Introducción a bases de datos Sesión 3

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1. Ejemplos

```
1 SHOW KEYS FROM venta;
        -----
# | Table | Non_unique | Key_name | Seq_in_index | Column_name | Collation |
   Cardinality | Sub_part | Packed | Null | Index_type | Comment | Index_comment | Visible |
   Expression |
1
7 # | venta | 1 | fk_venta_empleado1_idx | 642 | NULL | BTREE | |
                                       1 | id_empleado | A
    ----+
9 # 3 rows in set (0.09 sec)
12 SELECT*FROM empleado AS e JOIN puesto AS p ON e.id_puesto=p.id_puesto;
# | id_empleado | id_puesto | nombre | apellido_paterno
                                             | apellido_materno | rfc
       | id_puesto | nombre
                                        | salario |
  | 18836.86 |
                                             | Metham
17 # I
                                            | 10326.54 |
                659 | Budget/Accounting Analyst IV
18 # | 3 |
                                              | Heisler
                                            | 19806.07 |
                                             | Chapell
                                             | 20528.15 |
                                             | Kalinowsky
                                            | 20688.87 |
                                             | 19593.51 |
22 # 1000 rows in set (0.25 sec)
25 SELECT*FROM puesto AS p LEFT JOIN empleado e ON p.id_puesto=e.id_puesto;
```

```
27 # | id_puesto | nombre
                                                                       | salario | id_empleado | id_puesto | nombre
        | apellido_paterno | apellido_materno | rfc |
             ______
 29 # | 1 | Analog Circuit Design manager | 28500.98 | 158 |
Kristien | MacGiffin | Spurden | BPSX843218N44 |
            1 | Analog Circuit Design manager | 28500.98 | 882 | 1 | Killie
                                                                                             | ILEX192895U29 |
                     | Cosyns
                                               | Jakoubek
                                                                                            | 10508.47 | NULL | NULL | NULL | NULL
                      2 | Junior Executive
 31 #
                                                                 NULL
                                                                                             | NULL |
| 28725.56 | 51
                     NULL
                                                                                                                              519 |
 32 # |
                        3 | Director of Sales
                                                                                                                                                    3 | Dicky
                                                                | Nutbrown
                     Abotson
                                                                                             | CSZT485586W61 |
                       3 | Director of Sales
                                                                                            | 28725.56 | 843 |
                                                                                                                                                    3 |
                                                                            | Schnitter | KDFM877616F59 |
     Thorndike | Dowdall
                                                                              | 14965.31 | 317 |
             4 | Staff Scientist
                                                                                                                                                    4 | Norrie
                      | McGarrie
                                                                   | Hartopp
                                                                                               | HDOW177256016 |
                                                                                             | 14965.31 | 361 |
 35 # |
                      4 | Staff Scientist
                                                                                                                                                  4 | Maxy
                     Udden
                                                                                              | MBZF302490Y06 |
                                                                   | Kose
                      5 | Desktop Support Technician
                                                                                                                                               NULL | NULL
                                                                                             | 15885.41 | NULL |
 36 # I
                                                                                             | NULL |
| 17131.23 |
                     NULL
                                                            NULL
                        6 | Budget/Accounting Analyst III
                                                                                                                              166 |
                                                                                                                                                    6 | Della
 37 # I
                     | Fulbrook | Harrie
6 | Budget/Accounting Analyst III
                                                                                             | APGJ840909W11 |
                                                                                             | 17131.23 |
                                                                                                                              206 |
                                                                                                                                                    6 | Katya
 38 # |
                                                                                             | ELAY505814Q48 |
                     | Banbridge | Fossitt
                     7 | Accounting Assistant III
| Tibald | Pymer
                                                                                             | 29257.91 |
                                                                                                                               796 l
                                                                                                                                              7 | Abbie
                                                                                            | OCBH010837012 |
                     | 23223.95 | NULL | NULL | NULL
                                                                                            NULL
                     NULL
 # 1366 rows in set (0.24 sec)
 44 SELECT*FROM empleado AS e RIGHT JOIN puesto AS p ON e.id_puesto=p.id_puesto;
 # | id_empleado | id_puesto | nombre | apellido_paterno | apellido_materno | rfc
                    | id_puesto | nombre
                                                                                            | salario |
 48 # | 158 | 1 | Kristien | MacGiffin | Spurden |
BPSX843218N44 | 1 | Analog Circuit Design manager | 28500.98 |
49 # | 882 | 1 | Killie | Cosyns | Jakoubek |
ILEX192895U29 | 1 | Analog Circuit Design manager | 28500.98 |
NULL
                                                                                                                                                      | NULL
                                                                                                                                                         I NULL.
