# MySQL ORDER BY Clause

1. List the Product Code, Product Name and Buy Price in ‘products’ table in descending order of the ‘buyPrice’

|  |  |  |
| --- | --- | --- |
| S10\_4962 | 1962 LanciaA Delta 16V | 103.42 |
| S18\_2238 | 1998 Chrysler Plymouth Prowler | 101.51 |
| S10\_1949 | 1952 Alpine Renault 1300 | 98.58 |
| S24\_3856 | 1956 Porsche 356A Coupe | 98.30 |
| S12\_1108 | 2001 Ferrari Enzo | 95.59 |
| S12\_1099 | 1968 Ford Mustang | 95.34 |
| S18\_1984 | 1995 Honda Civic | 93.89 |
| S18\_4027 | 1970 Triumph Spitfire | 91.92 |
| S10\_4698 | 2003 Harley-Davidson Eagle Drag Bike | 91.02 |
| S12\_3148 | 1969 Corvair Monza | 89.14 |
| S18\_1749 | 1917 Grand Touring Sedan | 86.70 |
| S10\_4757 | 1972 Alfa Romeo GTA | 85.68 |
| S18\_4600 | 1940s Ford truck | 84.76 |
| S18\_1129 | 1993 Mazda RX-7 | 83.51 |
| S12\_3891 | 1969 Ford Falcon | 83.05 |

1. List the country, state and customerName in order of country, and then state within state the name of customers should be descending order from ‘customers’ table.

|  |  |  |
| --- | --- | --- |
| Australia | NSW | Souveniers And Things Co. |
| Australia | NSW | Anna's Decorations, Ltd |
| Australia | Queensland | Australian Gift Network, Co |
| Australia | Victoria | Australian Collectors, Co. |
| Australia | Victoria | Australian Collectables, Ltd |
| Austria | NULL | Salzburg Collectables |
| Austria | NULL | Mini Auto Werke |
| Belgium | NULL | Royale Belge |
| Belgium | NULL | Petit Auto |
| Canada | BC | Royal Canadian Collectables, Ltd. |
| Canada | BC | Canadian Gift Exchange Network |
| Canada | Québec | Québec Home Shopping Network |
| Denmark | NULL | Heintze Collectables |
| Denmark | NULL | Danish Wholesale Imports |
| Finland | NULL | Toys of Finland, Co. |
| Finland | NULL | Suominen Souveniers |
| Finland | NULL | Oulu Toy Supplies, Inc. |
| France | NULL | Saveley & Henriot, Co. |
| France | NULL | Reims Collectables |
| France | NULL | Mini Caravy |
| France | NULL | Marseille Mini Autos |
| France | NULL | Lyon Souveniers |
| France | NULL | La Rochelle Gifts |
| France | NULL | La Corne D'abondance, Co. |
| France | NULL | Daedalus Designs Imports |
| France | NULL | Auto Canal+ Petit |
| France | NULL | Auto Associés & Cie. |
| France | NULL | Atelier graphique |
| France | NULL | Alpha Cognac |
| Germany | NULL | Warburg Exchange |
| Germany | NULL | Toms Spezialitäten, Ltd |
| Germany | NULL | Stuttgart Collectable Exchange |
| Germany | NULL | Natürlich Autos |
| Germany | NULL | Mit Vergnügen & Co. |
| Germany | NULL | Messner Shopping Network |
| Germany | NULL | Kommission Auto |
| Germany | NULL | Franken Gifts, Co |
| Germany | NULL | Feuer Online Stores, Inc |
| Germany | NULL | Der Hund Imports |
| Germany | NULL | Cramer Spezialitäten, Ltd |
| Germany | NULL | Blauer See Auto, Co. |
| Germany | NULL | Bavarian Collectables Imports, Co. |
| Hong Kong | NULL | King Kong Collectables, Co. |
| Ireland | NULL | Clover Collections, Co. |
| Ireland | Co. Cork | Asian Treasures, Inc. |
| Israel | NULL | Raanan Stores, Inc |
| Italy | NULL | Rovelli Gifts |
| Italy | NULL | L'ordine Souveniers |
| Italy | NULL | Frau da Collezione |
| Italy | NULL | Amica Models & Co. |
| Japan | Osaka | Osaka Souveniers Co. |
| Japan | Tokyo | Tokyo Collectables, Ltd |
| Netherlands | NULL | Schuyler Imports |
| New Zealand | NULL | Kelly's Gift Shop |
| New Zealand | NULL | GiftsForHim.com |
| New Zealand | NULL | Extreme Desk Decorations, Ltd |
| New Zealand | NULL | Down Under Souveniers, Inc |
| Norway | NULL | Norway Gifts By Mail, Co. |
| Norway | NULL | Herkku Gifts |
| Norway | NULL | Baane Mini Imports |

1. List the productName and TotalAmount of products from the ‘products’ table in descending order. (Total Amount is product of Stock of Product multiplied by Buy Price of the product.)

|  |  |
| --- | --- |
| productName | TotalAmount |
| 1995 Honda Civic | 917493.08 |
| 1952 Alpine Renault 1300 | 720126.90 |
| 1962 LanciaA Delta 16V | 702325.22 |
| 1968 Dodge Charger | 685684.68 |
| 1976 Ford Gran Torino | 670743.23 |
| America West Airlines B757-200 | 664126.40 |
| 2002 Suzuki XREO | 662501.19 |
| 1992 Ferrari 360 Spider red | 650231.30 |
| 1956 Porsche 356A Coupe | 648780.00 |
| 1964 Mercedes Tour Bus | 618193.88 |
| 1969 Corvair Monza | 615600.84 |
| 1965 Aston Martin DB5 | 596410.32 |
| 2002 Chevy Corvette | 586691.06 |
| 1948 Porsche Type 356 Roadster | 558818.40 |
| 1932 Model A Ford J-Coupe | 547021.92 |
| 1937 Lincoln Berline | 526969.66 |
| 1970 Triumph Spitfire | 509696.40 |
| 2003 Harley-Davidson Eagle Drag Bike | 508073.64 |
| 1998 Chrysler Plymouth Prowler | 479533.24 |
| 1948 Porsche 356-A Roadster | 475721.40 |
| 1999 Indy 500 Monte Carlo SS | 463388.64 |
| 1992 Porsche Cayenne Turbo Silver | 459291.96 |
| 1996 Moto Guzzi 1100i | 457058.75 |
| 1917 Maxwell Touring Car | 455314.02 |
| 1985 Toyota Supra | 440858.33 |
| 1904 Buick Runabout | 436551.40 |
| Collectable Wooden Train | 435762.00 |

# MySQL WHERE Clause

1. Find First Name, Last Name, JobTitle and Extension number of employees who have extension number ‘x102’

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| [lastName](http://localhost/phpmyadmin/sql.php) | [jobTitle](http://localhost/phpmyadmin/sql.php) | [extension](http://localhost/phpmyadmin/sql.php) | [firstName](http://localhost/phpmyadmin/sql.php) |  |
| Jones | Sales Rep | x102 | Barry |  |
| Marsh | Sales Rep | x102 | Peter |  |
| Kato | Sales Rep | x102 | Yoshimi |  |

1. Find first name and last name of customers whose customer number is less than 200 and is from New York state

|  |  |  |  |
| --- | --- | --- | --- |
| customerNumber | contactFirstName | contactLastName | state |
| 131 | Kwai | Lee | NY |
| 151 | Jeff | Young | NY |
| 181 | Michael | Frick | NY |

1. Find first name and last name of customers whose customer number is less than 200 and is from New York state or Norway country.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| customerNumber | contactFirstName | contactLastName | state | country |
| 121 | Jonas | Bergulfsen | NULL | Norway |
| 131 | Kwai | Lee | NY | USA |
| 151 | Jeff | Young | NY | USA |
| 167 | Veysel | Oeztan | NULL | Norway |
| 181 | Michael | Frick | NY | USA |
| 299 | Jan | Klaeboe | NULL | Norway |

