

Practica 3

Bases de Datos

José María Fernández Gómez

Fernando Pérez Ballesteros

Pablo Rayón Zapater

1. Combinar el nombre y apellido de empleados y nombre y apellido de contactos en clientes en un solo conjunto de resultados, ordenado por apellido y nombre. Sugerencia: usar UNION

```
sudo mysql 104x56
+-----+
145 rows in set (0.000 sec)

MariaDB [classicmodels]>
MariaDB [classicmodels]> SELECT customerName AS nombre,contactLastName AS apellido FROM customers UNION
SELECT firstName,lastName FROM employees ORDER BY nombre,apellido;
+-----+
| nombre          | apellido |
+-----+
| Alpha Cognac   | Roulet   |
| American Souvenirs Inc | Franco  |
| Amica Models & Co. | Accorti  |
| Andy            | Fixter   |
| ANG Resellers   | Camino   |
| Anna's Decorations, Ltd | O'Hara   |
| Anthony         | Bow      |
| Anton Designs, Ltd | Anton    |
| Asian Shopping Network, Co | Walker   |
| Asian Treasures, Inc. | McKenna  |
| Atelier graphique | Schmitt  |
| Australian Collectables, Ltd | Clenahan |
| Australian Collectors, Co. | Ferguson |
| Australian Gift Network, Co | Calaghan |
| Auto Associes & Cie. | Tonini   |
| Auto Canal+ Petit | Perrier  |
| Auto-Moto Classics Inc. | Taylor   |
| AV Stores, Co. | Ashworth |
| Baane Mini Imports | Bergulfsen |
| Barry            | Jones    |
| Bavarian Collectables Imports, Co. | Donnermeyer |
| BG&E Collectables | Harrison |
| Blauer See Auto, Co. | Keitel   |
| Boards & Toys Co. | Young    |
| CAF Imports      | Fernandez |
| Cambridge Collectables Co. | Tseng    |
| Canadian Gift Exchange Network | Tamuri   |
| Classic Gift Ideas, Inc | Cervantes |
| Classic Legends Inc. | Hernandez |
| clover Collections, Co. | Cassidy  |
| Collectable Mini Designs Co. | Thompson |
| Collectables For Less Inc. | Nelson   |
| Corporate Gift Ideas Co. | Brown    |
| Corrida Auto Replicas, Ltd | Sommer   |
| Cramer Spezialitaeten, Ltd | Cramer   |
| Cruz & Sons Co. | Cruz     |
| Daedalus Designs Imports | Rancé    |
| Danish Wholesale Imports | Petersen |
| Der Hund Imports | Andersen |
| Diane            | Murphy   |
| Diecast Classics Inc. | Leong    |
| Diecast Collectables | Franco   |
| Double Decker Gift Stores, Ltd | Smith    |
| Down Under Souveniers, Inc | Graham   |
| Dragon Souveniers, Ltd. | Natividad |
| Enaco Distributors | Saavedra  |
| Euro+ Shopping Channel | Freyre   |
| Extreme Desk Decorations, Ltd | McRoy    |
+-----+
```

2. Crea una nueva tabla llamada empleadosclientes, cuyos atributos son nombre y apellido; el tipo los atributos será el mismo que el de los atributos de origen. No hace falta que tenga claves.

```
sudo mysql104x56
MariaDB [classicmodels]> CREATE TABLE empleadosclientes (nombre VARCHAR(50),apellido VARCHAR(50));
Query OK, 0 rows affected (0.006 sec)
```

```
MariaDB [classicmodels]> █
```

3. Inserta en la tabla empleadosclientes, los resultados del ejercicio 1.

```
sudo mysql104x56
MariaDB [classicmodels]> CREATE TABLE empleadosclientes (nombre VARCHAR(50),apellido VARCHAR(50));
Query OK, 0 rows affected (0.006 sec)

MariaDB [classicmodels]> INSERT INTO empleadosclientes SELECT customerName AS nombre,contactLastName AS apellido FROM customers UNION SELECT firstName,lastName FROM employees ORDER BY nombre,apellido;
Query OK, 145 rows affected (0.004 sec)
Records: 145  Duplicates: 0  Warnings: 0

MariaDB [classicmodels]> slect * from empleadosclientes;
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MariaDB server version for the right syntax to use near 'slect * from empleadosclientes' at line 1
MariaDB [classicmodels]> select * from empleadosclientes;
+-----+-----+
| nombre          | apellido        |
+-----+-----+
| Alpha Cognac    | Roulet          |
| American Souvenirs Inc | Franco          |
| Amica Models & Co. | Accorti         |
| Andy             | Fixter          |
| ANG Resellers   | Camino          |
| Anna's Decorations, Ltd | O'Hara          |
| Anthony          | Bow              |
| Anton Designs, Ltd. | Anton           |
| Asian Shopping Network, Co | Walker          |
| Asian Treasures, Inc. | McKenna         |
| Atelier graphique | Schmitt         |
| Australian Collectables, Ltd | Clenahan        |
| Australian Collectors, Co. | Ferguson        |
| Australian Gift Network, Co | Calaghan        |
| Auto Associes & Cie. | Tonini          |
| Auto Canal+ Petit | Perrier         |
| Auto-Moto Classics Inc. | Taylor          |
| AV Stores, Co.    | Ashworth        |
| Baane Mini Imports | Bergulfsen     |
| Barry             | Jones            |
| Bavarian Collectables Imports, Co. | Donnermeyer    |
| BG&E Collectables | Harrison        |
| Blauwe Fot Auto Co | Kaisai          |
+-----+-----+
```