 ELATOUGE...

58 # | 796 | 7 | ADDIC

0CBH010837012 | 7 | Accounting Assistant II.

59 # | NULL | NUL
                                                                                                               l NULL
                                                                                                                                                         I NULL
 # 1366 rows in set (0.24 sec)
```

SELECT v.clave, v.fecha, a.nombre producto, a.precio, concat(e.nombre, '', e.apellido_paterno)
empleado FROM venta v JOIN empleado e ON v.id_empleado=e.id_empleado JOIN articulo a ON v.

```
id_articulo=a.id_articulo;
 3 # | clave
                | fecha
                                     | producto
                                                                           | precio | empleado
                         -
5 # | 0228-3661 | 2019-11-15 00:00:00 | Cake - Cake Sheet Macaroon
                                                                          | 3714.37 | Arlana
      Fanstone
6 # | 52125-277 | 2019-04-23 00:00:00 | Beans - Long, Chinese
                                                                           | 1157.42 | Julianna
      Gecke
 7 # | 0049-0032 | 2019-08-31 00:00:00 | Beef - Rib Roast, Capless
                                                                          | 4788.24 | Maryellen
      Parkisson
8 # | 52125-277 | 2020-02-03 15:04:57 | Langers - Ruby Red Grapfruit
                                                                          | 4786.97 | Cad
      Sambedge
9 # | 13107-062 | 2019-10-30 00:00:00 | Filter - Coffee
                                                                           | 5816.84 | Michaeline
      Stolli
# | 0049-0032 | 2020-02-03 15:05:27 | Corn Meal
                                                                           | 5066.16 | Courtnay
      Harston
# | 47335-894 | 2019-06-08 00:00:00 | Wine - White, Pelee Island
                                                                           | 2735.46 | Giuditta
      Chicchetto
12 # | 52125-277 | 2020-02-03 15:04:57 | Bagelers - Cinn / Brown
                                                                           | 1133.63 | Julianna
      Gecke
13 # | 0049-0032 | 2020-02-03 15:05:27 | Smoked Tongue
                                                                            | 2115.44 | Rosalinde
      Livock
# | 13107-062 | 2020-02-03 15:05:40 | Sage Ground Wiberg
                                                                           | 2689.33 | Ema
      Itzkovwich
# | 51655-951 | 2019-10-10 00:00:00 | Duck - Breast
                                                                           | 1930.66 | Emmy Roblin
# | 0049-0032 | 2020-02-03 15:05:27 | Filter - Coffee
                                                                            | 5816.84 | Mignonne
     Baszniak
17 # | 52380-1865 | 2019-07-09 00:00:00 | Strawberries - California
                                                                           | 3620.47 | Hersch
      Blader
18 # | 47335-894 | 2020-02-03 15:05:50 | Cake - Box Window 10x10x2.5
                                                                          | 5929.94 | Hyacinthia
     Petz
19 # | 13107-062 | 2020-02-03 15:05:40 | Beef - Montreal Smoked Brisket
                                                                          | 1864.11 | Frederich
      Canton
20 # | 52125-277 | 2020-02-03 15:04:57 | Veal - Tenderloin, Untrimmed
                                                                           | 3635.75 | Pernell
      Brotherwood
21 # | 69128-001 | 2019-03-23 00:00:00 | Juice - Lemon
                                                                           | 2485.2 | Berenice
      Scolland
22 # | 0049-0032 | 2020-02-03 15:05:27 | Carbonated Water - Blackberry
                                                                          | 6652.19 | Morganne
      Curley
# | 52343-028 | 2019-12-18 00:00:00 | Tomatoes - Diced, Canned
                                                                          | 3800.76 | Andree
     Shill
24 # 1000 rows in set (0.25 sec)
25
27 CREATE VIEW tickets_786 AS (SELECT v.clave, v.fecha, a.nombre producto, a.precio, concat(e.nombre,
      ' ', e.apellido_paterno) empleado FROM venta v JOIN empleado e ON v.id_empleado=e.id_empleado
       JOIN articulo a ON v.id_articulo=a.id_articulo);
# Query OK, O rows affected (0.09 sec)
29
31 SELECT * FROM tickets_786;
32 # Same as the first query
33
34
35 SELECT clave, round(sum(precio),2) total FROM tickets_786 GROUP BY clave;
36 # +-----+
37 # | clave | total
38 # +-
39 # | 0228-3661 | 3714.37 |
40 # | 52125-277 | 340582.65 |
# | 0049-0032 | 321524.61 |
42 # | 13107-062 | 249071.46 |
43 # | 47335-894 | 223650.32 |
44 # | 51655-951 | 190821.21 |
45 # | 52380-1865 | 162361.13 |
```

```
# | 69128-001 | 174310.76 |

47 # | 52343-028 | 150970.75 |

48 # | 68040-706 | 131078.51 |

49 # | 66336-030 | 102351.64 |

50 # | 47682-146 | 124106.79 |

51 # | 60760-353 | 104536.46 |

52 # 169 rows in set (0.08 sec)
```

2. Retos