1. Find the orderNumber and orderAmount of all orders above $10000;

|  |  |
| --- | --- |
| [orderNumber](http://localhost/phpmyadmin/sql.php) | [orderAmount](http://localhost/phpmyadmin/sql.php) |
| [10312](http://localhost/phpmyadmin/sql.php) | 10286.40 |
| [10403](http://localhost/phpmyadmin/sql.php) | 11503.14 |
| [10404](http://localhost/phpmyadmin/sql.php) | 10460.16 |
| [10405](http://localhost/phpmyadmin/sql.php) | 11170.52 |
| [10407](http://localhost/phpmyadmin/sql.php) | 10723.60 |
| [10424](http://localhost/phpmyadmin/sql.php) | 10072.00 |

1. Find the contactFirstName, contactLastName, phone, city and state of all customers from state of New York or California.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Susan | Nelson | 4155551450 | San Rafael | CA |
| Julie | Murphy | 6505555787 | San Francisco | CA |
| Kwai | Lee | 2125557818 | NYC | NY |
| Jeff | Young | 2125557413 | NYC | NY |
| Juri | Hashimoto | 6505556809 | Burlingame | CA |
| Michael | Frick | 2125551500 | NYC | NY |
| Julie | Young | 6265557265 | Pasadena | CA |
| Mary | Young | 3105552373 | Glendale | CA |
| Valarie | Thompson | 7605558146 | San Diego | CA |
| Steve | Frick | 9145554562 | White Plains | NY |
| Julie | Brown | 6505551386 | San Francisco | CA |
| Brian | Chandler | 2155554369 | Los Angeles | CA |
| Maria | Hernandez | 2125558493 | NYC | NY |
| Sue | Frick | 4085553659 | San Jose | CA |
| Yu | Choi | 2125551957 | NYC | NY |
| Steve | Thompson | 3105553722 | Burbank | CA |
| Sue | Taylor | 4155554312 | Brisbane | CA |

1. Repeat the above query by sorting in by state in ascending order and then by city in descending order.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Susan | Nelson | 4155551450 | San Rafael | CA |
| Sue | Frick | 4085553659 | San Jose | CA |
| Julie | Murphy | 6505555787 | San Francisco | CA |
| Julie | Brown | 6505551386 | San Francisco | CA |
| Valarie | Thompson | 7605558146 | San Diego | CA |
| Julie | Young | 6265557265 | Pasadena | CA |
| Brian | Chandler | 2155554369 | Los Angeles | CA |
| Mary | Young | 3105552373 | Glendale | CA |
| Juri | Hashimoto | 6505556809 | Burlingame | CA |
| Steve | Thompson | 3105553722 | Burbank | CA |
| Sue | Taylor | 4155554312 | Brisbane | CA |
| Steve | Frick | 9145554562 | White Plains | NY |
| Kwai | Lee | 2125557818 | NYC | NY |
| Jeff | Young | 2125557413 | NYC | NY |
| Michael | Frick | 2125551500 | NYC | NY |
| Maria | Hernandez | 2125558493 | NYC | NY |
| Yu | Choi | 2125551957 | NYC | NY |

1. Find all order details in which the quantity ordered in between 22 and 25.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 10100 | S18\_4409 | 22 | 75.46 | 4 |
| 10101 | S18\_2325 | 25 | 108.06 | 4 |
| 10103 | S18\_2432 | 22 | 58.34 | 2 |
| 10103 | S18\_3136 | 25 | 86.92 | 13 |
| 10103 | S24\_4258 | 25 | 88.62 | 15 |
| 10104 | S18\_2238 | 24 | 135.90 | 8 |
| 10104 | S18\_3232 | 23 | 165.95 | 13 |
| 10105 | S18\_3140 | 22 | 136.59 | 11 |
| 10105 | S700\_3962 | 22 | 99.31 | 7 |
| 10105 | S72\_3212 | 25 | 44.77 | 8 |
| 10107 | S24\_1578 | 25 | 96.92 | 3 |
| 10112 | S18\_2949 | 23 | 85.10 | 2 |
| 10113 | S32\_3522 | 23 | 58.82 | 1 |
| 10114 | S24\_2840 | 24 | 28.64 | 1 |
| 10117 | S18\_4027 | 22 | 122.08 | 12 |
| 10117 | S18\_4522 | 23 | 73.73 | 4 |
| 10119 | S700\_1138 | 25 | 57.34 | 14 |
| 10120 | S32\_1374 | 22 | 94.90 | 6 |
| 10120 | S700\_2466 | 24 | 81.77 | 15 |
| 10120 | S700\_2834 | 24 | 106.79 | 7 |
| 10121 | S32\_4485 | 25 | 95.93 | 3 |

There are total 324 rows in the answer.

1. Find all payments made in which the amount is between 10000 and 13000.

|  |  |  |  |
| --- | --- | --- | --- |
| 124 | CQ287967 | 2003-04-11 | 11044.30 |
| 128 | DI925118 | 2003-01-28 | 10549.01 |
| 161 | KG644125 | 2005-02-02 | 12692.19 |
| 167 | ED743615 | 2004-09-19 | 12538.01 |
| 173 | GP545698 | 2004-05-13 | 11843.45 |
| 242 | HR224331 | 2005-06-03 | 12432.32 |
| 363 | IS232033 | 2003-01-16 | 10223.83 |
| 379 | GB890854 | 2004-08-02 | 12530.51 |
| 381 | BC726082 | 2004-12-03 | 12081.52 |
| 406 | BJMPR4545 | 2005-04-23 | 12190.85 |
| 487 | PT550181 | 2004-02-29 | 12573.28 |

1. Repeat the above query and sort the result by paymentDate.

|  |  |  |  |
| --- | --- | --- | --- |
| 363 | IS232033 | 2003-01-16 | 10223.83 |
| 128 | DI925118 | 2003-01-28 | 10549.01 |
| 124 | CQ287967 | 2003-04-11 | 11044.30 |
| 487 | PT550181 | 2004-02-29 | 12573.28 |
| 173 | GP545698 | 2004-05-13 | 11843.45 |
| 379 | GB890854 | 2004-08-02 | 12530.51 |
| 167 | ED743615 | 2004-09-19 | 12538.01 |
| 381 | BC726082 | 2004-12-03 | 12081.52 |
| 161 | KG644125 | 2005-02-02 | 12692.19 |
| 406 | BJMPR4545 | 2005-04-23 | 12190.85 |
| 242 | HR224331 | 2005-06-03 | 12432.32 |

# MySQL LIKE Clause

1. List customerNumber, contactFirstName, contactLastName, phone of all customers whose name starts with ‘W’

| **customerNumber** | **contactFirstName** | **contactLastName** | **phone** |
| --- | --- | --- | --- |
| 166 | Wendy | Victorino | +65 224 1555 |
| 320 | Wing | Huang | 5085559555 |
| 328 | William | Brown | 2015559350 |
| 357 | Wales | MacKinlay | 64-9-3763555 |

1. List customerNumber, contactFirstName, contactLastName, phone of all customers whose name ends with ‘a’

| **customerNumber** | **contactFirstName** | **contactLastName** | **phone** |
| --- | --- | --- | --- |
| 276 | Anna | O'Hara | 02 9936 8555 |
| 286 | Marta | Hernandez | 6175558555 |
| 339 | Francisca | Cervantes | 2155554695 |
| 424 | Maria | Hernandez | 2125558493 |
| 448 | Martha | Larsson | 0695-34 6555 |
| 462 | Violeta | Benitez | 5085552555 |
| 486 | Rosa | Salazar | 2155559857 |

1. List customerNumber, contactFirstName, contactLastName, phone of all customers whose name contains ‘ea’

| **customerNumber** | **contactFirstName** | **contactLastName** | **phone** |
| --- | --- | --- | --- |
| 112 | Jean | King | 7025551838 |
| 189 | Dean | Cassidy | +353 1862 1555 |
| 233 | Jean | Fresnière | (514) 555-8054 |
| 471 | Sean | Clenahan | 61-9-3844-6555 |