4. Muestra el contenido de la tabla empleadosclientes.

```
Records: 145  Duplicates: 0  Warnings: 0
MariaDB [classicmodels]> slect * from empleadosclientes;
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MariaDB server version for the right syntax to use near 'slect * from empleadosclientes' at line 1
MariaDB [classicmodels]> select * from empleadosclientes;
+-----+-----+
| nombre          | apellido        |
+-----+-----+
| Alpha Cognac    | Roulet          |
| American Souvenirs Inc | Franco          |
| Amica Models & Co. | Accorti         |
| Andy             | Fixter          |
| ANG Resellers    | Camino          |
| Anna's Decorations, Ltd | O'Hara          |
| Anthony          | Bow              |
| Anton Designs, Ltd | Anton           |
| Asian Shopping Network, Co | Walker          |
| Asian Treasures, Inc | McKenna         |
| Atelier graphique | Schmitt         |
| Australian Collectables, Ltd | Clenahan        |
| Australian Collectors, Co. | Ferguson        |
| Australian Gift Network, Co | Calaghan        |
| Auto Associes & Cie. | Tonini          |
| Auto Canal+ Petit | Perrier         |
| Auto-Moto Classics Inc | Taylor          |
| AV Stores, Co.    | Ashworth        |
| Baane Mini Imports | Bergulfsen      |
| Barry             | Jones            |
| Bavarian Collectables Imports, Co. | Donnermeyer    |
| BG&E Collectables | Harrison         |
| Blauer See Auto, Co. | Keitel           |
| Boards & Toys Co. | Young            |
| CAF Imports       | Fernandez        |
| Cambridge Collectables Co. | Tseng            |
| Canadian Gift Exchange Network | Tamuri          |
| Classic Gift Ideas, Inc | Cervantes        |
| Classic Legends Inc. | Hernandez        |
| Clover Collections, Co. | Cassidy          |
| Collectable Mini Designs Co. | Thompson        |
| Collectables For Less Inc. | Nelson           |
| Corporate Gift Ideas Co. | Brown            |
| Corrida Auto Replicas, Ltd | Sommer           |
| Cramer Spezialitäten, Ltd | Cramer           |
| Cruz & Sons Co.   | Cruz             |
| Daedalus Designs Imports | Rancé            |
| Danish Wholesale Imports | Petersen         |
| Der Hund Imports  | Andersen         |
| Diane             | Murphy           |
| Diecast Classics Inc. | Leong            |
| Diecast Collectables | Franco           |
| Double Decker Gift Stores, Ltd | Smith           |
| Down Under Souveniers, Inc | Graham           |
| Dragon Souveniers, Ltd | Natividad        |
| Enaco Distributors | Saavedra          |
| Euro+ Shopping Channel | Freyre           |
| Extreme Desk Decorations, Ltd | McRov            |
+-----+-----+
```

