souveniers, Ltd.	Singapore	Mami	Nishi
151	Muscle Machine Inc	USA	Foon Yue	Tseng
157	Diecast Classics Inc.	USA	Steve	Patterson
161	Technics Stores Inc.	USA	Leslie	Jennings
166	Handji Gifts& Co	Singapore	Peter	Marsh
167	Herkku Gifts	Norway	Barry	Jones

Returns 100 Rows



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End of Lesson Exercise

CHANGE ROW LIMIT



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End of Lesson Exercise

NO DATABASE SELECTED

Message

Error Code: 1046. Select the default DB to be used by double-clicking its name in the SCHEMAS list in the sidebar.



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End of Lesson Exercise

WRONG DATABASE SELECTED/WRONG TABLE NAME SPECIFIED

Response

Error Code: 1146. Table 'ccinfomdemo.customers' doesn't exist



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Questions?

PLEASE FEEL FREE TO USE YOUR MICROPHONE.



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End of Lesson Exercise

2. Generate the list of orders completed in May 2005 showing the order number, the order date, shipped date, and the complete name of the customer who made the order.



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Recommended Sequence of Thinking

CLAUSE	DESCRIPTION
1. FROM	Identify where will the data you need come from
2. WHERE	Identify what conditions you need to filter the data
3. SELECT	Identify the fields needed to represent the information requirement
4. ORDER BY	Identify what fields in the SELECT clause, you want the information to be sorted on

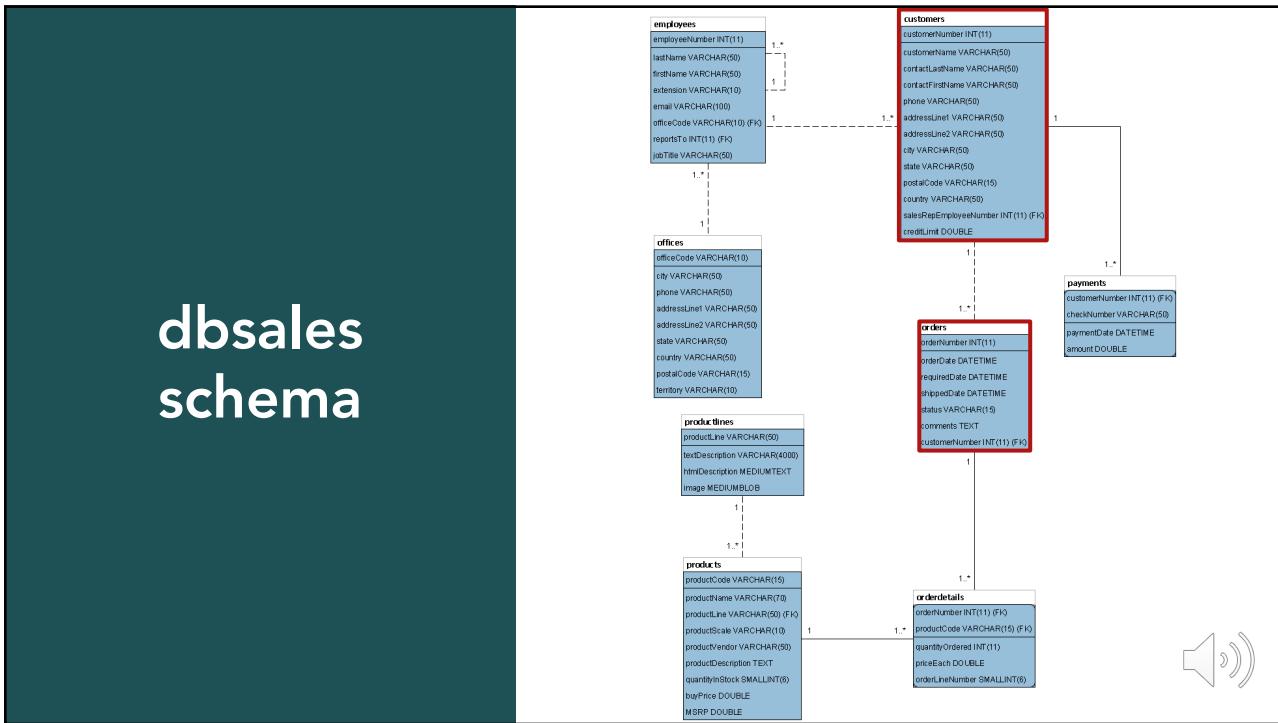


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dbsales schema



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End of Lesson Exercise

- Generate the list of orders completed in May 2005 showing the order number, the order date, shipped date, and the complete name of the customer who made the order.

```

FROM      orders o
          customers c
  
```



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End of Lesson Exercise

2. Generate the list of orders completed in May 2005 showing the order number, the order date, shipped date, and the complete name of the customer who made the order.

```
FROM      orders o
JOIN      customers c ON o.customerNumber = c.customerNumber
```



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Recommended Sequence of Thinking

CLAUSE	DESCRIPTION
1. FROM	Identify where will the data you need come from
2. WHERE	Identify what conditions you need to filter the data
3. SELECT	Identify the fields needed to represent the information requirement
4. ORDER BY	Identify what fields in the SELECT clause, you want the information to be sorted on



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End of Lesson Exercise

2. Generate the list of **orders completed** in May 2005 showing the order number, the order date, shipped date, and the complete name of the customer who made the order.



