Setting environment for using XAMPP for Windows.

prabh@DESKTOP-5UPSKC7 c:\xampp

# mysql -u root -p

Enter password:

Welcome to the MariaDB monitor. Commands end with ; or \g.

Your MariaDB connection id is 2

Server version: 10.1.13-MariaDB mariadb.org binary distribution

Copyright (c) 2000, 2016, Oracle, MariaDB Corporation Ab and others.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

MariaDB [(none)]> use csd2204w18;

Database changed

MariaDB [csd2204w18]> show tables;

+----------------------+

| Tables\_in\_csd2204w18 |

+----------------------+

| animals |

| c |

| c1 |

| citymaster |

| citypoint |

| countries |

| d10\_v1 |

| d10\_v8 |

| departments |

| employees |

| job\_history |

| jobs |

| locations |

| manu |

| movies |

| noname |

| p |

| person |

| pet |

| prabh |

| products |

| regions |

| user |

+----------------------+

23 rows in set (0.00 sec)

MariaDB [csd2204w18]> select first\_name, last\_name, salary from employees where > (select salary from employees where last\_name = "bull");

ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MariaDB server version for the right syntax to use near '> (select salary from employees where last\_name = "bull")' at line 1

MariaDB [csd2204w18]> select first\_name, last\_name, salary from employees where > (select salary from employees where last\_name = 'bull');

ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MariaDB server version for the right syntax to use near '> (select salary from employees where last\_name = 'bull')' at line 1

MariaDB [csd2204w18]> select first\_name, last\_name, salary from employees where salary > (select salary from employees where last\_name = 'bull');

+-------------+------------+----------+

| first\_name | last\_name | salary |

+-------------+------------+----------+

| Steven | King | 24000.00 |

| Neena | Kochhar | 17000.00 |

| Lex | De Haan | 17000.00 |

| Alexander | Hunold | 9000.00 |

| Bruce | Ernst | 6000.00 |

| David | Austin | 4800.00 |

| Valli | Pataballa | 4800.00 |

| Diana | Lorentz | 4200.00 |

| Nancy | Greenberg | 12000.00 |

| Daniel | Faviet | 9000.00 |

| John | Chen | 8200.00 |

| Ismael | Sciarra | 7700.00 |

| Jose Manuel | Urman | 7800.00 |

| Luis | Popp | 6900.00 |

| Den | Raphaely | 11000.00 |

| Matthew | Weiss | 8000.00 |

| Adam | Fripp | 8200.00 |

| Payam | Kaufling | 7900.00 |

| Shanta | Vollman | 6500.00 |

| Kevin | Mourgos | 5800.00 |

| John | Russell | 14000.00 |

| Karen | Partners | 13500.00 |

| Alberto | Errazuriz | 12000.00 |

| Gerald | Cambrault | 11000.00 |

| Eleni | Zlotkey | 10500.00 |

| Peter | Tucker | 10000.00 |

| David | Bernstein | 9500.00 |

| Peter | Hall | 9000.00 |

| Christopher | Olsen | 8000.00 |

| Nanette | Cambrault | 7500.00 |

| Oliver | Tuvault | 7000.00 |

| Janette | King | 10000.00 |

| Patrick | Sully | 9500.00 |

| Allan | McEwen | 9000.00 |

| Lindsey | Smith | 8000.00 |

| Louise | Doran | 7500.00 |

| Sarath | Sewall | 7000.00 |

| Clara | Vishney | 10500.00 |

| Danielle | Greene | 9500.00 |

| Mattea | Marvins | 7200.00 |

| David | Lee | 6800.00 |

| Sundar | Ande | 6400.00 |

| Amit | Banda | 6200.00 |

| Lisa | Ozer | 11500.00 |

| Harrison | Bloom | 10000.00 |

| Tayler | Fox | 9600.00 |

| William | Smith | 7400.00 |

| Elizabeth | Bates | 7300.00 |

| Sundita | Kumar | 6100.00 |

| Ellen | Abel | 11000.00 |

| Alyssa | Hutton | 8800.00 |

| Jonathon | Taylor | 8600.00 |

| Jack | Livingston | 8400.00 |

| Kimberely | Grant | 7000.00 |

| Charles | Johnson | 6200.00 |

| Nandita | Sarchand | 4200.00 |

| Jennifer | Whalen | 4400.00 |

| Michael | Hartstein | 13000.00 |

| Pat | Fay | 6000.00 |

| Susan | Mavris | 6500.00 |

| Hermann | Baer | 10000.00 |

| Shelley | Higgins | 12000.00 |

| William | Gietz | 8300.00 |

+-------------+------------+----------+

63 rows in set (0.01 sec)

MariaDB [csd2204w18]> select \* from employees;

+-------------+-------------+-------------+----------+--------------------+------------+------------+----------+----------------+------------+---------------+

| EMPLOYEE\_ID | FIRST\_NAME | LAST\_NAME | EMAIL | PHONE\_NUMBER | HIRE\_DATE | JOB\_ID | SALARY | COMMISSION\_PCT | MANAGER\_ID | DEPARTMENT\_ID |