```
1 SELECT clave, nombre, apellido_paterno FROM venta AS v JOIN empleado AS e ON v.id_empleado=e.
       id_empleado ORDER BY clave;
 2 # +----
 3 # | clave | nombre | apellido_paterno
                                                       | Junkinson
 7 # | 0002-8149 | Edee
                                 | Billin
8 # | 0002-8149 | Jillie | Corter

9 # | 0002-8149 | Sydney | Woolway

10 # | 0002-8149 | Aguistin | Richarz

11 # | 0002-8149 | Sigfrid | Teal

12 # | 0002-8149 | Rebecka | Rushworth

13 # | 0002-8149 | Nora
13 # | 0002-8149 | Nora
14 # | 0002-8149 | Luise
                                 Lennard
# 1000 rows in set (0.16 sec)
18
19
20 SELECT clave, nombre FROM venta AS v JOIN articulo AS a ON v.id_articulo=a.id_articulo ORDER BY
     clave;
21 # +-----
22 # | clave | nombre
24 # | 0002-8149 | Sprouts - Pea
_{25} # | 0002-8149 | Wine - Saint - Bris 2002, Sauv
26 # | 0002-8149 | Sauce Tomato Pouch
27 # | 0002-8149 | Wine - Montecillo Rioja Crianza
28 # | 0002-8149 | Yokaline
29 # | 0002-8149 | Marsala - Sperone, Fine, D.o.c.
_{\rm 30} # | 0002-8149 | Glaze - Clear
_{31} # | 0002-8149 | Beans - Green _{32} # | 0002-8149 | Water, Tap
33 # | 0002-8149 | Butter Sweet
34 # | 0002-8149 | Sour Puss - Tangerine
_{\rm 35} # | 0002-8149 | Bread - White, Sliced
36 # | 0002-8149 | Juice - Orange 1.891
37 # | 0008-0833 | Ice Cream Bar - Drumstick
38 # | 0009-0347 | Frangelico
39 # | 0019-9888 | Shrimp - 16 - 20 Cooked, Peeled
_{\rm 40} # | 0023-9177 | Rabbit - Saddles
41 # 1000 rows in set (0.16 sec)
42
43
44 SELECT clave, round(sum(precio),1) AS total FROM venta AS v JOIN articulo AS a ON v.id_articulo=a.
      id_articulo GROUP BY clave ORDER BY clave;
45 # +-----+
46 # | clave | total |
47 # +-----+
48 # | 0002-8149 | 38642.6 |
49 # | 0008-0833 | 862.6 | 50 # | 0009-0347 | 6879.6 |
51 # | 0009-0347 |
                       178.6 I
52 # | 0023-9177 |
                     3891.9 |
# | 0049-0032 | 321524.6 |
54 # | 0065-0396 | 5572 |
55 # | 0067-5080 | 1675.5 |
56 # | 0067-6122 | 87221.9
57 # | 0069-1001 | 5382.4 |

    58
    #
    |
    0074-6633
    |
    2882.7
    |

59 # | 0075-2915 |
                      2799.8 |
60 # 169 rows in set (0.08 sec)
 1 CREATE VIEW puestos_786 AS SELECT concat(e.nombre, ''', e.apellido_paterno), p.nombre FROM
      empleado e JOIN puesto p ON e.id_puesto=p.id_puesto;
 2 # Query OK, 0 rows affected (0.09 sec)
```

```
5 SELECT * FROM puestos_786;
 6 # +----
 # | concat(e.nombre, '', e.apellido_paterno) | nombre
 8 # +-----
 9 # | Enrichetta Bodechon
                                                               | Product Engineer
9 # | Enriches :
                                                                | Budget/Accounting Analyst IV
11 # | Jeannette Potes
                                                                | Occupational Therapist
12 # | Cassey Womersley
                                                              | Financial Advisor
                                                              | Physical Therapy Assistant
13 # | Gnni Risom
14 # | Lisle Carlsson
                                                              | Marketing Assistant
                                                              | Tax Accountant
# | Andre Theurer
16 # | Land Locksley
                                                                | Product Engineer
17 # | Nikki Fayerbrother
                                                              | Sales Associate
# 1000 rows in set (0.17 sec)
19
20
21 CREATE VIEW empleado_articulo_786 AS SELECT v.clave, concat(e.nombre, '', e.apellido_paterno)
       nombre, a.nombre articulo FROM venta v JOIN empleado e ON v.id_empleado=e.id_empleado JOIN
        articulo a ON v.id_articulo=a.id_articulo ORDER BY v.clave;
22 # Query OK, 0 rows affected (0.09 sec)
23
24
25 SELECT * FROM empleado_articulo_786;
27 # | clave | nombre
                                                                 | articulo
28 # +-----
# | 0002-8149 | Leonidas Junkinson | Sprouts - Pea | Wine - Saint - Bris 2002, Sauv | 0002-8149 | Leslie Cuvley | Wine - Saint - Bris 2002, Sauv
                                                          | Sauce Tomato Pouch
| Wine - Montecillo Rioja Crianza
| Yokaline
| Marsala - Sperone, Fine, D.o.c.