1. List customerNumber, contactFirstName, contactLastName, phone of all customers whose name has ‘t’ as third character.

| **customerNumber** | **contactFirstName** | **contactLastName** | **phone** |
| --- | --- | --- | --- |
| 114 | Peter | Ferguson | 03 9520 4555 |
| 145 | Jytte | Petersen | 31 12 3555 |
| 186 | Matti | Karttunen | 90-224 8555 |
| 273 | Peter | Franken | 089-0877555 |
| 314 | Catherine | Dewey | (02) 5554 67 |
| 348 | Patricia | McKenna | 2967 555 |
| 409 | Rita | Müller | 0711-555361 |

1. List customerNumber, contactFirstName, contactLastName, phone of all customers whose name as ‘t’ as third character and ends with ‘e’

| **customerNumber** | **contactFirstName** | **contactLastName** | **Phone** |
| --- | --- | --- | --- |
| 145 | Jytte | Petersen | 31 12 3555 |
| 314 | Catherine | Dewey | (02) 5554 67 |

1. List productCode, productName of all products whose productCode contains ‘12\_1’

| **productCode** | **productName** |
| --- | --- |
| S12\_1099 | 1968 Ford Mustang |
| S12\_1108 | 2001 Ferrari Enzo |
| S12\_1666 | 1958 Setra Bus |

# MySQL DISTINCT Clause

1. Select the distinct customer numbers from payments table who have made any payment.

| **customerNumber** |
| --- |
| 103 |
| 112 |
| 114 |
| 119 |
| 121 |
| 124 |
| 128 |
| 129 |
| 131 |
| 141 |
| 144 |
| 145 |

There should be total 98 rows in the result

1. List all distinct cities from France which have customers in the customers table.

| **city** |
| --- |
| Nantes |
| Lyon |
| Lille |
| Paris |
| Strasbourg |
| Toulouse |
| Versailles |
| Marseille |
| Reims |

1. List all distinct cities from France which have customers in the customers table and the result should be arranges alphabetically.

| **city** |
| --- |
| Lille |
| Lyon |
| Marseille |
| Nantes |
| Paris |
| Reims |
| Strasbourg |
| Toulouse |
| Versailles |

1. Count from how many cities of France, we have customers from, in the customers table.

| **COUNT(DISTINCT city)** |
| --- |
| 9 |

1. Count from how many cities of France, we have customers from, in the customers table and rename the column as “No of Cities”

| **No of Cities** |
| --- |
| 9 |

1. Write a query to find out number of sales representatives in the company as “No of Sales Representative”

| **No of Sales Representative** |
| --- |
| 17 |

1. Write a query to find different productLines available in the products table sorted in ascending order.

| **productLine** |
| --- |
| Classic Cars |
| Motorcycles |
| Planes |
| Ships |
| Trains |
| Trucks and Buses |
| Vintage Cars |

# MySQL LIMIT Clause

1. Write a query to list top 5 payments from payments table

| **customerNumber** | **checkNumber** | **paymentDate** | **amount** |
| --- | --- | --- | --- |
| 141 | JE105477 | 2005-03-18 | 120166.58 |
| 141 | ID10962 | 2004-12-31 | 116208.40 |
| 124 | KI131716 | 2003-08-15 | 111654.40 |
| 148 | KM172879 | 2003-12-26 | 105743.00 |
| 124 | AE215433 | 2005-03-05 | 101244.59 |

1. Write a query to list top 3 payments from payments table whose check number start with alphabet M

| **customerNumber** | **checkNumber** | **paymentDate** | **amount** |
| --- | --- | --- | --- |
| 114 | MA765515 | 2004-12-15 | 82261.22 |
| 320 | MU817160 | 2003-11-24 | 52548.49 |
| 496 | MN89921 | 2004-12-31 | 52166.00 |

# MySQL IS NULL Clause

1. Find all offices details in which the state is null.

| **officeCode** | **city** | **phone** | **addressLine1** | **addressLine2** | **state** | **country** | **postalCode** | **Territory** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 4 | Paris | +33 14 723 4404 | 43 Rue Jouffroy D'abbans | **Null** | **null** | France | 75017 | EMEA |
| 6 | Sydney | +61 2 9264 2451 | 5-11 Wentworth Avenue | Floor #2 | **null** | Australia | NSW 2010 | APAC |
| 7 | London | +44 20 7877 2041 | 25 Old Broad Street | Level 7 | **null** | UK | EC2N 1HN | EMEA |

# MySQL IN Clause

1. Find first name, last name, contact number, and country of all customers from Poland, Denmark, Sweden and Spain.

| **contactFirstName** | **contactLastName** | **Phone** | **country** |
| --- | --- | --- | --- |
| Jytte | Petersen | 31 12 3555 | Denmark |
| Palle | Ibsen | 86 21 3555 | Denmark |
| Zbyszek | Piestrzeniewicz | (26) 642-7555 | Poland |
| Diego | Freyre | (91) 555 94 44 | Spain |
| Eduardo | Saavedra | (93) 203 4555 | Spain |
| Alejandra | Camino | (91) 745 6555 | Spain |
| Jesus | Fernandez | +34 913 728 555 | Spain |
| Martín | Sommer | (91) 555 22 82 | Spain |
| Carmen | Anton | +34 913 728555 | Spain |
| José Pedro | Roel | (95) 555 82 82 | Spain |
| Christina | Berglund | 0921-12 3555 | Sweden |
| Martha | Larsson | 0695-34 6555 | Sweden |

1. Find first name, last name, contact number, and country of all customers from all countries whose name starts with S.

| **contactFirstName** | **contactLastName** | **Phone** | **country** |
| --- | --- | --- | --- |
| Eric | Natividad | +65 221 7555 | Singapore |
| Wendy | Victorino | +65 224 1555 | Singapore |
| Brydey | Walker | +612 9411 1555 | Singapore |
| Armand | Kuger | +27 21 550 3555 | South Africa |
| Diego | Freyre | (91) 555 94 44 | Spain |
| Eduardo | Saavedra | (93) 203 4555 | Spain |
| Alejandra | Camino | (91) 745 6555 | Spain |
| Jesus | Fernandez | +34 913 728 555 | Spain |
| Martín | Sommer | (91) 555 22 82 | Spain |
| Carmen | Anton | +34 913 728555 | Spain |
| José Pedro | Roel | (95) 555 82 82 | Spain |
| Christina | Berglund | 0921-12 3555 | Sweden |
| Martha | Larsson | 0695-34 6555 | Sweden |
| Ed | Harrison | +41 26 425 50 01 | Switzerland |
| Mihael | Holz | 0897-034555 | Switzerland |
| Braun | Urs | 0452-076555 | Switzerland |

1. Find first name, last name, contact number, state, and country of all customers from all countries whose name starts with S and state is also mentioned(i.e. state is not null).

| **contactFirstName** | **contactLastName** | **Phone** | **state** | **country** |
| --- | --- | --- | --- | --- |
| Armand | Kuger | +27 21 550 3555 | Pretoria | South Africa |

1. Find first name, last name, contact number, state, and country of all customers from all countries where the company has offices.