5. Ahora selecciona de la tabla empleadosclientes, las tuplas procedentes solo de los empleados. Sugerencia: usar INNER JOIN

```
sudo mysql 104x56
23 rows in set (0.002 sec)

MariaDB [classicmodels]> SELECT * FROM empleadosclientes INNER JOIN employees ON (empleadosclientes.nombre=employees.firstName && empleadosclientes.apellido=employees.lastName) ;
+-----+-----+-----+-----+-----+-----+
| nombre | apellido | employeeNumber | lastName | firstName | extension | email
| officeCode | reportsTo | jobTitle |
+-----+-----+-----+-----+-----+-----+
| Andy | Fixter | 1611 | Fixter | Andy | x101 | afixter@classicmodelcars.com
| om | 6 | 1088 | Sales Rep | | |
| Anthony | Bow | 1143 | Bow | Anthony | x5428 | abow@classicmodelcars.com
| m | 1 | 1056 | Sales Manager (NA) | | |
| Barry | Jones | 1504 | Jones | Barry | x102 | bjones@classicmodelcars.co
| m | 7 | 1102 | Sales Rep | | |
| Diane | Murphy | 1002 | Murphy | Diane | x5800 | dmurphy@classicmodelcars.c
| om | 1 | NULL | President | | |
| Foon Yue | Tseng | 1286 | Tseng | Foon Yue | x2248 | ftseng@classicmodelcars.co
| m | 3 | 1143 | Sales Rep | | |
| George | Vanauf | 1323 | Vanauf | George | x4102 | gvanauf@classicmodelcars.c
| om | 3 | 1143 | Sales Rep | | |
| Gerard | Bondur | 1102 | Bondur | Gerard | x5408 | gbondur@classicmodelcars.c
| om | 4 | 1056 | Sale Manager (EMEA) | | |
| Gerard | Hernandez | 1370 | Hernandez | Gerard | x2028 | ghernande@classicmodelcars
|.com | 4 | 1102 | Sales Rep | | |
| Jeff | Firrelli | 1076 | Firrelli | Jeff | x9273 | jfirrelli@classicmodelcars
|.com | 1 | 1002 | VP Marketing | | |
| Julie | Firrelli | 1188 | Firrelli | Julie | x2173 | jfirrelli@classicmodelcars
|.com | 2 | 1143 | Sales Rep | | |
| Larry | Bott | 1501 | Bott | Larry | x2311 | lbott@classicmodelcars.com
| m | 7 | 1102 | Sales Rep | | |
| Leslie | Jennings | 1165 | Jennings | Leslie | x3291 | ljennings@classicmodelcars
|.com | 1 | 1143 | Sales Rep | | |
| Leslie | Thompson | 1166 | Thompson | Leslie | x4065 | lthompson@classicmodelcars
|.com | 1 | 1143 | Sales Rep | | |
| Loui | Bondur | 1337 | Bondur | Loui | x6493 | lbondur@classicmodelcars.c
| om | 4 | 1102 | Sales Rep | | |
| Mami | Nishi | 1621 | Nishi | Mami | x101 | mnishi@classicmodelcars.co
| m | 5 | 1056 | Sales Rep | | |
| Martin | Gerard | 1702 | Gerard | Martin | x2312 | mgerard@classicmodelcars.c
| om | 4 | 1102 | Sales Rep | | |
| Mary | Patterson | 1056 | Patterson | Mary | x4611 | mpatterso@classicmodelcars
|.com | 1 | 1002 | VP Sales | | |
| Pamela | Castillo | 1401 | Castillo | Pamela | x2759 | pcastillo@classicmodelcars
|.com | 4 | 1102 | Sales Rep | | |
| Peter | Marsh | 1612 | Marsh | Peter | x102 | pmarsh@classicmodelcars.co
| m | 6 | 1088 | Sales Rep | | |
| Steve | Patterson | 1216 | Patterson | Steve | x4334 | spatterson@classicmodelcar
|.com | 2 | 1143 | Sales Rep | | |
| Tom | King | 1619 | King | Tom | x103 | tking@classicmodelcars.com
| m | 6 | 1088 | Sales Rep | | |
| William | Patterson | 1088 | Patterson | William | x4871 | wpatterson@classicmodelcar
|.com | 6 | 1056 | Sales Manager (APAC) | | |
| Yoshimi | Kato | 1625 | Kato | Yoshimi | x102 | ykato@classicmodelcars.com
| m | 5 | 1621 | Sales Rep | | |
```

6. Ahora actualiza la tabla empleadosclientes de esta manera: el nombre y el apellido de las tuplas procedentes de los contactos, van a contener ‘Contacto’ y ‘Contacto’ respectivamente.