| Glaze - Clear
| Beans - Green
| Water, Tap
31 # | 0002-8149 | Edee Billin
32 # | 0002-8149 | Jillie Corter
33 # | 0002-8149 | Sydney Woolway
34 # | 0002-8149 | Aguistin Richarz
35 # | 0002-8149 | Sigfrid Teal
36 # | 0002-8149 | Rebecka Rushworth
37 # | 0002-8149 | Nora O'Suaird
38 # | 0002-8149 | Luise Lennard
                                                                 | Water, Tap
| Butter Sweet
38 # | 0002-0149 | Edise Lennard | Butter Sweet | Sour Puss - Tangerine | # | 0002-8149 | Petr Skedgell | Bread - White, Sliced
41 # | 0002-8149 | Doti Mc Kellen
42 # | 0008-0833 | Kain Glassopp
43 # | 0009-0347 | Alleyn Cornehl
                                                           | Juice - Orange 1.891
| Ice Cream Bar - Drumstick
| Frangelico
| Shrimp - 16 - 20 Cooked, Peeled
44 # | 0019-9888 | Rickie Arnaldy
45 # | 0023-9177 | Bethena Joly
44 # | 0019-9888 | Rickie Arnaldy | Shrimp - 16 - 20 Cooked, Peeled
45 # | 0023-9177 | Bethena Joly | Rabbit - Saddles
46 # | 0049-0032 | Maryellen Parkisson | Beef - Rib Roast, Capless
47 # | 0049-0032 | Courtnay Harston | Corn Meal
48 # | 0049-0032 | Rosalinde Livock | Smoked Tongue
49 # | 0049-0032 | Mignonne Baszniak | Filter - Coffee
50 # | 0049-0032 | Morganne Curley | Carbonated Water - Blackberry
51 # | 0049-0032 | Emalia Stirrip | Curry Powder
52 # | 0049-0032 | Shurlocke Pyford | Sherbet - Raspberry
53 # | 0049-0032 | Roger Hounihan | Beer - Sleemans Honey Brown
54 # | 0049-0032 | Imojean Cowl | Huck Towels White
55 # 1000 rows in set (0.24 sec)
56
57
58 CREATE VIEW puesto_ventas_786 AS SELECT p.nombre, count(v.clave) total FROM venta v JOIN empleado
   e ON v.id_empleado=e.id_empleado JOIN puesto p ON e.id_puesto=p.id_puesto GROUP BY p.nombre;
59 # Query OK, O rows affected (0.09 sec)
60
61
62 SELECT * FROM puesto_ventas_786 ORDER BY total DESC LIMIT 1;
63 # +-----+
                                           | total |
65 # +----
66 # | Physical Therapy Assistant | 23 |
68 # 1 row in set (0.08 sec)
```

3. Ejercicio

```
USE classicmodels;