+-------------+-------------+-------------+----------+--------------------+------------+------------+----------+----------------+------------+---------------+

| 100 | Steven | King | SKING | 515.123.4567 | 1987-06-17 | AD\_PRES | 24000.00 | 0.00 | 0 | 90 |

| 101 | Neena | Kochhar | NKOCHHAR | 515.123.4568 | 1987-06-18 | AD\_VP | 17000.00 | 0.00 | 100 | 90 |

| 102 | Lex | De Haan | LDEHAAN | 515.123.4569 | 1987-06-19 | AD\_VP | 17000.00 | 0.00 | 100 | 90 |

| 103 | Alexander | Hunold | AHUNOLD | 590.423.4567 | 1987-06-20 | IT\_PROG | 9000.00 | 0.00 | 102 | 60 |

| 104 | Bruce | Ernst | BERNST | 590.423.4568 | 1987-06-21 | IT\_PROG | 6000.00 | 0.00 | 103 | 60 |

| 105 | David | Austin | DAUSTIN | 590.423.4569 | 1987-06-22 | IT\_PROG | 4800.00 | 0.00 | 103 | 60 |

| 106 | Valli | Pataballa | VPATABAL | 590.423.4560 | 1987-06-23 | IT\_PROG | 4800.00 | 0.00 | 103 | 60 |

| 107 | Diana | Lorentz | DLORENTZ | 590.423.5567 | 1987-06-24 | IT\_PROG | 4200.00 | 0.00 | 103 | 60 |

| 108 | Nancy | Greenberg | NGREENBE | 515.124.4569 | 1987-06-25 | FI\_MGR | 12000.00 | 0.00 | 101 | 100 |

| 109 | Daniel | Faviet | DFAVIET | 515.124.4169 | 1987-06-26 | FI\_ACCOUNT | 9000.00 | 0.00 | 108 | 100 |

| 110 | John | Chen | JCHEN | 515.124.4269 | 1987-06-27 | FI\_ACCOUNT | 8200.00 | 0.00 | 108 | 100 |

| 111 | Ismael | Sciarra | ISCIARRA | 515.124.4369 | 1987-06-28 | FI\_ACCOUNT | 7700.00 | 0.00 | 108 | 100 |

| 112 | Jose Manuel | Urman | JMURMAN | 515.124.4469 | 1987-06-29 | FI\_ACCOUNT | 7800.00 | 0.00 | 108 | 100 |

| 113 | Luis | Popp | LPOPP | 515.124.4567 | 1987-06-30 | FI\_ACCOUNT | 6900.00 | 0.00 | 108 | 100 |

| 114 | Den | Raphaely | DRAPHEAL | 515.127.4561 | 1987-07-01 | PU\_MAN | 11000.00 | 0.00 | 100 | 30 |

| 115 | Alexander | Khoo | AKHOO | 515.127.4562 | 1987-07-02 | PU\_CLERK | 3100.00 | 0.00 | 114 | 30 |

| 116 | Shelli | Baida | SBAIDA | 515.127.4563 | 1987-07-03 | PU\_CLERK | 2900.00 | 0.00 | 114 | 30 |

| 117 | Sigal | Tobias | STOBIAS | 515.127.4564 | 1987-07-04 | PU\_CLERK | 2800.00 | 0.00 | 114 | 30 |

| 118 | Guy | Himuro | GHIMURO | 515.127.4565 | 1987-07-05 | PU\_CLERK | 2600.00 | 0.00 | 114 | 30 |

| 119 | Karen | Colmenares | KCOLMENA | 515.127.4566 | 1987-07-06 | PU\_CLERK | 2500.00 | 0.00 | 114 | 30 |

| 120 | Matthew | Weiss | MWEISS | 650.123.1234 | 1987-07-07 | ST\_MAN | 8000.00 | 0.00 | 100 | 50 |

| 121 | Adam | Fripp | AFRIPP | 650.123.2234 | 1987-07-08 | ST\_MAN | 8200.00 | 0.00 | 100 | 50 |

| 122 | Payam | Kaufling | PKAUFLIN | 650.123.3234 | 1987-07-09 | ST\_MAN | 7900.00 | 0.00 | 100 | 50 |

| 123 | Shanta | Vollman | SVOLLMAN | 650.123.4234 | 1987-07-10 | ST\_MAN | 6500.00 | 0.00 | 100 | 50 |

| 124 | Kevin | Mourgos | KMOURGOS | 650.123.5234 | 1987-07-11 | ST\_MAN | 5800.00 | 0.00 | 100 | 50 |

| 125 | Julia | Nayer | JNAYER | 650.124.1214 | 1987-07-12 | ST\_CLERK | 3200.00 | 0.00 | 120 | 50 |

| 126 | Irene | Mikkilineni | IMIKKILI | 650.124.1224 | 1987-07-13 | ST\_CLERK | 2700.00 | 0.00 | 120 | 50 |

| 127 | James | Landry | JLANDRY | 650.124.1334 | 1987-07-14 | ST\_CLERK | 2400.00 | 0.00 | 120 | 50 |

| 128 | Steven | Markle | SMARKLE | 650.124.1434 | 1987-07-15 | ST\_CLERK | 2200.00 | 0.00 | 120 | 50 |

| 129 | Laura | Bissot | LBISSOT | 650.124.5234 | 1987-07-16 | ST\_CLERK | 3300.00 | 0.00 | 121 | 50 |