7. Muestra el contenido de la tabla empleadosclientes.

8. Ahora vamos a usar la tabla de pagos y clientes: para TODOS los clientes, mostrar su nombre y numero de sus pagos. Sugerencia: usar LEFT JOIN

```
MariaDB [classicmodels]>
MariaDB [classicmodels]> SELECT customers.customerName, payments.checkNumber FROM customers LEFT JOIN payments ON
customers.customerNumber=payments.customerNumber;
+-----+-----+
| customerName | checkNumber |
+-----+-----+
| Atelier graphique | HQ336336 |
| Atelier graphique | JM555205 |
| Atelier graphique | OM314933 |
| Signal Gift Stores | B0864823 |
| Signal Gift Stores | HQ55022 |
| Signal Gift Stores | ND748579 |
| Australian Collectors, Co. | GG31455 |
| Australian Collectors, Co. | MA765515 |
| Australian Collectors, Co. | NP603840 |
| Australian Collectors, Co. | NR27552 |
| La Rochelle Gifts | DB933704 |
| La Rochelle Gifts | LN373447 |
| La Rochelle Gifts | NG94694 |
| Baane Mini Imports | DB889831 |
| Baane Mini Imports | FD317790 |
| Baane Mini Imports | KI831359 |
| Baane Mini Imports | MA302151 |
| Mini Gifts Distributors Ltd. | AE215433 |
| Mini Gifts Distributors Ltd. | BG255406 |
| Mini Gifts Distributors Ltd. | CQ287967 |
| Mini Gifts Distributors Ltd. | ET64396 |
| Mini Gifts Distributors Ltd. | HI366474 |
| Mini Gifts Distributors Ltd. | HR86578 |
| Mini Gifts Distributors Ltd. | KI131716 |
| Mini Gifts Distributors Ltd. | LF217299 |
| Mini Gifts Distributors Ltd. | NT141748 |
| Havel & Zbyszek Co. | NULL |
| Blauer See Auto, Co. | DI925118 |
| Blauer See Auto, Co. | FA465482 |
| Blauer See Auto, Co. | FH668230 |
| Blauer See Auto, Co. | IP383901 |
| Mini Wheels Co. | DM826140 |
| Mini Wheels Co. | ID449593 |
| Mini Wheels Co. | PI42991 |
| Land of Toys Inc. | CL442705 |
| Land of Toys Inc. | MA724562 |
| Land of Toys Inc. | NB445135 |
| Euro+ Shopping Channel | AU364101 |
| Euro+ Shopping Channel | DB583216 |
| Euro+ Shopping Channel | DL466618 |
| Euro+ Shopping Channel | HJ32686 |
| Euro+ Shopping Channel | ID10962 |
| Euro+ Shopping Channel | IN446258 |
| Euro+ Shopping Channel | JE105477 |
| Euro+ Shopping Channel | JN355280 |
| Euro+ Shopping Channel | JN722010 |
| Euro+ Shopping Channel | KT52578 |
| Euro+ Shopping Channel | MC46946 |
| Euro+ Shopping Channel | MF629602 |
+-----+-----+
```

9. Seleccionar todos los registros de la clientes más todas las coincidencias de sus pedidos. Sugerencia: usar RIGHT JOIN

```
sudo mysql104x56
+-----+-----+
326 rows in set (0.001 sec)

MariaDB [classicmodels]> SELECT c.customerName, o.orderNumber From customers c  RIGHT JOIN orders o  ON
c.customerNumber=o.customerNumber;
+-----+-----+
| customerName          | orderNumber |
+-----+-----+
| Atelier graphique      | 10123      |
| Atelier graphique      | 10298      |
| Atelier graphique      | 10345      |
| Signal Gift Stores     | 10124      |
| Signal Gift Stores     | 10278      |
| Signal Gift Stores     | 10346      |
| Australian Collectors, Co. | 10120      |
| Australian Collectors, Co. | 10125      |
| Australian Collectors, Co. | 10223      |
| Australian Collectors, Co. | 10342      |
| Australian Collectors, Co. | 10347      |
| La Rochelle Gifts      | 10275      |
| La Rochelle Gifts      | 10315      |
| La Rochelle Gifts      | 10375      |
| La Rochelle Gifts      | 10425      |
| Baane Mini Imports      | 10103      |
| Baane Mini Imports      | 10158      |
| Baane Mini Imports      | 10309      |
| Baane Mini Imports      | 10325      |
| Mini Gifts Distributors Ltd. | 10113      |
| Mini Gifts Distributors Ltd. | 10135      |
| Mini Gifts Distributors Ltd. | 10142      |
| Mini Gifts Distributors Ltd. | 10182      |
| Mini Gifts Distributors Ltd. | 10229      |
| Mini Gifts Distributors Ltd. | 10271      |
| Mini Gifts Distributors Ltd. | 10282      |
| Mini Gifts Distributors Ltd. | 10312      |
| Mini Gifts Distributors Ltd. | 10335      |
| Mini Gifts Distributors Ltd. | 10357      |
| Mini Gifts Distributors Ltd. | 10368      |
| Mini Gifts Distributors Ltd. | 10371      |
| Mini Gifts Distributors Ltd. | 10382      |
| Mini Gifts Distributors Ltd. | 10385      |
| Mini Gifts Distributors Ltd. | 10390      |
| Mini Gifts Distributors Ltd. | 10396      |
| Mini Gifts Distributors Ltd. | 10421      |
| Blauer See Auto, Co.      | 10101      |
| Blauer See Auto, Co.      | 10230      |
| Blauer See Auto, Co.      | 10300      |
| Blauer See Auto, Co.      | 10323      |
| Mini Wheels Co.          | 10111      |
| Mini Wheels Co.          | 10201      |
| Mini Wheels Co.          | 10333      |
| Land of Toys Inc.        | 10107      |
| Land of Toys Inc.        | 10248      |
| Land of Toys Inc.        | 10292      |
| Land of Toys Inc.        | 10329      |
| Euro+ Shopping Channel    | 10104      |
| Euro+ Shopping Channel    | 10128      |

```

10. Extrae para todos los empleados (tabla employees) su nombre, apellido, y el nombre y apellido de la persona a la que reporta.