3 # 1
4 SELECT o.orderNumber, sum(quantityOrdered) FROM orders o JOIN orderdetails od ON o.orderNumber=od.
     orderNumber GROUP BY o.orderNumber;
# | orderNumber | sum(quantityOrdered) |
7 # +-----
8 # |
           10100 L
                                    151 l
9 # |
           10101 |
                                    142 |
           10102 |
10 # |
                                    80 I
           10103 |
                                   541 |
11 # |
12 # |
           10104 |
                                   443 |
13 # |
           10105 |
                                    545 I
14 # |
            10106 |
                                    675 I
           10107 |
15 # |
                                    229 I
16 # |
           10108 |
                                   561 |
17 # |
           10109 |
                                   212 |
           10110 |
18 # |
                                   570 I
19 # |
            10111 |
                                    217 |
           10112 |
                                    52 I
20 # I
21 # |
           10113 |
                                    143 |
22 # |
           10114 |
                                    351 I
# 326 rows in set (0.09 sec)
25
26 # 2
27 SELECT o.orderNumber, o.status, sum(quantityOrdered * priceEach) total FROM orders o JOIN
     orderdetails od ON o.orderNumber=od.orderNumber GROUP BY o.orderNumber, o.status;
28 # +-----
# | orderNumber | status | total
30 # +------
                            | 10223.83 |
          10100 | Shipped
31 # |
           10101 | Shipped
10102 | Shipped
32 # |
                              | 10549.01
33 # |
                              | 5494.78
          10103 | Shipped
                              | 50218.95
34 # |
35 # |
          10104 | Shipped
                              | 40206.20
           10105 | Shipped
                              | 53959.21 |
36 # I
           10106 | Shipped
37 # |
                              | 52151.81
           10107 | Shipped
38 # |
                              | 22292.62
           10108 | Shipped
39 # |
                              | 51001.22 |
40 # |
           10109 | Shipped
                              | 25833.14 |
41 # |
           10110 | Shipped
                              I 48425.69 I
                              | 16537.85 |
42 # |
           10111 | Shipped
43 # 326 rows in set (0.09 sec)
44
45
46 # 3
  SELECT o.orderNumber, requiredDate, orderLineNumber, p.productName, quantityOrdered, priceEach
      FROM orders o JOIN orderdetails od ON o.orderNumber=od.orderNumber JOIN products p ON od.
      productCode = p.productCode;
48 # +-
49 # | orderNumber | requiredDate | orderLineNumber | productName
                                                                                              Τ
     quantityOrdered | priceEach |
51 # |
           10100 | 2003-01-13 |
                                               3 | 1917 Grand Touring Sedan
                                                                                              1
                 30 | 136.00 |
            10100 | 2003-01-13 |
                                               2 | 1911 Ford Town Car
52 # |
                                                                                              -
                 50 |
                         55.09 |
53 # |
            10100 | 2003-01-13
                                               4 | 1932 Alfa Romeo 8C2300 Spider Sport
                 22 |
                        75.46 |
54 # |
            10100 | 2003-01-13 |
                                               1 | 1936 Mercedes Benz 500k Roadster
                                                                                              49 I 35.29 I
            10101 | 2003-01-18
55 # |
                                                4 | 1932 Model A Ford J-Coupe
                                                                                              25 | 108.06 |
```

```
1 | 1928 Mercedes-Benz SSK
56 # | 10101 | 2003-01-18 |
                              26 | 167.06 |
                 10101 | 2003-01-18 |
                                                                            3 | 1939 Chevrolet Deluxe Coupe
57 # |
                                                                                                                                                             1
                             45 | 32.53 |
                                                                         2 | 1938 Cadillac V-16 Presidential Limousine
58 # |
                 10101 | 2003-01-18 |
                             46 | 44.35 |
                 10102 | 2003-01-18 |
59 # |
                                                                            2 | 1937 Lincoln Berline
                            39 l 95.55 l
                                                                          1 | 1936 Mercedes-Benz 500K Special Roadster
                 10102 | 2003-01-18 |
60 # |
                             41 | 43.13 |
61 # |
                   10103 | 2003-02-07 |
                                                                           11 | 1952 Alpine Renault 1300
                                                                                                                                                             1
                              26 | 214.30 |
62 # |
                  10103 | 2003-02-07 |
                                                                             4 | 1962 LanciaA Delta 16V
                                                                                                                                                             1
                             42 | 119.67 |
63 # |
                   10103 | 2003-02-07 |
                                                                             8 | 1958 Setra Bus
                                                                                                                                                            27 | 121.64 |
                 10103 | 2003-02-07 |
                                                                           10 | 1940 Ford Pickup Truck
64 # |
                                                                                                                                                             35 | 94.50 |
                                                                             2 | 1926 Ford Fire Engine
65 # |
                 10103 | 2003-02-07 |
                            22 | 58.34 |
                 10103 | 2003-02-07 |
66 # |
                                                                           12 | 1913 Ford Model T Speedster
                                                                                                                                                             \mathbf{I}
                            27 | 92.19 |
67 # |
                 10103 | 2003-02-07 |
                                                                           14 | 1934 Ford V8 Coupe
                                                                                                                                                            -1
                            35 | 61.84 |
                 10103 | 2003-02-07 |
68 # |
                                                                           13 | 18th Century Vintage Horse Carriage
                                                                                                                                                            - 1
                             25 | 86.92 |
                 10103 | 2003-02-07 |
69 # |
                                                                         16 | 1917 Maxwell Touring Car
                                                                                                                                                             -
                             46 | 86.31 |
                 10103 | 2003-02-07 |
70 # |
                                                                             5 | 1940s Ford truck
                                                                                                                                                             1
                            36 l 98.07 l
71 # |
                  10103 | 2003-02-07
                                                                             9 | 1939 Cadillac Limousine
                            41 | 40.75 |
                                                                          1 | 1962 Volkswagen Microbus
72 # |
                 10103 | 2003-02-07 |
                          36 | 107.34 |
73 # |
                    10103 | 2003-02-07 |
                                                                         15 | 1936 Chrysler Airflow
                                                                                                                                                             1
                            25 | 88.62 |
74 # 2996 rows in set (0.34 sec)