| 130 | Mozhe | Atkinson | MATKINSO | 650.124.6234 | 1987-07-17 | ST\_CLERK | 2800.00 | 0.00 | 121 | 50 |

| 131 | James | Marlow | JAMRLOW | 650.124.7234 | 1987-07-18 | ST\_CLERK | 2500.00 | 0.00 | 121 | 50 |

| 132 | TJ | Olson | TJOLSON | 650.124.8234 | 1987-07-19 | ST\_CLERK | 2100.00 | 0.00 | 121 | 50 |

| 133 | Jason | Mallin | JMALLIN | 650.127.1934 | 1987-07-20 | ST\_CLERK | 3300.00 | 0.00 | 122 | 50 |

| 134 | Michael | Rogers | MROGERS | 650.127.1834 | 1987-07-21 | ST\_CLERK | 2900.00 | 0.00 | 122 | 50 |

| 135 | Ki | Gee | KGEE | 650.127.1734 | 1987-07-22 | ST\_CLERK | 2400.00 | 0.00 | 122 | 50 |

| 136 | Hazel | Philtanker | HPHILTAN | 650.127.1634 | 1987-07-23 | ST\_CLERK | 2200.00 | 0.00 | 122 | 50 |

| 137 | Renske | Ladwig | RLADWIG | 650.121.1234 | 1987-07-24 | ST\_CLERK | 3600.00 | 0.00 | 123 | 50 |

| 138 | Stephen | Stiles | SSTILES | 650.121.2034 | 1987-07-25 | ST\_CLERK | 3200.00 | 0.00 | 123 | 50 |

| 139 | John | Seo | JSEO | 650.121.2019 | 1987-07-26 | ST\_CLERK | 2700.00 | 0.00 | 123 | 50 |

| 140 | Joshua | Patel | JPATEL | 650.121.1834 | 1987-07-27 | ST\_CLERK | 2500.00 | 0.00 | 123 | 50 |

| 141 | Trenna | Rajs | TRAJS | 650.121.8009 | 1987-07-28 | ST\_CLERK | 3500.00 | 0.00 | 124 | 50 |

| 142 | Curtis | Davies | CDAVIES | 650.121.2994 | 1987-07-29 | ST\_CLERK | 3100.00 | 0.00 | 124 | 50 |

| 143 | Randall | Matos | RMATOS | 650.121.2874 | 1987-07-30 | ST\_CLERK | 2600.00 | 0.00 | 124 | 50 |

| 144 | Peter | Vargas | PVARGAS | 650.121.2004 | 1987-07-31 | ST\_CLERK | 2500.00 | 0.00 | 124 | 50 |

| 145 | John | Russell | JRUSSEL | 011.44.1344.429268 | 1987-08-01 | SA\_MAN | 14000.00 | 0.40 | 100 | 80 |

| 146 | Karen | Partners | KPARTNER | 011.44.1344.467268 | 1987-08-02 | SA\_MAN | 13500.00 | 0.30 | 100 | 80 |

| 147 | Alberto | Errazuriz | AERRAZUR | 011.44.1344.429278 | 1987-08-03 | SA\_MAN | 12000.00 | 0.30 | 100 | 80 |

| 148 | Gerald | Cambrault | GCAMBRAU | 011.44.1344.619268 | 1987-08-04 | SA\_MAN | 11000.00 | 0.30 | 100 | 80 |

| 149 | Eleni | Zlotkey | EZLOTKEY | 011.44.1344.429018 | 1987-08-05 | SA\_MAN | 10500.00 | 0.20 | 100 | 80 |

| 150 | Peter | Tucker | PTUCKER | 011.44.1344.129268 | 1987-08-06 | SA\_REP | 10000.00 | 0.30 | 145 | 80 |

| 151 | David | Bernstein | DBERNSTE | 011.44.1344.345268 | 1987-08-07 | SA\_REP | 9500.00 | 0.25 | 145 | 80 |

| 152 | Peter | Hall | PHALL | 011.44.1344.478968 | 1987-08-08 | SA\_REP | 9000.00 | 0.25 | 145 | 80 |

| 153 | Christopher | Olsen | COLSEN | 011.44.1344.498718 | 1987-08-09 | SA\_REP | 8000.00 | 0.20 | 145 | 80 |

| 154 | Nanette | Cambrault | NCAMBRAU | 011.44.1344.987668 | 1987-08-10 | SA\_REP | 7500.00 | 0.20 | 145 | 80 |

| 155 | Oliver | Tuvault | OTUVAULT | 011.44.1344.486508 | 1987-08-11 | SA\_REP | 7000.00 | 0.15 | 145 | 80 |

| 156 | Janette | King | JKING | 011.44.1345.429268 | 1987-08-12 | SA\_REP | 10000.00 | 0.35 | 146 | 80 |

| 157 | Patrick | Sully | PSULLY | 011.44.1345.929268 | 1987-08-13 | SA\_REP | 9500.00 | 0.35 | 146 | 80 |

| 158 | Allan | McEwen | AMCEWEN | 011.44.1345.829268 | 1987-08-14 | SA\_REP | 9000.00 | 0.35 | 146 | 80 |

| 159 | Lindsey | Smith | LSMITH | 011.44.1345.729268 | 1987-08-15 | SA\_REP | 8000.00 | 0.30 | 146 | 80 |