Sugerencia: hay que emular una SELF JOIN (o JOIN sobre la misma tabla) ya que se trata de obtener datos de la misma tabla. El atributo donde se va a obtener el identificador de la persona a la que reporta es reportsTo.

```
sudo mysql 104x56
MariaDB [classicmodels]> SELECT e.firstName,e.lastName, c.customerName,c.contactLastName FROM employees
e LEFT JOIN customers c ON c.salesRepEmployeeNumber=e.reportsTo;
+-----+-----+-----+-----+
| firstName | lastName | customerName | contactLastName |
+-----+-----+-----+-----+
| Yoshimi | Kato | Dragon Souveniers, Ltd. | Natividad |
| Yoshimi | Kato | Osaka Souveniers Co. | Kentary |
| Yoshimi | Kato | King Kong Collectables, Co. | Gao |
| Yoshimi | Kato | Cruz & Sons Co. | Cruz |
| Yoshimi | Kato | Tokyo Collectables, Ltd | Shimamura |
| Diane | Murphy | NULL | NULL |
| Mary | Patterson | NULL | NULL |
| Jeff | Firrelli | NULL | NULL |
| William | Patterson | NULL | NULL |
| Gerard | Bondur | NULL | NULL |
| Anthony | Bow | NULL | NULL |
| Leslie | Jennings | NULL | NULL |
| Leslie | Thompson | NULL | NULL |
| Julie | Firrelli | NULL | NULL |
| Steve | Patterson | NULL | NULL |
| Foon Yue | Tseng | NULL | NULL |
| George | Vanauf | NULL | NULL |
| Louis | Bondur | NULL | NULL |
| Gerard | Hernandez | NULL | NULL |
| Pamela | Castillo | NULL | NULL |
| Larry | Bott | NULL | NULL |
| Barry | Jones | NULL | NULL |
| Andy | Fixter | NULL | NULL |
| Peter | Marsh | NULL | NULL |
| Tom | King | NULL | NULL |
| Mami | Nishi | NULL | NULL |
| Martin | Gerard | NULL | NULL |
+-----+-----+-----+-----+
27 rows in set (0.001 sec)

MariaDB [classicmodels]>
```

11. Modificar el ejercicio 10, para que el primer nombre y apellido salgan separado por un blanco y en una misma columna llamada Jefe; y el segundo nombre y apellido salgan separado por un blanco y en una misma columna llamada Subordinados. Un ejemplo de esta salida es:

```
sudo mysql 104x56
MariaDB [classicmodels]> SELECT concat(e.firstName,e.lastName) AS Jefe,concat(c.contactFirstName,
c.contactLastName)AS Subordinado FROM employees e LEFT JOIN customers c ON c.salesRepEmployeeNumber=e.report
sTo;
+-----+-----+
| Subordinado | Jefe |
+-----+-----+
| YoshimiKato | ErichNatividad |
| YoshimiKato | MoryKentary |
| YoshimiKato | MikeGao |
| YoshimiKato | ArnoldCruz |
| YoshimiKato | AkikoShimamura |
| DianeMurphy | NULL |
| MaryPatterson | NULL |
| JeffFirrelli | NULL |
| WilliamPatterson | NULL |
| GerardBondur | NULL |
| AnthonyBow | NULL |
| LeslieJennings | NULL |
| LeslieThompson | NULL |
| JulieFirrelli | NULL |
| StevePatterson | NULL |
| FoonYueTseng | NULL |
| GeorgeVanauf | NULL |
| LouisBondur | NULL |
| GerardHernandez | NULL |
| PamelaCastillo | NULL |
| LarryBott | NULL |
| BarryJones | NULL |
| AndyFixter | NULL |
| PeterMarsh | NULL |
| TomKing | NULL |
| MamiNishi | NULL |
| MartinGerard | NULL |
+-----+-----+
27 rows in set (0.001 sec)

MariaDB [classicmodels]>
```