75
76
77 # 4
 78 SELECT o.orderNumber, p.productName, MSRP, priceEach FROM orders o JOIN orderdetails od ON o.
      order \verb|Number=od.order| \verb|Number| JOIN| products p ON od.product \verb|Code=p.product \verb|Code|; \\
 79 # +-----
                                                                                                       | MSRP | priceEach |
# | orderNumber | productName
81 # +------
                 10123 | 1965 Aston Martin DB5
82 # |
                                                                                                       | 124.44 |
                                                                                                                          120.71
                                                                                                                          114.84
                 10123 | 1999 Indy 500 Monte Carlo SS
                                                                                                       | 132.00 |
83 # I
                                                                                                  | 141.28 |
                 10123 | 1948 Porsche Type 356 Roadster
84 # |
          10123 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1
                                                                                                                          117.26
                10123 | 1966 Shelby Cobra 427 S/C
                                                                                                                              43.27
85 # I
86 # I
                                                                                                                             105.86
87 # I
                                                                                                                              60.57 l
88 # |
                                                                                                                              38.98 |
89 # |
                                                                                                                          153.00 |
90 # |
                                                                                                                              58.12 l
                                                                                                                             111.87
91 # |
                                                                                                                            75.46 |
66.28 |
92 #
93 # |
                                                                                                                             62.47 |
94 # |
                                                                                                                             30.53 I
95 # I
                                                                                                                               36.29 |
96 # |
                                                                                                                          74.51 |
93.95 |
97 # | 10124 | 1949 Jaguar XK 120
98 # | 10124 | 1952 Citroen-15CV
                                                                                                      | 117.44 |
99 # 2996 rows in set (0.34 sec)
100
102 # 5
103 SELECT c.customerNumber, customerName, orderNumber, status FROM customers c LEFT JOIN orders o ON
 c.customerNumber=o.customerNumber;
104 # +-----
105 # | customerNumber | customerName | orderNumber | status |
106 # +-
```

```
103 | Atelier graphique
103 | Atelier graphique
103 | Atelier graphique
                                                                                             10123 | Shipped
107 # |
108 # |
                                                                                                 10298 | Shipped
                                                                                             10345 | Shipped
109 # |
                  112 | Signal Gift Stores
112 | Signal Gift Stores
112 | Signal Gift Stores
114 | Australian Collectors, Co.
115 | La Rochelle Gifts
119 | La Rochelle Gifts
121 | Baane Mini Imports
121 | Baane Mini Imports
121 | Baane Mini Imports
                        112 | Signal Gift Stores
                                                                                               10124 | Shipped
110 # |
                                                                                             10278 | Shipped
10346 | Shipped
10120 | Shipped
10125 | Shipped
10223 | Shipped
111 # |
112 # |
113 # |
                                                                                     1
114 # I
115 # |
116 # |
                                                                                               10342 | Shipped
                                                                                     10347 | Shipped
10275 | Shipped
117 # |
118 # |
                                                                                     119 #
                                                                                                10315 | Shipped
                                                                                     - 1
                                                                                               10375 | Shipped
120 # |
                                                                                               10425 | In Process |
10103 | Shipped |
10158 | Shipped |
121 # |
                                                                                    - 1
                                                                                     1
122 # |
123 #
                        121 | Baane Mini Imports
                                                                                               10309 | Shipped
124 # |
                                                                                    121 | Baane Mini Imports
                                                                                                10325 | Shipped
125 # |
126 #
                         124 | Mini Gifts Distributors Ltd. |
                                                                                                10113 | Shipped
# 350 rows in set (0.17 sec)
128
129
130 # 6
131 SELECT c.customerNumber, customerName FROM customers c LEFT JOIN orders o ON c.customerNumber=o.
        customerNumber WHERE orderNumber IS NULL;
132 # +-----
# | customerNumber | customerName
134 # +-----
                 125 | Havel & Zbyszek Co
135 # I
                  168 | American Souvenirs Inc
169 | Porto Imports Co.