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End of Lesson Exercise

- ▶ View the contents of the ORDERS table to check all the possible order statuses

```
SELECT *
FROM   orders;
```

- ▶ Order Status: Cancelled, Disputed, On Hold, Resolved, Shipped
- ▶ Order is Completed = Order Status is 'Shipped'



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End of Lesson Exercise

2. Generate the list of **orders completed** in May 2005 showing the order number, the order date, shipped date, and the complete name of the customer who made the order.

```
FROM      orders o
JOIN      customers c ON o.customerNumber = c.customerNumber
WHERE    o.status = 'Shipped'
```



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End of Lesson Exercise

2. Generate the list of **orders completed in May 2005** showing the order number, the order date, shipped date, and the complete name of the customer who made the order.

```
FROM      orders o
JOIN      customers c ON o.customerNumber = c.customerNumber
WHERE    o.status = 'Shipped' AND o.shippedDate BETWEEN '2005-05-01' AND '2005-05-31'
```



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Recommended Sequence of Thinking

CLAUSE	DESCRIPTION
1. FROM	Identify where will the data you need come from
2. WHERE	Identify what conditions you need to filter the data
3. SELECT	Identify the fields needed to represent the information requirement
4. ORDER BY	Identify what fields in the SELECT clause, you want the information to be sorted on



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End of Lesson Exercise

- Generate the list of orders completed in May 2005 showing the order number, the order date, shipped date, and the complete name of the customer who made the order.

```

SELECT      o.orderNumber, o.orderDate, o.shippedDate, o.status, c.customerName
FROM        orders o
JOIN        customers c ON o.customerNumber = c.customerNumber
WHERE       o.status = 'Shipped' AND o.shippedDate BETWEEN '2005-05-01' AND '2005-05-31'
  
```



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Recommended Sequence of Thinking

CLAUSE	DESCRIPTION
1. FROM	Identify where will the data you need come from
2. WHERE	Identify what conditions you need to filter the data
3. SELECT	Identify the fields needed to represent the information requirement
4. ORDER BY	Identify what fields in the SELECT clause, you want the information to be sorted on



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End of Lesson Exercise

- Generate the list of orders completed in May 2005 showing the order number, the order date, shipped date, and the complete name of the customer who made the order.

```

SELECT      o.orderNumber, o.orderDate, o.shippedDate, c.customerName
FROM        orders o
JOIN        customers c ON o.customerNumber = c.customerNumber
WHERE       o.status = 'Shipped' AND o.shippedDate BETWEEN '2005-05-01' AND '2005-05-31'
ORDER BY    o.orderNumber;
  
```



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orderNumber	orderDate	shippedDate	customerName
10411	2005-05-01 00:00:00	2005-05-06 00:00:00	Québec Home Shopping Network
10412	2005-05-03 00:00:00	2005-05-05 00:00:00	Euro+ Shopping Channel
10413	2005-05-05 00:00:00	2005-05-09 00:00:00	Gift Depot Inc.
10416	2005-05-10 00:00:00	2005-05-14 00:00:00	L'ordine Souvenirs
10418	2005-05-16 00:00:00	2005-05-20 00:00:00	Extreme Desk Decorations, Ltd
10419	2005-05-17 00:00:00	2005-05-19 00:00:00	Salzburg Collectables

Returns 6 Rows



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Questions?

PLEASE FEEL FREE TO USE YOUR MICROPHONE.



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End of Lesson Exercise

3. Generate the list of products below 300 pieces. Show in the list the product's code and name, and the product line the product belongs to.



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Recommended Sequence of Thinking

CLAUSE	DESCRIPTION
1. FROM	Identify where will the data you need come from
2. WHERE	Identify what conditions you need to filter the data
3. SELECT	Identify the fields needed to represent the information requirement
4. ORDER BY	Identify what fields in the SELECT clause, you want the information to be sorted on



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Please type your answer in the Chat section.



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Recommended Sequence of Thinking

CLAUSE	DESCRIPTION
1. FROM	Identify where will the data you need come from
2. WHERE	Identify what conditions you need to filter the data
3. SELECT	Identify the fields needed to represent the information requirement
4. ORDER BY	Identify what fields in the SELECT clause, you want the information to be sorted on



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Please type your answer in the Chat section.



