**Practice SQL 37-43**

**37. List all customers who didn't order in 2015 (78)**

SELECT CUSTOMERNAME FROM Customers

EXCEPT

SELECT CUSTOMERNAME FROM Customers

INNER JOIN Orders ON Customers.CUSTOMERNUMBER = Orders.CUSTOMERNUMBER

WHERE YEAR(ORDERDATE) = 2015;

|  |
| --- |
| CUSTOMERNAME |
| ANG Resellers |
| AV Stores, Co. |
| American Souvenirs Inc |
| Amica Models & Co. |
| Anton Designs, Ltd. |
| Asian Shopping Network, Co |
| Asian Treasures, Inc. |
| Atelier graphique |
| Australian Collectors, Co. |
| Auto AssociÃ©s & Cie. |
| Auto-Moto Classics Inc. |
| BG&E Collectables |
| Baane Mini Imports |
| Bavarian Collectables Imports, Co. |
| Blauer See Auto, Co. |
| CAF Imports |
| Cambridge Collectables Co. |
| Canadian Gift Exchange Network |
| Classic Gift Ideas, Inc |
| Classic Legends Inc. |
| Clover Collections, Co. |
| Collectable Mini Designs Co. |
| Corrida Auto Replicas, Ltd |
| Cramer SpezialitÃ¤ten, Ltd |
| Cruz & Sons Co. |
| Daedalus Designs Imports |
| Der Hund Imports |
| Diecast Collectables |
| Double Decker Gift Stores, Ltd |
| Enaco Distributors |
| Feuer Online Stores, Inc |
| Franken Gifts, Co |
| Frau da Collezione |
| Gift Ideas Corp. |
| Havel & Zbyszek Co |
| Heintze Collectables |
| Herkku Gifts |
| Iberia Gift Imports, Corp. |
| King Kong Collectables, Co. |
| Kommission Auto |
| Kremlin Collectables, Co. |
| La Corne D'abondance, Co. |
| Land of Toys Inc. |
| Lisboa Souveniers, Inc |
| Marta's Replicas Co. |
| Men 'R' US Retailers, Ltd. |
| Messner Shopping Network |
| Microscale Inc. |
| Mini Classics |
| Mini Wheels Co. |
| Mit VergnÃ¼gen & Co. |
| Motor Mint Distributors Inc. |
| Muscle Machine Inc |
| NatÃ¼rlich Autos |
| Norway Gifts By Mail, Co. |
| Online Diecast Creations Co. |
| Online Mini Collectables |
| Osaka Souveniers Co. |
| Porto Imports Co. |
| Precious Collectables |
| Raanan Stores, Inc |
| Rovelli Gifts |
| Royal Canadian Collectables, Ltd. |
| SAR Distributors, Co |
| Saveley & Henriot, Co. |
| Schuyler Imports |
| Signal Collectibles Ltd. |
| Signal Gift Stores |
| Stuttgart Collectable Exchange |
| Stylish Desk Decors, Co. |
| Super Scale Inc. |
| Toms SpezialitÃ¤ten, Ltd |
| Vida Sport, Ltd |
| Vitachrome Inc. |
| Volvo Model Replicas, Co |
| Warburg Exchange |
| West Coast Collectables Co. |
| giftsbymail.co.uk |

**38. List all people that we deal with (employees and customer contacts). Display contact first name, contact last name, company name for the customers. For the employees, display their first name, last name, and just the literal ‘Employee’ for the employees. Returns 145 rows.**

SELECT CONTACTFIRSTNAME AS "FIRSTNAME", CONTACTLASTNAME AS "LASTNAME", CUSTOMERNAME AS "COMPANYNAME" FROM Customers

UNION

SELECT FIRSTNAME AS "FIRSTNAME", LASTNAME AS "LASTNAME", 'EMPLOYEE' AS "COMPANYNAME" FROM Employees;