206 | Asian Shopping Network, Co
223 | Naturlich Autos
237 | ANG Resellers
247 | Messner Shopping Network
273 | Franken Gifts, Co
293 | BG&E Collectables
303 | Schuyler Imports
307 | Der Hund Imports
335 | Cramer Spezialitaten, Ltd
348 | Asian Treasures, Inc.
356 | SAR Distributors, Co
361 | Kommission Auto
369 | Lisboa Souveniers, Inc
376 | Precious Collectables
409 | Stuttgart Collectable Exchange
443 | Feuer Online Stores, Inc
459 | Warburg Exchange
465 | Anton Designs, Ltd.
477 | Mit Vergnugen & Co.
480 | Kremlin Collectables, Co.
136 # |
                          168 | American Souvenirs Inc
                       168 | American School 169 | Porto Imports Co.
137 # I
138 # I
139 #
140 # |
141 # |
142 # |
143 # |
144 #
145 # |
146 # |
147 # |
148 # |
149 # |
150 # |
151 #
152 # |
153 # |
154 # |
155 # |
156 # |
             480 | Kremlin Collectables, Co.
157 # |
158 # |
                         481 | Raanan Stores, Inc
159 # +--
# 24 rows in set (0.08 sec)
161
162
163 # 7
164 SELECT lastName, firstName, customerName, checkNumber, amount FROM employees e LEFT JOIN customers
          c ON e.employeeNumber=c.salesRepEmployeeNumber LEFT JOIN payments ON payments.customerNumber=
          c.customerNumber ORDER BY customerName, checkNumber;
165 # +-----
                                                                                                .+-----
166 # | lastName | firstName | customerName
                                                                                               | checkNumber | amount
167 # +-----+
168 # | Murphy | Diane | NULL
169 # | Patterson | Mary | NULL
                                                                                                                       NULL |
NULL |
                                                                                               NULL
                                                                                                | NULL
170 # | Firrelli | Jeff | NULL
                                                                                                NULL
                                                                                                                            NULL
                                                                                                                           NULL |
171 # | Patterson | William | NULL
                                                                                                NULL
172 # | Bondur | Gerard
                                          NULL
                                                                                                NULL
                                                                                                                              NULL.
NULL
                                                                                                                              NULL
                                                                                                NULL
                                                                                                                              NULL |
```

```
| NULL | NULL |
| AF40894 | 33818.34 |
| HR224331 | 12432.32 |
 175 # | Kato | Yoshimi | NULL
# | Hernandez | Gerard | Alpha Cognac | Hernandez | He
                                                                                                              # | Tseng | Foon Yue | American Souvenirs Inc
184 # | Fixter | Andy | Anna's Decorations, Ltd
185 # | Fixter | Andy | Anna's Decorations, Ltd
 186 # 283 rows in set (0.17 sec)
 187
 189 SELECT c.customerNumber, customerName, orderNumber, status FROM customers c RIGHT JOIN orders o ON
              c.customerNumber=o.customerNumber;
 190 # +-----
 # | customerNumber | customerName
                                                                                                         | orderNumber | status
______
 207 # 326 rows in set (0.17 sec)
 208
 210 SELECT c.customerNumber, customerName FROM customers c RIGHT JOIN orders o ON c.customerNumber=o.
        customerNumber WHERE orderNumber IS NULL;
 211 # Empty set (0.08 sec)
 212
 213
 214 SELECT lastName, firstName, customerName, checkNumber, amount FROM employees e RIGHT JOIN
      customers c ON e.employeeNumber=c.salesRepEmployeeNumber LEFT JOIN payments ON payments.
             customerNumber=c.customerNumber ORDER BY customerName, checkNumber;
 215 # +-----
 # | lastName | firstName | customerName
                                                                                                                        | checkNumber | amount |
 # | Hernandez | Gerard | Alpha Cognac
                                                                                                                   | AF40894 | 33818.34 |
 # | Hernandez | Gerard | Alpha Cognac
220 # | Hernandez | Gerard | Alpha Cognac
                                                                                                                     # | Tseng | Foon Yue | American Souvenirs Inc
 # | Castillo | Pamela | Amica Models & Co.
 # | Castillo | Pamela | Amica Models & Co.
# | Castillo | Pamela | Amica Models & Co.

224 # | NULL | NULL | ANG Resellers

225 # | Fixter | Andy | Anna's Decorations, Ltd

226 # | Fixter | Andy | Anna's Decorations, Ltd

227 # | Fixter | Andy | Anna's Decorations, Ltd

228 # | Fixter | Andy | Anna's Decorations, Ltd

229 # | NULL | NULL | Anton Designs, Ltd.