| 160 | Louise | Doran | LDORAN | 011.44.1345.629268 | 1987-08-16 | SA\_REP | 7500.00 | 0.30 | 146 | 80 |

| 161 | Sarath | Sewall | SSEWALL | 011.44.1345.529268 | 1987-08-17 | SA\_REP | 7000.00 | 0.25 | 146 | 80 |

| 162 | Clara | Vishney | CVISHNEY | 011.44.1346.129268 | 1987-08-18 | SA\_REP | 10500.00 | 0.25 | 147 | 80 |

| 163 | Danielle | Greene | DGREENE | 011.44.1346.229268 | 1987-08-19 | SA\_REP | 9500.00 | 0.15 | 147 | 80 |

| 164 | Mattea | Marvins | MMARVINS | 011.44.1346.329268 | 1987-08-20 | SA\_REP | 7200.00 | 0.10 | 147 | 80 |

| 165 | David | Lee | DLEE | 011.44.1346.529268 | 1987-08-21 | SA\_REP | 6800.00 | 0.10 | 147 | 80 |

| 166 | Sundar | Ande | SANDE | 011.44.1346.629268 | 1987-08-22 | SA\_REP | 6400.00 | 0.10 | 147 | 80 |

| 167 | Amit | Banda | ABANDA | 011.44.1346.729268 | 1987-08-23 | SA\_REP | 6200.00 | 0.10 | 147 | 80 |

| 168 | Lisa | Ozer | LOZER | 011.44.1343.929268 | 1987-08-24 | SA\_REP | 11500.00 | 0.25 | 148 | 80 |

| 169 | Harrison | Bloom | HBLOOM | 011.44.1343.829268 | 1987-08-25 | SA\_REP | 10000.00 | 0.20 | 148 | 80 |

| 170 | Tayler | Fox | TFOX | 011.44.1343.729268 | 1987-08-26 | SA\_REP | 9600.00 | 0.20 | 148 | 80 |

| 171 | William | Smith | WSMITH | 011.44.1343.629268 | 1987-08-27 | SA\_REP | 7400.00 | 0.15 | 148 | 80 |

| 172 | Elizabeth | Bates | EBATES | 011.44.1343.529268 | 1987-08-28 | SA\_REP | 7300.00 | 0.15 | 148 | 80 |

| 173 | Sundita | Kumar | SKUMAR | 011.44.1343.329268 | 1987-08-29 | SA\_REP | 6100.00 | 0.10 | 148 | 80 |

| 174 | Ellen | Abel | EABEL | 011.44.1644.429267 | 1987-08-30 | SA\_REP | 11000.00 | 0.30 | 149 | 80 |

| 175 | Alyssa | Hutton | AHUTTON | 011.44.1644.429266 | 1987-08-31 | SA\_REP | 8800.00 | 0.25 | 149 | 80 |

| 176 | Jonathon | Taylor | JTAYLOR | 011.44.1644.429265 | 1987-09-01 | SA\_REP | 8600.00 | 0.20 | 149 | 80 |

| 177 | Jack | Livingston | JLIVINGS | 011.44.1644.429264 | 1987-09-02 | SA\_REP | 8400.00 | 0.20 | 149 | 80 |

| 178 | Kimberely | Grant | KGRANT | 011.44.1644.429263 | 1987-09-03 | SA\_REP | 7000.00 | 0.15 | 149 | 0 |

| 179 | Charles | Johnson | CJOHNSON | 011.44.1644.429262 | 1987-09-04 | SA\_REP | 6200.00 | 0.10 | 149 | 80 |

| 180 | Winston | Taylor | WTAYLOR | 650.507.9876 | 1987-09-05 | SH\_CLERK | 3200.00 | 0.00 | 120 | 50 |

| 181 | Jean | Fleaur | JFLEAUR | 650.507.9877 | 1987-09-06 | SH\_CLERK | 3100.00 | 0.00 | 120 | 50 |

| 182 | Martha | Sullivan | MSULLIVA | 650.507.9878 | 1987-09-07 | SH\_CLERK | 2500.00 | 0.00 | 120 | 50 |

| 183 | Girard | Geoni | GGEONI | 650.507.9879 | 1987-09-08 | SH\_CLERK | 2800.00 | 0.00 | 120 | 50 |

| 184 | Nandita | Sarchand | NSARCHAN | 650.509.1876 | 1987-09-09 | SH\_CLERK | 4200.00 | 0.00 | 121 | 50 |

| 185 | Alexis | Bull | ABULL | 650.509.2876 | 1987-09-10 | SH\_CLERK | 4100.00 | 0.00 | 121 | 50 |

| 186 | Julia | Dellinger | JDELLING | 650.509.3876 | 1987-09-11 | SH\_CLERK | 3400.00 | 0.00 | 121 | 50 |

| 187 | Anthony | Cabrio | ACABRIO | 650.509.4876 | 1987-09-12 | SH\_CLERK | 3000.00 | 0.00 | 121 | 50 |

| 188 | Kelly | Chung | KCHUNG | 650.505.1876 | 1987-09-13 | SH\_CLERK | 3800.00 | 0.00 | 122 | 50 |