|  |  |  |
| --- | --- | --- |
| FIRSTNAME | LASTNAME | COMPANYNAME |
| Adrian | Huxley | Souveniers And Things Co. |
| Akiko | Shimamura | Tokyo Collectables, Ltd |
| Alejandra | Camino | ANG Resellers |
| Alexander | Feuer | Feuer Online Stores, Inc |
| Alexander | Semenov | Kremlin Collectables, Co. |
| Allen | Nelson | Collectables For Less Inc. |
| Andy | Fixter | EMPLOYEE |
| Ann | Brown | Stylish Desk Decors, Co. |
| Anna | O'Hara | Anna's Decorations, Ltd |
| Annette | Roulet | Alpha Cognac |
| Anthony | Bow | EMPLOYEE |
| Armand | Kuger | SAR Distributors, Co |
| Arnold | Cruz | Cruz & Sons Co. |
| Barry | Jones | EMPLOYEE |
| Ben | Calaghan | Australian Gift Network, Co |
| Bradley | Schuyler | Schuyler Imports |
| Braun | Urs | Precious Collectables |
| Brian | Chandler | Men 'R' US Retailers, Ltd. |
| Brydey | Walker | Asian Shopping Network, Co |
| Carine | Schmitt | Atelier graphique |
| Carmen | Anton | Anton Designs, Ltd. |
| Catherine | Dewey | Petit Auto |
| Christina | Berglund | Volvo Model Replicas, Co |
| Dan | Lewis | Gift Ideas Corp. |
| Daniel | Da Silva | Lyon Souveniers |
| Daniel | Tonini | Auto AssociÃ©s & Cie. |
| Dean | Cassidy | Clover Collections, Co. |
| Diane | Murphy | EMPLOYEE |
| Diego | Freyre | Euro+ Shopping Channel |
| Dominique | Perrier | Auto Canal+ Petit |
| Dorothy | Young | Online Diecast Creations Co. |
| Ed | Harrison | BG&E Collectables |
| Eduardo | Saavedra | Enaco Distributors |
| Elizabeth | Devon | UK Collectables, Ltd. |
| Elizabeth | Lincoln | Royal Canadian Collectables, Ltd. |
| Eric | Natividad | Dragon Souveniers, Ltd. |
| Foon Yue | Tseng | EMPLOYEE |
| Francisca | Cervantes | Classic Gift Ideas, Inc |
| Franco | Ricotti | Frau da Collezione |
| FrÃ©dÃ©rique | Citeaux | Mini Caravy |
| Georg | Pipps | Salzburg Collectables |
| George | Vanauf | EMPLOYEE |
| Gerard | Bondur | EMPLOYEE |
| Gerard | Hernandez | EMPLOYEE |
| Giovanni | Rovelli | Rovelli Gifts |
| Hanna | Moos | Mit VergnÃ¼gen & Co. |
| Helen | Bennett | giftsbymail.co.uk |
| Henriette | Pfalzheim | Toms SpezialitÃ¤ten, Ltd |
| Horst | Kloss | NatÃ¼rlich Autos |
| Isabel | de Castro | Porto Imports Co. |
| Jan | Klaeboe | Norway Gifts By Mail, Co. |
| Janine | Labrune | La Rochelle Gifts |
| Jean | FresniÃ¨re | QuÃ©bec Home Shopping Network |
| Jean | King | Signal Gift Stores |
| Jeff | Firrelli | EMPLOYEE |
| Jeff | Young | Muscle Machine Inc |
| Jerry | Tseng | Cambridge Collectables Co. |
| Jesus | Fernandez | CAF Imports |
| Jonas | Bergulfsen | Baane Mini Imports |
| JosÃ© Pedro | Roel | Iberia Gift Imports, Corp. |
| Julie | Brown | Corporate Gift Ideas Co. |
| Julie | Firrelli | EMPLOYEE |
| Julie | King | Gift Depot Inc. |
| Julie | Murphy | Mini Wheels Co. |
| Julie | Young | Toys4GrownUps.com |
| Juri | Hashimoto | Technics Stores Inc. |
| Juri | Yoshido | Gifts4AllAges.com |
| Jytte | Petersen | Danish Wholesale Imports |
| Kalle | Suominen | Suominen Souveniers |
| Karin | Josephs | Kommission Auto |
| Keith | Franco | American Souvenirs Inc |
| Kelvin | Leong | Diecast Classics Inc. |