230 # | NULL | NULL | Asian Shopping Network, Co

231 # | NULL | NULL | Asian Treasures, Inc.
                                                    232 # 297 rows in set (0.17 sec)
 233
 234 # 9
 235 # En un inicio no se pudo ejecutar el comando ya que arrojaba mensajes como:
 236 CREATE VIEW dos_786 AS SELECT o.orderNumber, o.status, sum(quantityOrdered * priceEach) total FROM
              orders o JOIN orderdetails od ON o.orderNumber=od.orderNumber GROUP BY o.orderNumber, o.
             status;
 237 SELECT*FROM dos_786;
 239 # | orderNumber | status | total |
```

```
240 # +------
241 # | 10100 | Shipped | 10223.83 | 242 # | 10101 | Shipped | 10549.01 | 243 # | 10102 | Shipped | 5494.78 |
          10103 | Shipped
10104 | Shipped
10105 | Shipped
10106 | Shipped
244 # |
                                  | 50218.95 |
                                  | 40206.20 |
| 53959.21 |
| 52151.81 |
245 # |
246 # |
247 # I
            10107 | Shipped
248 # |
                                    | 22292.62 |
            10108 | Shipped
                                    | 51001.22 |
249 # |
              10109 | Shipped
250 # |
                                    | 25833.14
251 # |
              10110 | Shipped
                                    | 48425.69
             10111 | Shipped
252 # |
                                    | 16537.85 |
            10112 | Shipped
                                  | 7674.94 |
253 # I
254 # |
             10113 | Shipped
                                    | 11044.30 |
255 # 326 rows in set (0.09 sec)
256
257
258 CREATE VIEW seis_786 AS SELECT c.customerNumber, customerName FROM customers c LEFT JOIN orders o
   ON c.customerNumber=o.customerNumber WHERE orderNumber IS NULL;
259 SELECT*FROM seis_786;
260 # +------------
261 # | customerNumber | customerName
                125 | Havel & Zbyszek Co
263 # I
264 # |
                    168 | American Souvenirs Inc
                   169 | Porto Imports Co.
265 #
266 # |
                   206 | Asian Shopping Network, Co
267 # |
                  223 | Naturlich Autos
                 237 | ANG Resellers
268 # |
269 # |
                   247 | Messner Shopping Network
                  273 | Franken Gifts, Co
270 # I
271 # |
              293 | BG&E Collectables
303 | Schuyler Imports
307 | Der Hund Imports
335 | Cramer Spezialitaten, Ltd
348 | Asian Treasures, Inc.
356 | SAR Distributors, Co
361 | Kommission Auto
369 | Lisboa Souveniers, Inc
376 | Precious Collectables
409 | Stuttgart Collectable Exchange |
443 | Feuer Online Stores, Inc
459 | Warburg Exchange
465 | Anton Designs, Ltd.
477 | Mit Vergnugen & Co.
480 | Kremlin Collectables, Co.
                 293 | BG&E Collectables
272 # |
273 # |
274 # |
275 # |
276 # |
277 # |
278 # |
279 # |
280 # I
281 # |
282 # |
283 # |
284 #
          480 | Kremlin Collectables, Co.
481 | Raanan Stores, Inc
285 # |
287 # +------
288 # 24 rows in set (0.09 sec)
289
290 CREATE VIEW siete_786 AS SELECT lastName, firstName, customerName, checkNumber, amount FROM
     employees e LEFT JOIN customers c ON e.employeeNumber=c.salesRepEmployeeNumber LEFT JOIN
       payments ON payments.customerNumber=c.customerNumber ORDER BY customerName, checkNumber;
291 SELECT*FROM siete_786;
292 # +-----
293 # | lastName | firstName | customerName
                                                                          | checkNumber | amount |
294 # +------
NULL
                                                                                             NULL
                                                                           NULL
                                                                                                  NULL
                                                                                                NULL
                                                                           I NULL.
298 # | Patterson | William | NULL
                                                                          INULL
                                                                                                NULL
299 # | Bondur | Gerard | NULL
                                                                          NULL
                                                                                                 NULL
300 # | Bow
                                                                          | NULL
| NULL
| NULL
                                                                                          I
                  | Anthony | NULL
                                                                                                  NULL
301 # | King | Tom | NULL
302 # | Kato | Yoshimi | NULL
                                                                                                  NULL
                                                                                               NULL
303# | Hernandez | Gerard| Alpha Cognac304# | Hernandez | Gerard| Alpha Cognac
                                                                           | AF40894
                                                                                         | 33818.34 |
                                                                           | HR224331 | 12432.32 |
305 # 283 rows in set (0.17 sec)
```