| 189 | Jennifer | Dilly | JDILLY | 650.505.2876 | 1987-09-14 | SH\_CLERK | 3600.00 | 0.00 | 122 | 50 |

| 190 | Timothy | Gates | TGATES | 650.505.3876 | 1987-09-15 | SH\_CLERK | 2900.00 | 0.00 | 122 | 50 |

| 191 | Randall | Perkins | RPERKINS | 650.505.4876 | 1987-09-16 | SH\_CLERK | 2500.00 | 0.00 | 122 | 50 |

| 192 | Sarah | Bell | SBELL | 650.501.1876 | 1987-09-17 | SH\_CLERK | 4000.00 | 0.00 | 123 | 50 |

| 193 | Britney | Everett | BEVERETT | 650.501.2876 | 1987-09-18 | SH\_CLERK | 3900.00 | 0.00 | 123 | 50 |

| 194 | Samuel | McCain | SMCCAIN | 650.501.3876 | 1987-09-19 | SH\_CLERK | 3200.00 | 0.00 | 123 | 50 |

| 195 | Vance | Jones | VJONES | 650.501.4876 | 1987-09-20 | SH\_CLERK | 2800.00 | 0.00 | 123 | 50 |

| 196 | Alana | Walsh | AWALSH | 650.507.9811 | 1987-09-21 | SH\_CLERK | 3100.00 | 0.00 | 124 | 50 |

| 197 | Kevin | Feeney | KFEENEY | 650.507.9822 | 1987-09-22 | SH\_CLERK | 3000.00 | 0.00 | 124 | 50 |

| 198 | Donald | OConnell | DOCONNEL | 650.507.9833 | 1987-09-23 | SH\_CLERK | 2600.00 | 0.00 | 124 | 50 |

| 199 | Douglas | Grant | DGRANT | 650.507.9844 | 1987-09-24 | SH\_CLERK | 2600.00 | 0.00 | 124 | 50 |

| 200 | Jennifer | Whalen | JWHALEN | 515.123.4444 | 1987-09-25 | AD\_ASST | 4400.00 | 0.00 | 101 | 10 |

| 201 | Michael | Hartstein | MHARTSTE | 515.123.5555 | 1987-09-26 | MK\_MAN | 13000.00 | 0.00 | 100 | 20 |

| 202 | Pat | Fay | PFAY | 603.123.6666 | 1987-09-27 | MK\_REP | 6000.00 | 0.00 | 201 | 20 |

| 203 | Susan | Mavris | SMAVRIS | 515.123.7777 | 1987-09-28 | HR\_REP | 6500.00 | 0.00 | 101 | 40 |

| 204 | Hermann | Baer | HBAER | 515.123.8888 | 1987-09-29 | PR\_REP | 10000.00 | 0.00 | 101 | 70 |

| 205 | Shelley | Higgins | SHIGGINS | 515.123.8080 | 1987-09-30 | AC\_MGR | 12000.00 | 0.00 | 101 | 110 |

| 206 | William | Gietz | WGIETZ | 515.123.8181 | 1987-10-01 | AC\_ACCOUNT | 8300.00 | 0.00 | 205 | 110 |

+-------------+-------------+-------------+----------+--------------------+------------+------------+----------+----------------+------------+---------------+

107 rows in set (0.00 sec)

MariaDB [csd2204w18]> select \* from departments;

+---------------+----------------------+------------+-------------+

| DEPARTMENT\_ID | DEPARTMENT\_NAME | MANAGER\_ID | LOCATION\_ID |

+---------------+----------------------+------------+-------------+

| 10 | Administration | 200 | 1700 |

| 20 | Marketing | 201 | 1800 |

| 30 | Purchasing | 114 | 1700 |

| 40 | Human Resources | 203 | 2400 |

| 50 | Shipping | 121 | 1500 |

| 60 | IT | 103 | 1400 |

| 70 | Public Relations | 204 | 2700 |

| 80 | Sales | 145 | 2500 |

| 90 | Executive | 100 | 1700 |

| 100 | Finance | 108 | 1700 |

| 110 | Accounting | 205 | 1700 |

| 120 | Treasury | 0 | 1700 |

| 130 | Corporate Tax | 0 | 1700 |

| 140 | Control And Credit | 0 | 1700 |

| 150 | Shareholder Services | 0 | 1700 |

| 160 | Benefits | 0 | 1700 |

| 170 | Manufacturing | 0 | 1700 |

| 180 | Construction | 0 | 1700 |

| 190 | Contracting | 0 | 1700 |

| 200 | Operations | 0 | 1700 |

| 210 | IT Support | 0 | 1700 |

| 220 | NOC | 0 | 1700 |

| 230 | IT Helpdesk | 0 | 1700 |

| 240 | Government Sales | 0 | 1700 |

| 250 | Retail Sales | 0 | 1700 |

| 260 | Recruiting | 0 | 1700 |

| 270 | Payroll | 0 | 1700 |

+---------------+----------------------+------------+-------------+

27 rows in set (0.01 sec)

MariaDB [csd2204w18]> select first\_name, last\_name from employees where department\_id in (select depetment\_id from departments where department\_name='it');

ERROR 1054 (42S22): Unknown column 'depetment\_id' in 'field list'