| **contactFirstName** | **contactLastName** | **Phone** | **state** | **country** |
| --- | --- | --- | --- | --- |
| Jean | King | 7025551838 | NV | USA |
| Susan | Nelson | 4155551450 | CA | USA |
| Julie | Murphy | 6505555787 | CA | USA |
| Kwai | Lee | 2125557818 | NY | USA |
| Valarie | Franco | 6175552555 | MA | USA |
| Carine | Schmitt | 40.32.2555 | **null** | France |
| Daniel | Tonini | 30.59.8555 | **null** | France |
| Laurence | Lebihan | 91.24.4555 | **null** | France |
| Paul | Henriot | 26.47.1555 | **null** | France |
| Dominique | Perrier | (1) 47.55.6555 | **null** | France |
| Mory | Kentary | +81 06 6342 5555 | Osaka | Japan |
| Akiko | Shimamura | +81 3 3584 0555 | Tokyo | Japan |
| Adrian | Huxley | +61 2 9495 8555 | NSW | Australia |
| Ben | Calaghan | 61-7-3844-6555 | Queensland | Australia |
| Sean | Clenahan | 61-9-3844-6555 | Victoria | Australia |
| Rachel | Ashworth | (171) 555-1555 | **null** | UK |
| Elizabeth | Devon | (171) 555-2282 | **null** | UK |
| Helen | Bennett | (198) 555-8888 | Isle of Wight | UK |

**Total 60 Rows in result of this query**

1. Find first name, last name, contact number, state, and country of all customers from all countries where the company does not have any offices.

| **contactFirstName** | **contactLastName** | **phone** | **state** | **country** |
| --- | --- | --- | --- | --- |
| Jonas | Bergulfsen | 07-98 9555 | **null** | Norway |
| Zbyszek | Piestrzeniewicz | (26) 642-7555 | **null** | Poland |
| Roland | Keitel | +49 69 66 90 2555 | **null** | Germany |
| Diego | Freyre | (91) 555 94 44 | **null** | Spain |
| Christina | Berglund | 0921-12 3555 | **null** | Sweden |
| Jytte | Petersen | 31 12 3555 | **null** | Denmark |
| Eric | Natividad | +65 221 7555 | **null** | Singapore |
| Wendy | Victorino | +65 224 1555 | **null** | Singapore |
| Veysel | Oeztan | +47 2267 3215 | **null** | Norway |
| Isabel | de Castro | (1) 356-5555 | **null** | Portugal |
| Matti | Karttunen | 90-224 8555 | **null** | Finland |
| Dean | Cassidy | +353 1862 1555 | **null** | Ireland |
| Yoshi | Tamuri | (604) 555-3392 | BC | Canada |
| Brydey | Walker | +612 9411 1555 | **null** | Singapore |
| Mike | Gao | +852 2251 1555 | **null** | Hong Kong |
| Eduardo | Saavedra | (93) 203 4555 | **null** | Spain |
| Horst | Kloss | 0372-555188 | **null** | Germany |
| Palle | Ibsen | 86 21 3555 | **null** | Denmark |
| Jean | Fresnière | (514) 555-8054 | Québec | Canada |
| Mike | Graham | +64 9 312 5555 | **null** | New Zealand |
| Kalle | Suominen | +358 9 8045 555 | **null** | Finland |
| Philip | Cramer | 0555-09555 | **null** | Germany |
| Jesus | Fernandez | +34 913 728 555 | **null** | Spain |
| Patricia | McKenna | 2967 555 | Co. Cork | Ireland |
| Armand | Kuger | +27 21 550 3555 | Pretoria | South Africa |
| Wales | MacKinlay | 64-9-3763555 | **null** | New Zealand |
| Karin | Josephs | 0251-555259 | **null** | Germany |
| Lino | Rodriguez | (1) 354-2555 | **null** | Portugal |
| Braun | Urs | 0452-076555 | **null** | Switzerland |
| Tony | Snowden | +64 9 5555500 | **null** | New Zealand |

**Total 62 Rows in result of this query**

1. Find customer number, first name, last name, contact number, and country of all customers who have cancelled their orders (Use in clause, although join is a better option for this query)

| **customerNumber** | **contactFirstName** | **contactLastName** | **phone** | **country** |
| --- | --- | --- | --- | --- |
| 131 | Kwai | Lee | 2125557818 | USA |
| 141 | Diego | Freyre | (91) 555 94 44 | Spain |
| 201 | Elizabeth | Devon | (171) 555-2282 | UK |
| 357 | Wales | MacKinlay | 64-9-3763555 | New Zealand |
| 448 | Martha | Larsson | 0695-34 6555 | Sweden |
| 496 | Tony | Snowden | +64 9 5555500 | New Zealand |

# MySQL GROUP BY Clause

1. Write a query to find the number of items ordered in each order.

| **orderNumber** | **count(\*)** |
| --- | --- |
| 10100 | 4 |
| 10101 | 4 |
| 10102 | 2 |
| 10103 | 16 |
| 10104 | 13 |
| 10105 | 15 |
| 10106 | 18 |
| 10107 | 8 |
| 10108 | 16 |
| 10109 | 6 |
| 10110 | 16 |
| 10111 | 6 |
| 10112 | 2 |
| 10113 | 4 |
| 10114 | 10 |
| 10115 | 5 |
| 10116 | 1 |
| 10117 | 12 |

**Total 326 Rows in result of this query**

1. Write a query to find the number of items ordered in each order and rename the column as “Items Ordered”

| **orderNumber** | **Items Ordered** |
| --- | --- |
| 10100 | 4 |
| 10101 | 4 |
| 10102 | 2 |
| 10103 | 16 |
| 10104 | 13 |
| 10105 | 15 |
| 10106 | 18 |
| 10107 | 8 |
| 10108 | 16 |
| 10109 | 6 |
| 10110 | 16 |
| 10111 | 6 |
| 10112 | 2 |
| 10113 | 4 |
| 10114 | 10 |
| 10115 | 5 |
| 10116 | 1 |
| 10117 | 12 |

**Total 326 Rows in result of this query**

1. Write a query to find out how many orders have items from each product orderLineNumber.

| **orderLineNumber** | **count(\*)** |
| --- | --- |
| 1 | 326 |
| 2 | 309 |
| 3 | 287 |
| 4 | 273 |
| 5 | 256 |
| 6 | 238 |
| 7 | 212 |
| 8 | 201 |
| 9 | 177 |
| 10 | 149 |
| 11 | 134 |
| 12 | 114 |
| 13 | 101 |
| 14 | 82 |
| 15 | 57 |
| 16 | 43 |
| 17 | 26 |
| 18 | 11 |

1. Write a query to find the total amount of each order as “Amount”

| **orderNumber** | **Amount** |
| --- | --- |
| 10100 | 10223.83 |
| 10101 | 10549.01 |
| 10102 | 5494.78 |
| 10103 | 50218.95 |
| 10104 | 40206.20 |
| 10105 | 53959.21 |
| 10106 | 52151.81 |
| 10107 | 22292.62 |
| 10108 | 51001.22 |
| 10109 | 25833.14 |
| 10110 | 48425.69 |
| 10111 | 16537.85 |
| 10112 | 7674.94 |
| 10113 | 11044.30 |
| 10114 | 33383.14 |

**Total 326 Rows in result of this query**

1. Write a query to find the total amount of first 5 orders as “Amount”

| **orderNumber** | **Amount** |
| --- | --- |
| 10100 | 10223.83 |
| 10101 | 10549.01 |
| 10102 | 5494.78 |
| 10103 | 50218.95 |
| 10104 | 40206.20 |

1. Write a query to find the total amount of all orders as “Amount” in which total amount is more than 10000

| **orderNumber** | **Amount** |
| --- | --- |
| 10312 | 10286.40 |
| 10403 | 11503.14 |
| 10404 | 10460.16 |
| 10405 | 11170.52 |
| 10407 | 10723.60 |
| 10424 | 10072.00 |

1. Count the total number of customers from each country in the customers table

| **country** | **No of Customers** |  |
| --- | --- | --- |
| Australia | 5 |  |
| Austria | 2 |  |
| Belgium | 2 |  |
| Canada | 3 |  |
| Denmark | 2 |  |
| Finland | 3 |  |
| France | 12 |  |
| Germany | 13 |  |
| Hong Kong | 1 |  |
| Ireland | 2 |  |
| Israel | 1 |  |
| Italy | 4 |  |
| Japan | 2 |  |
| Netherlands | 1 |  |
| New Zealand | 4 |  |
| Norway | 3 |  |
| Philippines | 1 |  |
| Poland | 1 |  |
| Portugal | 2 |  |
| Russia | 1 |  |
| Singapore | 3 |  |
| South Africa | 1 |  |
| Spain | 7 |  |
| Sweden | 2 |  |
| Switzerland | 3 |  |
| UK | 5 |  |
| USA | 36 |  |