| Kwai | Lee | Land of Toys Inc. |
| Larry | Bott | EMPLOYEE |
| Laurence | Lebihan | Marseille Mini Autos |
| Leslie | Jennings | EMPLOYEE |
| Leslie | Murphy | Super Scale Inc. |
| Leslie | Taylor | Auto-Moto Classics Inc. |
| Leslie | Thompson | EMPLOYEE |
| Lino | Rodriguez | Lisboa Souveniers, Inc |
| Loui | Bondur | EMPLOYEE |
| Mami | Nishi | EMPLOYEE |
| Maria | Hernandez | Classic Legends Inc. |
| Marie | Bertrand | La Corne D'abondance, Co. |
| Marta | Hernandez | Marta's Replicas Co. |
| Martha | Larsson | Scandinavian Gift Ideas |
| Martin | Gerard | EMPLOYEE |
| Martine | RancÃ© | Daedalus Designs Imports |
| MartÃ­n | Sommer | Corrida Auto Replicas, Ltd |
| Mary | Patterson | EMPLOYEE |
| Mary | Saveley | Saveley & Henriot, Co. |
| Mary | Young | Boards & Toys Co. |
| Matti | Karttunen | Toys of Finland, Co. |
| Maurizio | Moroni | L'ordine Souveniers |
| Mel | Andersen | Der Hund Imports |
| Michael | Donnermeyer | Bavarian Collectables Imports, Co. |
| Michael | Frick | Vitachrome Inc. |
| Miguel | Barajas | Online Mini Collectables |
| Mihael | Holz | Vida Sport, Ltd |
| Mike | Gao | King Kong Collectables, Co. |
| Mike | Graham | Down Under Souveniers, Inc |
| Mory | Kentary | Osaka Souveniers Co. |
| Palle | Ibsen | Heintze Collectables |
| Pamela | Castillo | EMPLOYEE |
| Paolo | Accorti | Amica Models & Co. |
| Pascale | Cartrain | Royale Belge |
| Patricia | McKenna | Asian Treasures, Inc. |
| Paul | Henriot | Reims Collectables |
| Peter | Ferguson | Australian Collectors, Co. |
| Peter | Franken | Franken Gifts, Co |
| Peter | Marsh | EMPLOYEE |
| Philip | Cramer | Cramer SpezialitÃ¤ten, Ltd |
| Pirkko | Koskitalo | Oulu Toy Supplies, Inc. |
| Raanan | Altagar,G M | Raanan Stores, Inc |
| Rachel | Ashworth | AV Stores, Co. |
| Renate | Messner | Messner Shopping Network |
| Rita | MÃ¼ller | Stuttgart Collectable Exchange |
| Roland | Keitel | Blauer See Auto, Co. |
| Roland | Mendel | Mini Auto Werke |
| Rosa | Salazar | Motor Mint Distributors Inc. |
| Sarah | McRoy | Extreme Desk Decorations, Ltd |
| Sean | Clenahan | Australian Collectables, Ltd |
| Steve | Frick | Mini Classics |
| Steve | Patterson | EMPLOYEE |
| Steve | Thompson | West Coast Collectables Co. |
| Sue | Frick | The Sharp Gifts Warehouse |
| Sue | Taylor | Signal Collectibles Ltd. |
| Susan | Nelson | Mini Gifts Distributors Ltd. |
| Sven | Ottlieb | Warburg Exchange |
| Thomas | Smith | Double Decker Gift Stores, Ltd |
| Tom | King | EMPLOYEE |
| Tony | Snowden | Kelly's Gift Shop |
| Valarie | Franco | Diecast Collectables |
| Valarie | Thompson | Collectable Mini Designs Co. |
| Veysel | Oeztan | Herkku Gifts |
| Violeta | Benitez | FunGiftIdeas.com |
| Wales | MacKinlay | GiftsForHim.com |
| Wendy | Victorino | Handji Gifts& Co |
| William | Brown | Tekni Collectables Inc. |
| William | Patterson | EMPLOYEE |
| Wing | Huang | Mini Creations Ltd. |
| Yoshi | Tamuri | Canadian Gift Exchange Network |
| Yoshimi | Kato | EMPLOYEE |
| Yu | Choi | Microscale Inc. |
| Zbyszek | Piestrzeniewicz | Havel & Zbyszek Co |