MariaDB [csd2204w18]> select first\_name, last\_name from employees where department\_id in (select department\_id from departments where department\_name='it');

+------------+-----------+

| first\_name | last\_name |

+------------+-----------+

| Alexander | Hunold |

| Bruce | Ernst |

| David | Austin |

| Valli | Pataballa |

| Diana | Lorentz |

+------------+-----------+

5 rows in set (0.00 sec)

MariaDB [csd2204w18]> select first\_name, last\_name, department\_name from employees where department\_id in (select department\_id from departments where department\_name='it');

ERROR 1054 (42S22): Unknown column 'department\_name' in 'field list'

MariaDB [csd2204w18]> select first\_name, last\_name, department\_id from employees where department\_id in (select department\_id from departments where department\_name='it');

+------------+-----------+---------------+

| first\_name | last\_name | department\_id |

+------------+-----------+---------------+

| Alexander | Hunold | 60 |

| Bruce | Ernst | 60 |

| David | Austin | 60 |

| Valli | Pataballa | 60 |

| Diana | Lorentz | 60 |

+------------+-----------+---------------+

5 rows in set (0.00 sec)

MariaDB [csd2204w18]> select \* from locations;

+-------------+---------------------------+--------------+---------------------+-------------------+------------+

| LOCATION\_ID | STREET\_ADDRESS | POSTAL\_CODE | CITY | STATE\_PROVINCE | COUNTRY\_ID |

+-------------+---------------------------+--------------+---------------------+-------------------+------------+

| 1000 | 1297 Via Cola di Rie | 989 | Roma | | IT |

| 1100 | 93091 Calle della Testa | 10934 | Venice | | IT |

| 1200 | 2017 Shinjuku-ku | 1689 | Tokyo | Tokyo Prefecture | JP |

| 1300 | 9450 Kamiya-cho | 6823 | Hiroshima | | JP |

| 1400 | 2014 Jabberwocky Rd | 26192 | Southlake | Texas | US |

| 1500 | 2011 Interiors Blvd | 99236 | South San Francisco | California | US |

| 1600 | 2007 Zagora St | 50090 | South Brunswick | New Jersey | US |

| 1700 | 2004 Charade Rd | 98199 | Seattle | Washington | US |

| 1800 | 147 Spadina Ave | M5V 2L7 | Toronto | Ontario | CA |

| 1900 | 6092 Boxwood St | YSW 9T2 | Whitehorse | Yukon | CA |

| 2000 | 40-5-12 Laogianggen | 190518 | Beijing | | CN |

| 2100 | 1298 Vileparle (E) | 490231 | Bombay | Maharashtra | IN |

| 2200 | 12-98 Victoria Street | 2901 | Sydney | New South Wales | AU |

| 2300 | 198 Clementi North | 540198 | Singapore | | SG |

| 2400 | 8204 Arthur St | | London | | UK |

| 2500 | "Magdalen Centre | The Oxford | OX9 9ZB | Oxford | Ox |

| 2600 | 9702 Chester Road | 9629850293 | Stretford | Manchester | UK |

| 2700 | Schwanthalerstr. 7031 | 80925 | Munich | Bavaria | DE |

| 2800 | Rua Frei Caneca 1360 | 01307-002 | Sao Paulo | Sao Paulo | BR |

| 2900 | 20 Rue des Corps-Saints | 1730 | Geneva | Geneve | CH |

| 3000 | Murtenstrasse 921 | 3095 | Bern | BE | CH |

| 3100 | Pieter Breughelstraat 837 | 3029SK | Utrecht | Utrecht | NL |

| 3200 | Mariano Escobedo 9991 | 11932 | Mexico City | "Distrito Federal | " |

+-------------+---------------------------+--------------+---------------------+-------------------+------------+

23 rows in set (0.04 sec)

MariaDB [csd2204w18]> select first\_name, last\_name from employees where manager\_id in (select manager\_id from departments where country\_id in (select country\_id from locations where country\_id='us');

ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MariaDB server version for the right syntax to use near '' at line 1

MariaDB [csd2204w18]> select first\_name, last\_name from employees where manager\_id in (select manager\_id from departments where country\_id in (select country\_id from locations where country\_id='us'));

ERROR 1054 (42S22): Unknown column 'country\_id' in 'IN/ALL/ANY subquery'

MariaDB [csd2204w18]> select first\_name, last\_name from employees where manager\_id in (select department\_id from departments where country\_id in (select country\_id from locations where country\_id='us'));

ERROR 1054 (42S22): Unknown column 'country\_id' in 'IN/ALL/ANY subquery'

MariaDB [csd2204w18]> show tables;

+----------------------+

| Tables\_in\_csd2204w18 |

+----------------------+

| animals |

| c |

| c1 |

| citymaster |

| citypoint |

| countries |

| d10\_v1 |

| d10\_v8 |

| departments |

| employees |

| job\_history |

| jobs |

| locations |

| manu |

| movies |

| noname |

| p |

| person |

| pet |

| prabh |

| products |

| regions |

| user |

+----------------------+

23 rows in set (0.00 sec)

MariaDB [csd2204w18]> select \* from pet;