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End of Lesson Exercise

3. Generate the list of products below 300 pieces. Show in the list the product's code and name, and the product line the product belongs to.



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Recommended Sequence of Thinking

CLAUSE	DESCRIPTION
1. FROM	Identify where will the data you need come from
2. WHERE	Identify what conditions you need to filter the data
3. SELECT	Identify the fields needed to represent the information requirement
4. ORDER BY	Identify what fields in the SELECT clause, you want the information to be sorted on



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Please type your answer in the Chat section.



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Recommended Sequence of Thinking

CLAUSE	DESCRIPTION
1. FROM	Identify where will the data you need come from
2. WHERE	Identify what conditions you need to filter the data
3. SELECT	Identify the fields needed to represent the information requirement
4. ORDER BY	Identify what fields in the SELECT clause, you want the information to be sorted on



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Please type your answer in the Chat section.



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End of Lesson Exercise

3. Generate the list of products below 300 pieces. Show in the list the product's code and name, and the product line the product belongs to.

```
SELECT      p.productCode, p.productName, p.productLine,
            p.quantityInStock
FROM        products p
WHERE       p.quantityInStock < 300
ORDER BY    p.productCode;
```



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productCode	productName	productLine	quantityInStock
S12_1099	1968 Ford Mustang	Classic Cars	68
S24_2000	1960 BSA Gold Star DBD34	Motorcycles	15
S32_1374	1997 BMW F650 ST	Motorcycles	178
S32_4289	1928 Ford Phaeton Deluxe	Vintage Cars	136

Returns 4 Rows



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End of Lesson Exercise

4. Generate the complete directory of employees, showing their complete name, email, extension number, the office code they belong to as well as the office phone number.



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End of Lesson Exercise

4. Generate the complete directory of employees, showing their complete name, email, extension number, the office code they belong to as well as the office phone number.



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End of Lesson Exercise

4. Generate the complete directory of employees, showing their complete name, email, extension number, the office code they belong to as well as the office phone number.

```
SELECT      e.lastName, e.firstName, e.email, e.extension,
            e.officeCode, o.phone
        FROM      employees e
        JOIN      offices o ON e.officeCode=o.officeCode
        ORDER BY e.lastName, e.firstName;
```



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lastName	firstName	email	extension	officeCode	phone
Bondur	Gerard	gbondur@classicmodelcars.com	x5408	4	+33 14 723 4404
Bondur	Loui	lbondur@classicmodelcars.com	x6493	4	+33 14 723 4404
Bott	Larry	lbott@classicmodelcars.com	x2311	7	+44 20 7877 2041
Bow	Anthony	abow@classicmodelcars.com	x5428	1	+1 650 219 4782
Castillo	Pamela	pcastillo@classicmodelcars.com	x2759	4	+33 14 723 4404
Firrelli	Jeff	jfirrelli@classicmodelcars.com	x9273	1	+1 650 219 4782
Firrelli	Julie	jfirrelli@classicmodelcars.com	x2173	2	+1 215 837 0825
Fixter	Andy	afixter@classicmodelcars.com	x101	6	+61 2 9264 2451
Gerard	Martin	mgerard@classicmodelcars.com	x2312	4	+33 14 723 4404
Hernandez	Gerard	ghernande@classicmodelcars.com	x2028	4	+33 14 723 4404
Jennings	Leslie	ljennings@classicmodelcars.com	x3291	1	+1 650 219 4782
Jones	Barry	bjones@classicmodelcars.com	x102	7	+44 20 7877 2041
Kato	Yoshimi	ykato@classicmodelcars.com	x102	5	+81 33 224 5000
King	Tom	tking@classicmodelcars.com	x103	6	+61 2 9264 2451
Marsh	Peter	pmarsh@classicmodelcars.com	x102	6	+61 2 9264 2451
Murphy	Diane	dmurphy@classicmodelcars.com	x5800	1	+1 650 219 4782
Nishi	Mami	mnishi@classicmodelcars.com	x101	5	+81 33 224 5000
Patterson	Mary	mpatterso@classicmodelcars.com	x4611	1	+1 650 219 4782
Patterson	Steve	spatterson@classicmodelcars.com	x4334	2	+1 215 837 0825
Patterson	William	wpatterson@classicmodelcars.com	x4871	6	+61 2 9264 2451
Thompson	Leslie	lthompson@classicmodelcars.com	x4065	1	+1 650 219 4782
Tseng	Foon Yue	ftseng@classicmodelcars.com	x2248	3	+1 212 555 3000
Vanauf	George	gvanauf@classicmodelcars.com	x4102	3	+1 212 555 3000

Returns 23 Rows



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References

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- ▶ MySQL Workbench Manual
<https://dev.mysql.com/doc/workbench/en/wb-sql-editor.html>



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Questions?

PLEASE POST YOUR QUESTIONS IN THE DISCUSSION BOARD CREATED FOR THIS TOPIC.



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