1. Count the total number of customers from each country and there states in the customers table.

| **country** | **state** | **No of Customers** |
| --- | --- | --- |
| Australia | NSW | 2 |
| Australia | Queensland | 1 |
| Australia | Victoria | 2 |
| Austria | **null** | 2 |
| Belgium | **null** | 2 |
| Canada | BC | 2 |
| Canada | Québec | 1 |
| Denmark | **null** | 2 |
| Finland | **null** | 3 |
| France | **null** | 12 |
| Germany | **null** | 13 |
| Hong Kong | **null** | 1 |
| Ireland | **null** | 1 |
| Ireland | Co. Cork | 1 |
| Israel | **null** | 1 |
| Italy | **null** | 4 |
| Japan | Osaka | 1 |
| Japan | Tokyo | 1 |
| Netherlands | **null** | 1 |
| New Zealand | **null** | 4 |
| Norway | **null** | 3 |
| Philippines | **null** | 1 |
| Poland | **null** | 1 |
| Portugal | **null** | 2 |
| Russia | **null** | 1 |
| Singapore | **null** | 3 |
| South Africa | Pretoria | 1 |
| Spain | **null** | 7 |
| Sweden | **null** | 2 |
| Switzerland | **null** | 3 |
| UK | **null** | 4 |
| UK | Isle of Wight | 1 |
| USA | CA | 11 |
| USA | CT | 4 |
| USA | MA | 9 |
| USA | NH | 1 |
| USA | NJ | 1 |
| USA | NV | 1 |
| USA | NY | 6 |
| USA | PA | 3 |

1. Count the total number of customers from different states of USA.

| **country** | **state** | **No of Custmores** |
| --- | --- | --- |
| USA | CA | 11 |
| USA | CT | 4 |
| USA | MA | 9 |
| USA | NH | 1 |
| USA | NJ | 1 |
| USA | NV | 1 |
| USA | NY | 6 |
| USA | PA | 3 |

1. Count the total number of customers from different states of whose name starts with U

| **country** | **State** | **No of Custmores** |
| --- | --- | --- |
| UK | **Null** | 4 |
| USA | CA | 11 |
| USA | CT | 4 |
| UK | Isle of Wight | 1 |
| USA | MA | 9 |
| USA | NH | 1 |
| USA | NJ | 1 |
| USA | NV | 1 |
| USA | NY | 6 |
| USA | PA | 3 |

1. Write a query to count the number of employees in each designation in the company.

| **jobTitle** | **Number of Employees** |
| --- | --- |
| President | 1 |
| Sale Manager (EMEA) | 1 |
| Sales Manager (APAC) | 1 |
| Sales Manager (NA) | 1 |
| Sales Rep | 17 |
| VP Marketing | 1 |
| VP Sales | 1 |

1. Write a query to count the number of employees in all designations in Sales department.

| **Sales Dept Employees** |
| --- |
| 21 |

# MySQL HAVING Clause

1. Write a query to list all countries from where the company has 5 or more customers.

| **country** | **CustomersNo** |
| --- | --- |
| Australia | 5 |
| France | 12 |
| Germany | 13 |
| Spain | 7 |
| UK | 5 |
| USA | 36 |

1. Write a query to list all countries from where the company has 5 or more customers in decreasing order.

| **country** | **CustomersNo** |
| --- | --- |
| USA | 36 |
| Germany | 13 |
| France | 12 |
| Spain | 7 |
| UK | 5 |
| Australia | 5 |

1. Write a query to list top 3 countries, in terms of number of customers. ( Listed countires should have at least 5 customers)

| **country** | **CustomersNo** |
| --- | --- |
| USA | 36 |
| Germany | 13 |
| France | 12 |

1. Write a query to find which office number has maximum employees along with number of employees in that office.

| **officeCode** | **NoOfEmployees** |
| --- | --- |
| 1 | 6 |

1. Write a query to find all orders in which more than 16 products were ordered.

| **orderNumber** | **NoOfItems** |
| --- | --- |
| 10106 | 18 |
| 10122 | 17 |
| 10126 | 17 |
| 10135 | 17 |
| 10159 | 18 |
| 10165 | 18 |
| 10168 | 18 |
| 10181 | 17 |
| 10182 | 17 |
| 10204 | 17 |
| 10210 | 17 |
| 10222 | 18 |
| 10275 | 18 |
| 10280 | 17 |
| 10287 | 17 |
| 10304 | 17 |
| 10306 | 17 |
| 10310 | 17 |
| 10312 | 17 |
| 10316 | 18 |
| 10332 | 18 |
| 10350 | 17 |
| 10360 | 18 |
| 10373 | 17 |
| 10386 | 18 |
| 10398 | 18 |

**Total 26 Rows in result of this query**

1. Write a query to find all orders in which more than 16 products were ordered arrange in decreasing order of products and increasing order of order number.

| **orderNumber** | **NoOfItems** |
| --- | --- |
| 10106 | 18 |
| 10159 | 18 |
| 10165 | 18 |
| 10168 | 18 |
| 10222 | 18 |
| 10275 | 18 |
| 10316 | 18 |
| 10332 | 18 |
| 10360 | 18 |
| 10386 | 18 |
| 10398 | 18 |
| 10122 | 17 |
| 10126 | 17 |
| 10135 | 17 |
| 10181 | 17 |
| 10182 | 17 |
| 10204 | 17 |
| 10210 | 17 |
| 10280 | 17 |
| 10287 | 17 |
| 10304 | 17 |
| 10306 | 17 |
| 10310 | 17 |
| 10312 | 17 |
| 10350 | 17 |
| 10373 | 17 |

**Total 26 Rows in result of this query**

1. Write a query to find all orders in which there are more than 3 products whose price is more than 140.

| **orderNumber** | **NoOfItems** |
| --- | --- |
| 10127 | 5 |
| 10176 | 4 |
| 10247 | 4 |
| 10282 | 4 |
| 10349 | 4 |
| 10382 | 4 |

1. Write a query to find all orders in which there are more than 4 products whose price between 120 and 140, arrange them in descending order of number of items.

| **orderNumber** | **NoOfItems** |
| --- | --- |
| 10181 | 7 |
| 10331 | 5 |
| 10310 | 5 |
| 10287 | 5 |
| 10321 | 5 |

# MySQL Subqueries/Nested Queries

1. Find the customer ID, check number and amount of customer who has made minimum payment.

| **customerNumber** | **checkNumber** | **amount** |
| --- | --- | --- |
| 398 | JPMR4544 | 615.45 |

1. Find the product details of all products which have buyPrice above average buyPrice of all products.

| **productCode** | **productName** | **productLine** | **buyPrice** |
| --- | --- | --- | --- |
| S10\_1949 | 1952 Alpine Renault 1300 | Classic Cars | 98.58 |
| S10\_2016 | 1996 Moto Guzzi 1100i | Motorcycles | 68.99 |
| S10\_4698 | 2003 Harley-Davidson Eagle Drag Bike | Motorcycles | 91.02 |
| S10\_4757 | 1972 Alfa Romeo GTA | Classic Cars | 85.68 |
| S10\_4962 | 1962 LanciaA Delta 16V | Classic Cars | 103.42 |
| S12\_1099 | 1968 Ford Mustang | Classic Cars | 95.34 |
| S12\_1108 | 2001 Ferrari Enzo | Classic Cars | 95.59 |
| S12\_1666 | 1958 Setra Bus | Trucks and Buses | 77.90 |
| S12\_2823 | 2002 Suzuki XREO | Motorcycles | 66.27 |
| S12\_3148 | 1969 Corvair Monza | Classic Cars | 89.14 |
| S12\_3380 | 1968 Dodge Charger | Classic Cars | 75.16 |
| S12\_3891 | 1969 Ford Falcon | Classic Cars | 83.05 |
| S12\_4473 | 1957 Chevy Pickup | Trucks and Buses | 55.70 |
| S12\_4675 | 1969 Dodge Charger | Classic Cars | 58.73 |