+----------+--------+---------+------+------------+------------+

| name | owner | species | sex | birth | death |

+----------+--------+---------+------+------------+------------+

| Fluffy | Harold | cat | f | 1993-02-04 | 0000-00-00 |

| Claws | Gwen | cat | m | 1994-03-17 | 0000-00-00 |

| Buffy | Harold | dog | f | 1989-05-13 | 0000-00-00 |

| Fang | Benny | dog | m | 1990-08-27 | 0000-00-00 |

| Bowser | Diane | dog | m | 1979-08-31 | 1995-07-29 |

| Chirpy | Gwen | bird | f | 1998-09-11 | 0000-00-00 |

| Whistler | Gwen | bird | | 1997-12-09 | 0000-00-00 |

| Slim | Benny | snake | m | 1996-04-29 | 0000-00-00 |

| nh123 | NULL | NULL | NULL | NULL | NULL |

| 123 | NULL | NULL | NULL | NULL | NULL |

+----------+--------+---------+------+------------+------------+

10 rows in set (0.01 sec)

MariaDB [csd2204w18]> insert into pet(name) values ('brunob');

Query OK, 1 row affected (0.01 sec)

MariaDB [csd2204w18]> select \* from pet;

+----------+--------+---------+------+------------+------------+

| name | owner | species | sex | birth | death |

+----------+--------+---------+------+------------+------------+

| Fluffy | Harold | cat | f | 1993-02-04 | 0000-00-00 |

| Claws | Gwen | cat | m | 1994-03-17 | 0000-00-00 |

| Buffy | Harold | dog | f | 1989-05-13 | 0000-00-00 |

| Fang | Benny | dog | m | 1990-08-27 | 0000-00-00 |

| Bowser | Diane | dog | m | 1979-08-31 | 1995-07-29 |

| Chirpy | Gwen | bird | f | 1998-09-11 | 0000-00-00 |

| Whistler | Gwen | bird | | 1997-12-09 | 0000-00-00 |

| Slim | Benny | snake | m | 1996-04-29 | 0000-00-00 |

| nh123 | NULL | NULL | NULL | NULL | NULL |

| 123 | NULL | NULL | NULL | NULL | NULL |

| brunob | NULL | NULL | NULL | NULL | NULL |

+----------+--------+---------+------+------------+------------+

11 rows in set (0.00 sec)

MariaDB [csd2204w18]> SELECT \* FROM pet WHERE name rLIKE 'b';

+--------+--------+---------+------+------------+------------+

| name | owner | species | sex | birth | death |

+--------+--------+---------+------+------------+------------+

| Buffy | Harold | dog | f | 1989-05-13 | 0000-00-00 |

| Bowser | Diane | dog | m | 1979-08-31 | 1995-07-29 |

| brunob | NULL | NULL | NULL | NULL | NULL |

+--------+--------+---------+------+------------+------------+

3 rows in set (0.00 sec)

MariaDB [csd2204w18]> SELECT \* FROM pet WHERE name REGEXP 'b';

+--------+--------+---------+------+------------+------------+

| name | owner | species | sex | birth | death |

+--------+--------+---------+------+------------+------------+

| Buffy | Harold | dog | f | 1989-05-13 | 0000-00-00 |

| Bowser | Diane | dog | m | 1979-08-31 | 1995-07-29 |

| brunob | NULL | NULL | NULL | NULL | NULL |

+--------+--------+---------+------+------------+------------+

3 rows in set (0.00 sec)

MariaDB [csd2204w18]> insert into pet(name) values ('brubno');

Query OK, 1 row affected (0.01 sec)

MariaDB [csd2204w18]> insert into pet(name) values ('rubno');

Query OK, 1 row affected (0.01 sec)

MariaDB [csd2204w18]> SELECT \* FROM pet WHERE name REGEXP 'b';

+--------+--------+---------+------+------------+------------+

| name | owner | species | sex | birth | death |

+--------+--------+---------+------+------------+------------+

| Buffy | Harold | dog | f | 1989-05-13 | 0000-00-00 |

| Bowser | Diane | dog | m | 1979-08-31 | 1995-07-29 |

| brunob | NULL | NULL | NULL | NULL | NULL |

| brubno | NULL | NULL | NULL | NULL | NULL |

| rubno | NULL | NULL | NULL | NULL | NULL |

+--------+--------+---------+------+------------+------------+

5 rows in set (0.00 sec)

MariaDB [csd2204w18]> SELECT \* FROM pet WHERE name rLIKE 'b';

+--------+--------+---------+------+------------+------------+

| name | owner | species | sex | birth | death |

+--------+--------+---------+------+------------+------------+

| Buffy | Harold | dog | f | 1989-05-13 | 0000-00-00 |

| Bowser | Diane | dog | m | 1979-08-31 | 1995-07-29 |

| brunob | NULL | NULL | NULL | NULL | NULL |

| brubno | NULL | NULL | NULL | NULL | NULL |

| rubno | NULL | NULL | NULL | NULL | NULL |

+--------+--------+---------+------+------------+------------+

5 rows in set (0.00 sec)

MariaDB [csd2204w18]> SELECT \* FROM pet WHERE name rLIKE '^b';