**/\* 39) List the last name, first name, and employee number of all of the employees who do not**

**have any customers. Order by last name first, then the first name. (8).\*/**

SELECT EMPLOYEES.LASTNAME, EMPLOYEES.FIRSTNAME, EMPLOYEES.EMPLOYEENUMBER FROM EMPLOYEES

EXCEPT

SELECT EMPLOYEES.LASTNAME, EMPLOYEES.FIRSTNAME, EMPLOYEES.EMPLOYEENUMBER FROM EMPLOYEES INNER JOIN

CUSTOMERS ON EMPLOYEES.EMPLOYEENUMBER=CUSTOMERS.SALESREPEMPLOYEENUMBER ORDER BY LASTNAME, FIRSTNAME**;**

|  |  |  |
| --- | --- | --- |
| LASTNAME | FIRSTNAME | EMPLOYEENUMBER |
| Bondur | Gerard | 1102 |
| Bow | Anthony | 1143 |
| Firrelli | Jeff | 1076 |
| Kato | Yoshimi | 1625 |
| King | Tom | 1619 |
| Murphy | Diane | 1002 |
| Patterson | Mary | 1056 |
| Patterson | William | 1088 |

**/\* 40) List the states and the country that the state is part of that have customers but not offices,**

**offices but not customers, or both one or more customers and one or more offices all in**

**one query. Designate which state is which with the string 'Customer', 'Office', or 'Both'. If**

**a state falls into the “Both” category, do not list it as a Customer or an Office state. Order**

**by the country, then the state. Give the category column (where you list ‘Customer’,**

**‘Office’, or ‘Both’) a header of “Category” and exclude any entries in which the state is null.**

**(19)\*/**

SELECT CUSTOMERS.COUNTRY, CUSTOMERS."STATE", 'CUSTOMER' as "TYPE" FROM CUSTOMERS WHERE CUSTOMERS."STATE" IS NOT NULL

EXCEPT

SELECT OFFICES.COUNTRY, OFFICES."STATE", 'CUSTOMER' as "TYPE" FROM OFFICES

UNION

SELECT CUSTOMERS.COUNTRY, CUSTOMERS."STATE", 'BOTH' as "TYPE" FROM CUSTOMERS WHERE CUSTOMERS."STATE" IS NOT NULL

INTERSECT

SELECT OFFICES.COUNTRY, OFFICES."STATE", 'BOTH' as "TYPE" FROM OFFICES

UNION

SELECT OFFICES.COUNTRY, OFFICES."STATE", 'OFFICE' as "TYPE" FROM OFFICES WHERE OFFICES."STATE" IS NOT NULL

EXCEPT

SELECT CUSTOMERS.COUNTRY, CUSTOMERS."STATE", 'OFFICE' as "TYPE" FROM CUSTOMERS

ORDER BY COUNTRY, "STATE";

|  |  |  |
| --- | --- | --- |
| COUNTRY | STATE | TYPE |
| Australia | NSW | CUSTOMER |
| Australia | Queensland | CUSTOMER |
| Australia | Victoria | CUSTOMER |
| Canada | BC | CUSTOMER |
| Canada | QuÃ©bec | CUSTOMER |
| Ireland | Co. Cork | CUSTOMER |
| Japan | Chiyoda-Ku | OFFICE |
| Japan | Osaka | CUSTOMER |
| Japan | Tokyo | CUSTOMER |
| South Africa | Pretoria | CUSTOMER |
| UK | Isle of Wight | CUSTOMER |
| USA | CA | BOTH |
| USA | CT | CUSTOMER |
| USA | MA | BOTH |
| USA | NH | CUSTOMER |
| USA | NJ | CUSTOMER |
| USA | NV | CUSTOMER |

**/\* 41) List the Product Code and Product name of every product that has never been in an order**

**in which the customer asked for more than 48 of them. Order by the Product Name. (8)\*/**

SELECT PRODUCTS.PRODUCTCODE, PRODUCTS.PRODUCTNAME FROM PRODUCTS

EXCEPT

SELECT ORDERDETAILS.PRODUCTCODE, PRODUCTS.PRODUCTNAME FROM ORDERDETAILS INNER JOIN PRODUCTS ON ORDERDETAILS.PRODUCTCODE= PRODUCTS.PRODUCTCODE