**Total 54 Rows in result of this query**

1. Write a query to find the customer who are from the countries where the company has offices.

| **customerName** | **contactFirstName** | **country** |
| --- | --- | --- |
| Signal Gift Stores | Jean | USA |
| Mini Gifts Distributors Ltd. | Susan | USA |
| Atelier graphique | Carine | France |
| Mini Caravy | Frédérique | France |
| Osaka Souveniers Co. | Mory | Japan |
| Tokyo Collectables, Ltd | Akiko | Japan |
| Australian Collectors, Co. | Peter | Australia |
| giftsbymail.co.uk | Helen | UK |
| Stylish Desk Decors, Co. | Ann | UK |
| Double Decker Gift Stores, Ltd | Thomas | UK |

**Total 60 Rows in result of this query**

1. Write a query to find out the offices which have people with jobTitle other than “Sales Rep”

| **officeCode** |
| --- |
| 1 |
| 6 |
| 4 |

# MySQL INNER JOIN Clause

1. Write a query to find the customer name, city, phone number, order number and order status of all order placed in the company.

| **customerName** | **City** | **phone** | **orderNumber** | **status** |
| --- | --- | --- | --- | --- |
| Atelier graphique | Nantes | 40.32.2555 | 10123 | Shipped |
| Atelier graphique | Nantes | 40.32.2555 | 10298 | Shipped |
| Atelier graphique | Nantes | 40.32.2555 | 10345 | Shipped |
| Signal Gift Stores | Las Vegas | 7025551838 | 10124 | Shipped |
| Signal Gift Stores | Las Vegas | 7025551838 | 10278 | Shipped |
| Signal Gift Stores | Las Vegas | 7025551838 | 10346 | Shipped |
| Australian Collectors, Co. | Melbourne | 03 9520 4555 | 10120 | Shipped |
| Australian Collectors, Co. | Melbourne | 03 9520 4555 | 10347 | Shipped |
| La Rochelle Gifts | Nantes | 40.67.8555 | 10275 | Shipped |
| Baane Mini Imports | Stavern | 07-98 9555 | 10103 | Shipped |
| Baane Mini Imports | Stavern | 07-98 9555 | 10158 | Shipped |
| Mini Gifts Distributors Ltd. | San Rafael | 4155551450 | 10113 | Shipped |
| Mini Gifts Distributors Ltd. | San Rafael | 4155551450 | 10135 | Shipped |

**Total 326 Rows in result of this query**

1. Write a query to find the customer name, city, phone number, order number and order status of all order placed in the company arranged in sequence of order number.

| **customerName** | **City** | **phone** | **orderNumber** | **status** |
| --- | --- | --- | --- | --- |
| Online Diecast Creations Co. | Nashua | 6035558647 | 10100 | Shipped |
| Blauer See Auto, Co. | Frankfurt | +49 69 66 90 2555 | 10101 | Shipped |
| Vitachrome Inc. | NYC | 2125551500 | 10102 | Shipped |
| Baane Mini Imports | Stavern | 07-98 9555 | 10103 | Shipped |
| Euro+ Shopping Channel | Madrid | (91) 555 94 44 | 10104 | Shipped |
| Danish Wholesale Imports | Kobenhavn | 31 12 3555 | 10105 | Shipped |
| Rovelli Gifts | Bergamo | 035-640555 | 10106 | Shipped |
| Land of Toys Inc. | NYC | 2125557818 | 10107 | Shipped |
| Cruz & Sons Co. | Makati City | +63 2 555 3587 | 10108 | Shipped |
| Motor Mint Distributors Inc. | Philadelphia | 2155559857 | 10109 | Shipped |
| AV Stores, Co. | Manchester | (171) 555-1555 | 10110 | Shipped |
| Mini Wheels Co. | San Francisco | 6505555787 | 10111 | Shipped |
| Volvo Model Replicas, Co | Luleå | 0921-12 3555 | 10112 | Shipped |
| Mini Gifts Distributors Ltd. | San Rafael | 4155551450 | 10113 | Shipped |
| La Corne D'abondance, Co. | Paris | (1) 42.34.2555 | 10114 | Shipped |
| Classic Legends Inc. | NYC | 2125558493 | 10115 | Shipped |
| Royale Belge | Charleroi | (071) 23 67 2555 | 10116 | Shipped |
| Dragon Souveniers, Ltd. | Singapore | +65 221 7555 | 10117 | Shipped |
| Enaco Distributors | Barcelona | (93) 203 4555 | 10118 | Shipped |
| Salzburg Collectables | Salzburg | 6562-9555 | 10119 | Shipped |
| Australian Collectors, Co. | Melbourne | 03 9520 4555 | 10120 | Shipped |
| Reims Collectables | Reims | 26.47.1555 | 10121 | Shipped |

**Total 326 Rows in result of this query**

1. Write a query to find the customer name, city, phone number, order number and order status of all cancelled orders.

| **customerName** | **City** | **phone** | **orderNumber** | **status** |
| --- | --- | --- | --- | --- |
| Land of Toys Inc. | NYC | 2125557818 | 10248 | Cancelled |
| Euro+ Shopping Channel | Madrid | (91) 555 94 44 | 10262 | Cancelled |
| UK Collectables, Ltd. | Liverpool | (171) 555-2282 | 10253 | Cancelled |
| GiftsForHim.com | Auckland | 64-9-3763555 | 10260 | Cancelled |
| Scandinavian Gift Ideas | Bräcke | 0695-34 6555 | 10167 | Cancelled |
| Kelly's Gift Shop | Auckland | +64 9 5555500 | 10179 | Cancelled |

1. Write a query to find the customer name, city, country, phone number, order number and order status of all orders from Spain.

| **customerName** | **City** | **country** | **phone** | **orderNumber** | **Status** |
| --- | --- | --- | --- | --- | --- |
| Euro+ Shopping Channel | Madrid | Spain | (91) 555 94 44 | 10104 | Shipped |
| Enaco Distributors | Barcelona | Spain | (93) 203 4555 | 10118 | Shipped |
| Enaco Distributors | Barcelona | Spain | (93) 203 4555 | 10197 | Shipped |
| Enaco Distributors | Barcelona | Spain | (93) 203 4555 | 10340 | Shipped |
| CAF Imports | Madrid | Spain | +34 913 728 555 | 10177 | Shipped |
| CAF Imports | Madrid | Spain | +34 913 728 555 | 10231 | Shipped |
| Corrida Auto Replicas, Ltd | Madrid | Spain | (91) 555 22 82 | 10126 | Shipped |
| Corrida Auto Replicas, Ltd | Madrid | Spain | (91) 555 22 82 | 10214 | Shipped |
| Corrida Auto Replicas, Ltd | Madrid | Spain | (91) 555 22 82 | 10348 | Shipped |
| Iberia Gift Imports, Corp. | Sevilla | Spain | (95) 555 82 82 | 10184 | Shipped |
| Iberia Gift Imports, Corp. | Sevilla | Spain | (95) 555 82 82 | 10303 | Shipped |

**Total 36 Rows in result of this query**

1. Write a query to find the customer name, city, country, phone number, order number and order status of all orders from Spain whose status in not Shipped.

| **customerName** | **City** | **country** | **Phone** | **orderNumber** | **status** |
| --- | --- | --- | --- | --- | --- |
| Euro+ Shopping Channel | Madrid | Spain | (91) 555 94 44 | 10262 | Cancelled |
| Euro+ Shopping Channel | Madrid | Spain | (91) 555 94 44 | 10386 | Resolved |
| Euro+ Shopping Channel | Madrid | Spain | (91) 555 94 44 | 10417 | Disputed |
| Euro+ Shopping Channel | Madrid | Spain | (91) 555 94 44 | 10424 | In Process |