12. Extrae los atributos de todos los clientes cuyo apellido de contacto sea igual que el apellido de algún empleado. Sugerencia: se puede realizar con una consulta derivada usando IN en la que coincidan contactLastName y lastName

sudo mysql 21x56																				
customerNumber	customerName	contactLastName	contactFirstName	phone	addressLine1	addressLine2	city	state	postalCode	country	salesRepEmployeeNumber	creditLimit	employeeNumber	lastName	firstName	extension	email	officeCode	reportsTo	jobTitle
129	Mini Wheels Co.	Murphy	Julie	+650555787	5557 North Pendale Street		San Francisco	CA	94217	USA		116	64600	Murphy	Diane	x5800	d murphy@classicmodelcars.com	1	NULL	President
173	Cambridge Collectables Co.	Tseng	Jerry	+6175555555	4658 Baden Av.		Cambridge	MA	02147	USA		118	43406	Tseng	Poon Yue	x2248	j tseng@classicmodelcars.com	1143	Sales Rep	
175	Signal Oil Stores	King	Tom	+3125555111	3000 S. Wabash	8409 Strong St.	Las Vegas	NV	88030	USA		116	71800	King	1819	x103	t king@classicmodelcars.com	1088	Sales Rep	
175	Gift Depot Inc.	King	Julie	+205552570	25593 South Bay Ln.		Bridgewater	CT	06756	USA		132	84300	King	1619	x103	j king@classicmodelcars.com	1088	Sales Rep	
239	Collectable Mini Designs Co.	Thompson	Valarie	+7005550146	361 Furth Circle		San Diego	CA	91217	USA		116	105000	Thompson	Leslie	x4065	l thompson@classicmodelcars.com	1143	Sales Rep	
286	Marta's Replicas Co.	Hernandez	Marta	+6175558555	39323 Spinaker Dr.		Cambridge	MA	02147	USA		121	123700	Hernandez	Gerard	x2028	g hernandez@classicmodelcars.com	1102	Sales Rep	
455	Super Scale Inc.	Murphy	Leslie	+2035559545	567 North Pendale Street		New Haven	CT	06823	USA		128	95400	Murphy	1802	x5800	d murphy@classicmodelcars.com	1	NULL	President
475	West Coast Collectables Co.	Thompson	Steve	+3105553722	3675 Furth Circle		Burbank	CA	94019	USA		116	55400	Thompson	Leslie	x4065	l thompson@classicmodelcars.com	1143	Sales Rep	
424	Classic Legends Inc.	Hernandez	Maria	+2125558493	5905 Pumpton St.	Suite 750	NYC	10022	USA			67500	Hernandez	1370	x2028	g hernandez@classicmodelcars.com	1102	Sales Rep		

13. Extrae los nombres de los productos que han tenido algún pedido con una cantidad superior a 20. Sugerencia: realizar una consulta EXISTS relacionando la tabla products con la tabla orderdetails.

109 rows in set (0.003 sec)
MariaDB [classicmodels]>
MariaDB [classicmodels]> SELECT p.productName FROM products p WHERE EXISTS(SELECT o.productCode FROM orderdetails o WHERE p.productCode=o.productCode AND o.quantityOrdered > 20);
productName
1917 Grand Touring Sedan
1911 Ford Town Car
1932 Alfa Romeo 8C2300 Spider Sport
1936 Mercedes Benz 500K Roadster
1932 Model A Ford J-Coupe
1928 Mercedes-Benz SSK
1939 Chevrolet Deluxe Coupe
1938 Cadillac V-16 Presidential Limousine
1937 Lincoln Berlin
1936 Mercedes-Benz 500K Special Roadster
1952 Alpine Renault 1300
1962 Lancia Delta 16V
1958 Setra Bus
1948 Ford Pickup Truck
1926 Ford Fire Engine
1913 Ford Model T Speedster
1934 Ford VB Coupe
18th Century Vintage Horse Carriage
1917 Maxwell Touring Car
1940s Ford truck
1939 Cadillac Limousine
1962 Volkswagen Microbus
1936 Chrysler Airflow
1980's GM Manhattan Express
1996 Peterbilt 379 Stake Bed with Outrigger
1962 Camaro Z28
1969 Corvair Monza
1957 Chevy Pickup
1998 Chrysler Plymouth Prowler
1964 Mercedes Tour Bus
1992 Ferrari 360 Spider red
1970 Triumph Spitfire
1970 Dodge Coronet
1958 Chevy Corvette Limited Edition
1992 Porsche Cayenne Turbo Silver
1954 Greyhound Scenicruiser
1950's Chicago Surface Lines Streetcar
Diamond T020 Semi-Skirted Tanker
1962 City of Detroit Streetcar
1972 Alfa Romeo GTA
2001 Ferrari Enzo
1969 Ford Falcon
1993 Ford Model A
Collectable Wooden Train
1904 Buick Runabout
18th century schooner
1912 Ford Model T Delivery Wagon
1940 Ford Delivery Sedan