WHERE ORDERDETAILS.QUANTITYORDERED > 48 ORDER BY PRODUCTNAME;

|  |  |
| --- | --- |
| PRODUCTCODE | PRODUCTNAME |
| S24\_3420 | 1937 Horch 930V Limousine |
| S18\_3782 | 1957 Vespa GS150 |
| S12\_3380 | 1968 Dodge Charger |
| S32\_2206 | 1982 Ducati 996 R |
| S24\_2972 | 1982 Lamborghini Diablo |
| S18\_3233 | 1985 Toyota Supra |
| S12\_1108 | 2001 Ferrari Enzo |
| S700\_1691 | American Airlines: B767-300 |

--42. List the customer name of any customer who ordered any products from either of the two

--product lines ‘Trains’ or ‘Trucks and Buses’. Do not use an “or”. Instead perform a union.

--Order by the customer’s name. (61)

select distinct contactlastname, contactfirstname

from customers natural join orders natural join orderdetails natural join products

where productline = 'Trains'

union

select distinct contactlastname, contactfirstname

from customers natural join orders natural join orderdetails natural join products

where productline = 'Trucks and Buses'

order by contactlastname, contactfirstname;

|  |  |
| --- | --- |
| CONTACTLASTNAME | CONTACTFIRSTNAME |
| Accorti | Paolo |
| Ashworth | Rachel |
| Bennett | Helen |
| Berglund | Christina |
| Bergulfsen | Jonas |
| Bertrand | Marie |
| Brown | Ann |
| Brown | Julie |
| Calaghan | Ben |
| Cartrain | Pascale |
| Cassidy | Dean |
| Cervantes | Francisca |
| Da Silva | Daniel |
| Dewey | Catherine |
| Ferguson | Peter |
| Fernandez | Jesus |
| Franco | Valarie |
| FresniÃ¨re | Jean |
| Freyre | Diego |
| Frick | Michael |
| Frick | Steve |
| Graham | Mike |
| Hashimoto | Juri |
| Henriot | Paul |
| Hernandez | Maria |
| Hernandez | Marta |
| Huang | Wing |
| Huxley | Adrian |
| Ibsen | Palle |
| Keitel | Roland |
| King | Julie |
| Koskitalo | Pirkko |
| Labrune | Janine |
| Larsson | Martha |
| Lee | Kwai |
| Leong | Kelvin |
| MacKinlay | Wales |
| Mendel | Roland |
| Moroni | Maurizio |
| Murphy | Julie |
| Murphy | Leslie |
| Natividad | Eric |
| Nelson | Susan |
| O'Hara | Anna |
| Petersen | Jytte |
| Ricotti | Franco |
| Roel | JosÃ© Pedro |
| Saveley | Mary |
| Shimamura | Akiko |
| Snowden | Tony |
| Sommer | MartÃ­n |
| Suominen | Kalle |
| Tamuri | Yoshi |
| Taylor | Sue |
| Thompson | Steve |
| Tonini | Daniel |
| Tseng | Jerry |
| Victorino | Wendy |
| Yoshido | Juri |
| Young | Dorothy |
| Young | Jeff |

--43. List the name of all customers who do not live in the same state and country with any other

--customer. Do not use a count for this exercise. Order by the customer name.

--This returns 17 if you convert the null states to something like ‘N/A’ and it returns 10 if you

--exclude all customers with no state value at all.

select distinct customername from customers

except

select distinct c1.customername from customers c1

inner join customers c2 on c1.country = c2. country

and coalesce (c1.state, 'N/A') = coalesce (c2.state, 'N/A')

and c1.CUSTOMERNUMBER != c2.customernumber

order by customername;

|  |
| --- |
| CUSTOMERNAME |
| Asian Treasures, Inc. |
| Australian Gift Network, Co |
| Clover Collections, Co. |
| Cruz & Sons Co. |
| Havel & Zbyszek Co |
| King Kong Collectables, Co. |
| Kremlin Collectables, Co. |
| Online Diecast Creations Co. |
| Osaka Souveniers Co. |
| QuÃ©bec Home Shopping Network |
| Raanan Stores, Inc |
| SAR Distributors, Co |
| Schuyler Imports |
| Signal Gift Stores |
| Tekni Collectables Inc. |
| Tokyo Collectables, Ltd |
| giftsbymail.co.uk |