1. Write a query to find the customer name, city, country, phone number, order number and order status of all orders from countries whose name start with N and status in not Shipped.

| **customerName** | **city** | **country** | **phone** | **orderNumber** | **status** |
| --- | --- | --- | --- | --- | --- |
| GiftsForHim.com | Auckland | New Zealand | 64-9-3763555 | 10260 | Cancelled |
| Kelly's Gift Shop | Auckland | New Zealand | +64 9 5555500 | 10179 | Cancelled |

1. Write a query to find the order number in which “Setra Bus” has been ordered.

| **orderNumber** | **productName** |
| --- | --- |
| 10103 | 1958 Setra Bus |
| 10113 | 1958 Setra Bus |
| 10126 | 1958 Setra Bus |
| 10140 | 1958 Setra Bus |
| 10150 | 1958 Setra Bus |
| 10164 | 1958 Setra Bus |
| 10174 | 1958 Setra Bus |

1. Write a query to list all employees and there state and country of work location.

| **firstName** | **lastName** | **jobTitle** | **state** | **Country** |
| --- | --- | --- | --- | --- |
| Diane | Murphy | President | CA | USA |
| Mary | Patterson | VP Sales | CA | USA |
| Jeff | Firrelli | VP Marketing | CA | USA |
| Anthony | Bow | Sales Manager (NA) | CA | USA |
| Leslie | Jennings | Sales Rep | CA | USA |
| Leslie | Thompson | Sales Rep | CA | USA |
| Julie | Firrelli | Sales Rep | MA | USA |
| Steve | Patterson | Sales Rep | MA | USA |
| Foon Yue | Tseng | Sales Rep | NY | USA |
| George | Vanauf | Sales Rep | NY | USA |
| Gerard | Bondur | Sale Manager (EMEA) | **null** | France |
| Loui | Bondur | Sales Rep | **null** | France |
| Gerard | Hernandez | Sales Rep | **null** | France |
| Pamela | Castillo | Sales Rep | **null** | France |
| Martin | Gerard | Sales Rep | **null** | France |
| Mami | Nishi | Sales Rep | Chiyoda-Ku | Japan |
| Yoshimi | Kato | Sales Rep | Chiyoda-Ku | Japan |
| William | Patterson | Sales Manager (APAC) | **null** | Australia |
| Andy | Fixter | Sales Rep | **null** | Australia |
| Peter | Marsh | Sales Rep | **null** | Australia |
| Tom | King | Sales Rep | **null** | Australia |
| Larry | Bott | Sales Rep | **null** | UK |
| Barry | Jones | Sales Rep | **null** | UK |

**Total 23 Rows in result of this query**

1. Write a query to list all employees who work in France

| **firstName** | **lastName** | **jobTitle** | **country** |
| --- | --- | --- | --- |
| Gerard | Bondur | Sale Manager (EMEA) | France |
| Loui | Bondur | Sales Rep | France |
| Gerard | Hernandez | Sales Rep | France |
| Pamela | Castillo | Sales Rep | France |
| Martin | Gerard | Sales Rep | France |

1. Write a query to list all names of customers who have made payment of more than 100000

| **customerName** | **contactFirstName** | **contactLastName** | **Amount** |
| --- | --- | --- | --- |
| Mini Gifts Distributors Ltd. | Susan | Nelson | 101244.59 |
| Mini Gifts Distributors Ltd. | Susan | Nelson | 111654.40 |
| Euro+ Shopping Channel | Diego | Freyre | 116208.40 |
| Euro+ Shopping Channel | Diego | Freyre | 120166.58 |
| Dragon Souveniers, Ltd. | Eric | Natividad | 105743.00 |

1. Write a query to list names of customers who have made payment of more than 50000 more than once.

| **customerName** | **contactFirstName** | **contactLastName** | **amount** | **NoCustomer** |
| --- | --- | --- | --- | --- |
| Euro+ Shopping Channel | Diego | Freyre | 59830.55 | 5 |
| Mini Gifts Distributors Ltd. | Susan | Nelson | 101244.59 | 5 |
| Muscle Machine Inc | Jeff | Young | 58793.53 | 2 |
| Online Diecast Creations Co. | Dorothy | Young | 50799.69 | 2 |

1. Write a query to list names of all customers who have made any payment in decreasing order of number of payments made by them.

| **customerName** | **contactFirstName** | **contactLastName** | **NoPayments** |
| --- | --- | --- | --- |
| Euro+ Shopping Channel | Diego | Freyre | 13 |
| Mini Gifts Distributors Ltd. | Susan | Nelson | 9 |
| Down Under Souveniers, Inc | Mike | Graham | 4 |
| Muscle Machine Inc | Jeff | Young | 4 |
| Danish Wholesale Imports | Jytte | Petersen | 4 |
| Royale Belge | Pascale | Cartrain | 4 |
| Australian Collectors, Co. | Peter | Ferguson | 4 |
| Technics Stores Inc. | Juri | Hashimoto | 4 |
| Dragon Souveniers, Ltd. | Eric | Natividad | 4 |
| Baane Mini Imports | Jonas | Bergulfsen | 4 |

**Total 98 Rows in result of this query**

1. Write a query to list names of all customers who have made payments in decreasing order of total payment made by them along with number of payments made.

| **customerName** | **contactFirstName** | **contactLastName** | **NoPayments** | **Total** |
| --- | --- | --- | --- | --- |
| Euro+ Shopping Channel | Diego | Freyre | 13 | 715738.98 |
| Mini Gifts Distributors Ltd. | Susan | Nelson | 9 | 584188.24 |
| Australian Collectors, Co. | Peter | Ferguson | 4 | 180585.07 |
| Muscle Machine Inc | Jeff | Young | 4 | 177913.95 |
| Dragon Souveniers, Ltd. | Eric | Natividad | 4 | 156251.03 |
| Down Under Souveniers, Inc | Mike | Graham | 4 | 154622.08 |
| AV Stores, Co. | Rachel | Ashworth | 3 | 148410.09 |
| Anna's Decorations, Ltd | Anna | O'Hara | 4 | 137034.22 |
| Corporate Gift Ideas Co. | Julie | Brown | 2 | 132340.78 |
| Saveley & Henriot, Co. | Mary | Saveley | 3 | 130305.35 |

**Total 98 Rows in result of this query**

1. Find the top 3 products which have been ordered along with number of times it has been ordered, if the number is same the product should be arranged alphabetically.

| **productCode** | **productName** | **NoProducts** |
| --- | --- | --- |
| S18\_3232 | 1992 Ferrari 360 Spider red | 53 |
| S10\_1678 | 1969 Harley Davidson Ultimate Chopper | 28 |
| S10\_1949 | 1952 Alpine Renault 1300 | 28 |

1. Find the top 5 products which have made highest sales amount for company along with the Total Amount for those products.

| **productCode** | **productName** | **TotalAmount** |
| --- | --- | --- |
| S18\_3232 | 1992 Ferrari 360 Spider red | 276839.98 |
| S12\_1108 | 2001 Ferrari Enzo | 190755.86 |
| S10\_1949 | 1952 Alpine Renault 1300 | 190017.96 |
| S10\_4698 | 2003 Harley-Davidson Eagle Drag Bike | 170686.00 |
| S12\_1099 | 1968 Ford Mustang | 161531.48 |