14. Modifica la consulta del ejercicio 13, usando ANY.

```
sudo mysql104x56
+-----+
109 rows in set (0.003 sec)

MariaDB [classicmodels]>
MariaDB [classicmodels]> SELECT p.productName FROM products p WHERE p.productCode=ANY(SELECT o.productCode FROM orderdetails o WHERE o.quantityOrdered > 20);
+-----+
| productName |
+-----+
| 1917 Grand Touring Sedan
| 1911 Ford Town Car
| 1932 Alfa Romeo 8C2300 Spider Sport
| 1936 Mercedes Benz 500K Roadster
| 1932 Model A Ford J-Coupe
| 1928 Mercedes-Benz SSK
| 1939 Chevrolet Deluxe Coupe
| 1938 Cadillac V-16 Presidential Limousine
| 1937 Lincoln Berline
| 1936 Mercedes-Benz 500K Special Roadster
| 1952 Alpine Renault 1300
| 1962 Lancia Delta 16V
| 1958 Setra Bus
| 1940 Ford Pickup Truck
| 1926 Ford Fire Engine
| 1913 Ford Model T Speedster
| 1934 Ford V8 Coupe
| 18th Century Vintage Horse Carriage
| 1917 Maxwell Touring Car
| 1940s Ford truck
| 1939 Cadillac Limousine
| 1962 Volkswagen Microbus
| 1936 Chrysler Airflow
| 1980's GM Manhattan Express
| 1996 Peterbilt 379 Stake Bed with Outrigger
| 1982 Camaro Z28
| 1969 Corvair Monza
| 1957 Chevy Pickup
| 1998 Chrysler Plymouth Prowler
| 1964 Mercedes Tour Bus
| 1992 Ferrari 360 Spider red
| 1970 Triumph Spitfire
| 1970 Dodge Coronet
| 1958 Chevy Corvette Limited Edition
| 1992 Porsche Cayenne Turbo Silver
| 1954 Greyhound Scenicruiser
| 1950's Chicago Surface Lines Streetcar
| Diamond T620 Semi-Skirted Tanker
| 1962 City of Detroit Streetcar
| 1972 Alfa Romeo GTA
| 2001 Ferrari Enzo
| 1969 Ford Falcon
| 1903 Ford Model A
| Collectable Wooden Train
| 1904 Buick Runabout
| 18th century schooner
| 1912 Ford Model T Delivery Wagon
| 1940 Ford Delivery Sedan
+-----+
```

15. Crea una tabla nueva emp1, con los atributos y respectivos tipos de employeeNumber, firstName, lastName de la tabla employee. Inserta en esta nueva tabla, los valores de la tabla customers, concretamente en los atributos customerNumber, contactFirstName, contactLastName, cuyo país sea USA. Sugerencia: usar INSERT INTO SELECT

```
sudo mysql 104x56
MariaDB [classicmodels]> INSERT INTO emp1 SELECT customerNumber,contactFirstName,contactLastName FROM customers c WHERE c.country='USA';
Query OK, 36 rows affected (0.002 sec)
Records: 36  Duplicates: 0  Warnings: 0

MariaDB [classicmodels]> select * from emp1;
+-----+-----+-----+
| employeeNumber | firstName | lastName |
+-----+-----+-----+
| 112 | Jean | King |
| 124 | Susan | Nelson |
| 129 | Julie | Murphy |
| 131 | Kwai | Lee |
| 151 | Jeff | Young |
| 157 | Kelvin | Leong |
| 161 | Juri | Hashimoto |
| 168 | Keith | Franco |
| 173 | Jerry | Tseng |
| 175 | Julie | King |
| 181 | Michael | Frick |
| 198 | Leslie | Taylor |
| 204 | Miguel | Barajas |
| 205 | Julie | Young |
| 219 | Mary | Young |
| 239 | Valarie | Thompson |
| 286 | Marta | Hernandez |
| 319 | Steve | Frick |
| 320 | Wing | Huang |
| 321 | Julie | Brown |
| 328 | William | Brown |
| 339 | Francisca | Cervantes |
| 347 | Brian | Chandler |
| 362 | Juri | Yoshido |
| 363 | Dorothy | Young |
| 379 | Allen | Nelson |
| 424 | Maria | Hernandez |
| 447 | Dan | Lewis |
| 450 | Sue | Frick |
| 455 | Leslie | Murphy |
| 456 | Yu | Choi |
| 462 | Violeta | Benitez |
| 475 | Steve | Thompson |
| 486 | Rosa | Salazar |
| 487 | Sue | Taylor |
| 495 | Valarie | Franco |
| 112 | Jean | King |
| 124 | Susan | Nelson |
| 129 | Julie | Murphy |
| 131 | Kwai | Lee |
| 151 | Jeff | Young |
| 157 | Kelvin | Leong |
| 161 | Juri | Hashimoto |
| 168 | Keith | Franco |
| 173 | Jerry | Tseng |
| 175 | Julie | King |
| 181 | Michael | Frick |

```

16. Modificar el atributo extension de la tabla employee con los valores del atributo territory de la tabla offices, en las tuplas donde ambas coincidan en el atributo officeCode. Sugerencia: usar UPDATE JOIN

```
sudo mysql 104x56
MariaDB [classicmodels]> UPDATE employees e INNER JOIN offices o ON e.officeCode=o.officeCode SET e.extension=o.territory;
Query OK, 0 rows affected (0.000 sec)
Rows matched: 23  Changed: 0  Warnings: 0

MariaDB [classicmodels]>
```

17. Borrar las tuplas de clientes que no han tenido ningún pedido. Sugerencia: usar DELETE LEFT JOIN

```
sudo mysql 104x56
stomerNumber WHERE o.customerNumber IS NULL;
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MariaDB server version for the right syntax to use near 'c FROM customers c LEFT JOIN orders o ON o.customerNumber=c.customerNumber WHERE o.customerNumber IS NULL';
MariaDB [classicmodels]> DELETE c FROM customers c LEFT JOIN orders o ON o.customerNumber=c.customerNumber WHERE o.customerNumber IS NULL;
Query OK, 24 rows affected (0.002 sec)

MariaDB [classicmodels]>

MariaDB [classicmodels]> DELETE c FROM customers c LEFT JOIN orders o ON o.customerNumber=c.customerNumber WHERE o.customerNumber IS NULL;
Query OK, 0 rows affected (0.001 sec)

MariaDB [classicmodels]>
```

18. Este ejercicio consta de varios pasos:

- Crea una tabla nueva llamada edificios, con un solo atributo de tipo int, llamado numedif. Esta tabla tiene como clave primaria numedif.
- Inserta 3 tuplas con los valores 1, 2, 3 respectivamente para numedif.
- Crea una tabla nueva llamada puertas, con 2 atributos de tipo int: numpuerta, que es clave primaria, y numedif que es clave foránea, que referencia a numedif de edificios. Al crear esta tabla, en la clave foránea tienes que poner **ON DELETE CASCADE**.
- Inserta 6 tuplas con los valores (1, 1), (2, 1), (3, 1), (4, 1), (5, 2), (6, 3) respectivamente.
- Borra la tupla de edificios que tiene 1 como numedif.

¿Qué consecuencias ha tenido este borrado para la tabla puertas?

```
MariaDB [classicmodels]> CREATE TABLE edificios(numedif int(11) ,PRIMARY KEY(numedif));
Query OK, 0 rows affected (0.005 sec)

MariaDB [classicmodels]> INSERT INTO edificios(numedif) VALUES (1),(2),(3);
Query OK, 3 rows affected (0.001 sec)
Records: 3  Duplicates: 0  Warnings: 0

MariaDB [classicmodels]> CREATE TABLE puertas(numpuerta int(11),numedif int(11) ,PRIMARY KEY(numpuerta),
FOREIGN KEY(numedif) REFERENCES edificio(numedif) ON DELETE CASCADE);
ERROR 1005 (HY000): Can't create table `classicmodels`.`puertas` (errno: 150 "Foreign key constraint is
incorrectly formed")
MariaDB [classicmodels]> CREATE TABLE puertas(numpuerta int(11),numedif int(11) ,PRIMARY KEY(numpuerta),
FOREIGN KEY(numedif) REFERENCES edificios(numedif) ON DELETE CASCADE);
Query OK, 0 rows affected (0.008 sec)

MariaDB [classicmodels]> INSERT INTO puertas(numpuerta,numedif) VALUES (1,1),(2,1),(3,1),(4,1),(5,2),(6,
3);
Query OK, 6 rows affected (0.001 sec)
Records: 6  Duplicates: 0  Warnings: 0

MariaDB [classicmodels]> DELETE e FROM edificios e WHERE numedif=1;
Query OK, 1 row affected (0.001 sec)

MariaDB [classicmodels]> select * from puertas;
+-----+-----+
| numpuerta | numedif |
+-----+-----+
|      5    |     2    |
|      6    |     3    |
+-----+-----+
2 rows in set (0.000 sec)

MariaDB [classicmodels]> COMO LE HEMOS INDICADO ON DELETE CASCADE ,AL ELIMINAR EN UNA TABLA SE HA
          BUSCADO LAS REFERENCIAS DE LOS DATOS BORRADOS Y SE HAN BORRADO TAMBIEN
```