1. Write a query to find name of all customers who have top 8 single payments.

| **customerNumber** | **customerName** | **Amount** |
| --- | --- | --- |
| 141 | Euro+ Shopping Channel | 120166.58 |
| 141 | Euro+ Shopping Channel | 116208.40 |
| 124 | Mini Gifts Distributors Ltd. | 111654.40 |
| 148 | Dragon Souveniers, Ltd. | 105743.00 |
| 124 | Mini Gifts Distributors Ltd. | 101244.59 |
| 321 | Corporate Gift Ideas Co. | 85559.12 |
| 124 | Mini Gifts Distributors Ltd. | 85410.87 |
| 167 | Herkku Gifts | 85024.46 |

1. Write a query to find name of 5 customers who have highest total payments and number of payments made for that amount.

| **customerNumber** | **customerName** | **TotalPayment** | **NoPayments** |
| --- | --- | --- | --- |
| 141 | Euro+ Shopping Channel | 715738.98 | 13 |
| 124 | Mini Gifts Distributors Ltd. | 584188.24 | 9 |
| 114 | Australian Collectors, Co. | 180585.07 | 4 |
| 151 | Muscle Machine Inc | 177913.95 | 4 |
| 148 | Dragon Souveniers, Ltd. | 156251.03 | 4 |

1. Write a query to find name of all customers, contact person and phone number whose order have been cancelled.

| **customerName** | **contactFirstName** | **contactLastName** | **phone** |
| --- | --- | --- | --- |
| Land of Toys Inc. | Kwai | Lee | 2125557818 |
| Euro+ Shopping Channel | Diego | Freyre | (91) 555 94 44 |
| UK Collectables, Ltd. | Elizabeth | Devon | (171) 555-2282 |
| GiftsForHim.com | Wales | MacKinlay | 64-9-3763555 |
| Scandinavian Gift Ideas | Martha | Larsson | 0695-34 6555 |
| Kelly's Gift Shop | Tony | Snowden | +64 9 5555500 |

# Self Join

1. Write a query to list all employees and there their supervisors name.

| **firstName** | **lastName** | **firstName** | **lastName** |
| --- | --- | --- | --- |
| Mary | Patterson | Diane | Murphy |
| Jeff | Firrelli | Diane | Murphy |
| William | Patterson | Mary | Patterson |
| Gerard | Bondur | Mary | Patterson |
| Anthony | Bow | Mary | Patterson |
| Leslie | Jennings | Anthony | Bow |
| Leslie | Thompson | Anthony | Bow |
| Julie | Firrelli | Anthony | Bow |
| Steve | Patterson | Anthony | Bow |
| Foon Yue | Tseng | Anthony | Bow |
| George | Vanauf | Anthony | Bow |
| Loui | Bondur | Gerard | Bondur |
| Gerard | Hernandez | Gerard | Bondur |
| Pamela | Castillo | Gerard | Bondur |
| Larry | Bott | Gerard | Bondur |
| Barry | Jones | Gerard | Bondur |
| Andy | Fixter | William | Patterson |
| Peter | Marsh | William | Patterson |
| Tom | King | William | Patterson |
| Mami | Nishi | Mary | Patterson |
| Yoshimi | Kato | Mami | Nishi |
| Martin | Gerard | Gerard | Bondur |

1. Write a query to list all employees and there their supervisors name sorted by name of employee.

| **firstName** | **lastName** | **firstName** | **lastName** |
| --- | --- | --- | --- |
| Andy | Fixter | William | Patterson |
| Anthony | Bow | Mary | Patterson |
| Barry | Jones | Gerard | Bondur |
| Foon Yue | Tseng | Anthony | Bow |
| George | Vanauf | Anthony | Bow |
| Gerard | Hernandez | Gerard | Bondur |
| Gerard | Bondur | Mary | Patterson |
| Jeff | Firrelli | Diane | Murphy |
| Julie | Firrelli | Anthony | Bow |
| Larry | Bott | Gerard | Bondur |
| Leslie | Thompson | Anthony | Bow |
| Leslie | Jennings | Anthony | Bow |
| Loui | Bondur | Gerard | Bondur |
| Mami | Nishi | Mary | Patterson |
| Martin | Gerard | Gerard | Bondur |
| Mary | Patterson | Diane | Murphy |
| Pamela | Castillo | Gerard | Bondur |
| Peter | Marsh | William | Patterson |
| Steve | Patterson | Anthony | Bow |
| Tom | King | William | Patterson |
| William | Patterson | Mary | Patterson |
| Yoshimi | Kato | Mami | Nishi |

1. Write a query to list all officers (All job tile except Sales Rep) and the name and designation of employee they supervise, arrange the result in order of supervisor name.

| **jobTitle** | **firstName** | **lastName** | **firstName** | **lastName** | **jobTitle** |
| --- | --- | --- | --- | --- | --- |
| Sales Manager (NA) | Anthony | Bow | Steve | Patterson | Sales Rep |
| Sales Manager (NA) | Anthony | Bow | Foon Yue | Tseng | Sales Rep |
| Sales Manager (NA) | Anthony | Bow | Leslie | Jennings | Sales Rep |
| Sales Manager (NA) | Anthony | Bow | George | Vanauf | Sales Rep |
| Sales Manager (NA) | Anthony | Bow | Leslie | Thompson | Sales Rep |
| Sales Manager (NA) | Anthony | Bow | Julie | Firrelli | Sales Rep |
| President | Diane | Murphy | Mary | Patterson | VP Sales |
| President | Diane | Murphy | Jeff | Firrelli | VP Marketing |
| Sale Manager (EMEA) | Gerard | Bondur | Martin | Gerard | Sales Rep |
| Sale Manager (EMEA) | Gerard | Bondur | Gerard | Hernandez | Sales Rep |
| Sale Manager (EMEA) | Gerard | Bondur | Pamela | Castillo | Sales Rep |
| Sale Manager (EMEA) | Gerard | Bondur | Larry | Bott | Sales Rep |
| Sale Manager (EMEA) | Gerard | Bondur | Barry | Jones | Sales Rep |
| Sale Manager (EMEA) | Gerard | Bondur | Loui | Bondur | Sales Rep |
| Sales Rep | Mami | Nishi | Yoshimi | Kato | Sales Rep |
| VP Sales | Mary | Patterson | Gerard | Bondur | Sale Manager (EMEA) |
| VP Sales | Mary | Patterson | Anthony | Bow | Sales Manager (NA) |
| VP Sales | Mary | Patterson | Mami | Nishi | Sales Rep |
| VP Sales | Mary | Patterson | William | Patterson | Sales Manager (APAC) |
| Sales Manager (APAC) | William | Patterson | Peter | Marsh | Sales Rep |
| Sales Manager (APAC) | William | Patterson | Tom | King | Sales Rep |
| Sales Manager (APAC) | William | Patterson | Andy | Fixter | Sales Rep |

# Join of more than 2 tables

1. Write a query to list status the all orders which have ordered “Setra Bus”

| **orderNumber** | **status** | **productName** |
| --- | --- | --- |
| 10103 | Shipped | 1958 Setra Bus |
| 10113 | Shipped | 1958 Setra Bus |
| 10126 | Shipped | 1958 Setra Bus |
| 10140 | Shipped | 1958 Setra Bus |
| 10150 | Shipped | 1958 Setra Bus |
| 10164 | Resolved | 1958 Setra Bus |
| 10174 | Shipped | 1958 Setra Bus |
| 10411 | Shipped | 1958 Setra Bus |
| 10424 | In Process | 1958 Setra Bus |

**Total 28 Rows in result of this query**

1. Write a query to list status the all orders which have ordered “Setra Bus” but has not been shipped.

| **orderNumber** | **status** | **productCode** | **productName** |
| --- | --- | --- | --- |
| 10164 | Resolved | S12\_1666 | 1958 Setra Bus |
| 10424 | In Process | S12\_1666 | 1958 Setra Bus |

# MySQL Aggregate Functions

1. Write a query to find the number of orders with each unique status in the orders table

| **Status** | **NoOfOrders** |
| --- | --- |
| Cancelled | 6 |
| Disputed | 3 |
| In Process | 6 |
| On Hold | 4 |
| Resolved | 4 |
| Shipped | 303 |