+--------+--------+---------+------+------------+------------+

| name | owner | species | sex | birth | death |

+--------+--------+---------+------+------------+------------+

| Buffy | Harold | dog | f | 1989-05-13 | 0000-00-00 |

| Bowser | Diane | dog | m | 1979-08-31 | 1995-07-29 |

| brunob | NULL | NULL | NULL | NULL | NULL |

| brubno | NULL | NULL | NULL | NULL | NULL |

+--------+--------+---------+------+------------+------------+

4 rows in set (0.00 sec)

MariaDB [csd2204w18]> SELECT \* FROM pet WHERE name rLIKE 'b';

+--------+--------+---------+------+------------+------------+

| name | owner | species | sex | birth | death |

+--------+--------+---------+------+------------+------------+

| Buffy | Harold | dog | f | 1989-05-13 | 0000-00-00 |

| Bowser | Diane | dog | m | 1979-08-31 | 1995-07-29 |

| brunob | NULL | NULL | NULL | NULL | NULL |

| brubno | NULL | NULL | NULL | NULL | NULL |

| rubno | NULL | NULL | NULL | NULL | NULL |

+--------+--------+---------+------+------------+------------+

5 rows in set (0.00 sec)

MariaDB [csd2204w18]> SELECT \* FROM pet WHERE name REGEXP 'fy$';

+--------+--------+---------+------+------------+------------+

| name | owner | species | sex | birth | death |

+--------+--------+---------+------+------------+------------+

| Fluffy | Harold | cat | f | 1993-02-04 | 0000-00-00 |

| Buffy | Harold | dog | f | 1989-05-13 | 0000-00-00 |

+--------+--------+---------+------+------------+------------+

2 rows in set (0.00 sec)

MariaDB [csd2204w18]> SELECT \* FROM pet WHERE name REGEXP '^.....$';

+-------+--------+---------+------+------------+------------+

| name | owner | species | sex | birth | death |

+-------+--------+---------+------+------------+------------+

| Claws | Gwen | cat | m | 1994-03-17 | 0000-00-00 |

| Buffy | Harold | dog | f | 1989-05-13 | 0000-00-00 |

| nh123 | NULL | NULL | NULL | NULL | NULL |

| rubno | NULL | NULL | NULL | NULL | NULL |

+-------+--------+---------+------+------------+------------+

4 rows in set (0.00 sec)

MariaDB [csd2204w18]> SELECT \* FROM pet WHERE name REGEXP '^.{5}$';

+-------+--------+---------+------+------------+------------+

| name | owner | species | sex | birth | death |

+-------+--------+---------+------+------------+------------+

| Claws | Gwen | cat | m | 1994-03-17 | 0000-00-00 |

| Buffy | Harold | dog | f | 1989-05-13 | 0000-00-00 |

| nh123 | NULL | NULL | NULL | NULL | NULL |

| rubno | NULL | NULL | NULL | NULL | NULL |

+-------+--------+---------+------+------------+------------+

4 rows in set (0.00 sec)

MariaDB [csd2204w18]> SELECT 'Hello World' REGEXP '^H.\*d$';

+--------------------------------+

| 'Hello World' REGEXP '^H.\*d$' |

+--------------------------------+

| 1 |

+--------------------------------+

1 row in set (0.00 sec)

MariaDB [csd2204w18]> select salary from employees where last\_name="Bull";

+---------+

| salary |

+---------+

| 4100.00 |

+---------+

1 row in set (0.00 sec)

MariaDB [csd2204w18]> (SELECT department\_id

-> FROM departments

->

-> mm;

ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MariaDB server version for the right syntax to use near '' at line 4

MariaDB [csd2204w18]> (SELECT department\_id

-> FROM departments

-> WHERE department\_name='IT');

+---------------+

| department\_id |

+---------------+

| 60 |

+---------------+

1 row in set (0.00 sec)

MariaDB [csd2204w18]> SELECT first\_name, last\_name

-> FROM employees

-> WHERE department\_id=60;

+------------+-----------+

| first\_name | last\_name |

+------------+-----------+

| Alexander | Hunold |

| Bruce | Ernst |

| David | Austin |

| Valli | Pataballa |

| Diana | Lorentz |

+------------+-----------+

5 rows in set (0.00 sec)

MariaDB [csd2204w18]> SELECT first\_name, last\_name

-> FROM employees

-> WHERE department\_id IN (60);

+------------+-----------+

| first\_name | last\_name |

+------------+-----------+

| Alexander | Hunold |

| Bruce | Ernst |

| David | Austin |

| Valli | Pataballa |

| Diana | Lorentz |

+------------+-----------+

5 rows in set (0.00 sec)

MariaDB [csd2204w18]> SELECT manager\_id FROM

-> employees;

+------------+

| manager\_id |

+------------+

| 0 |

| 100 |

| 100 |

| 100 |

| 100 |

| 100 |

| 100 |

| 100 |

| 100 |

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| 201 |

| 205 |

+------------+

107 rows in set (0.00 sec)

MariaDB [csd2204w18]> SELECT manager\_id FROM

-> employees where manager\_id=employee\_id;

Empty set (0.00 sec)

MariaDB [csd2204w18]> SELECT first\_name, last\_name

-> FROM employees

-> WHERE (employee\_id IN (SELECT manager\_id FROM

-> employees);

ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MariaDB server version for the right syntax to use near '' at line 4

MariaDB [csd2204w18]> SELECT first\_name, last\_name

-> FROM employees

-> WHERE employee\_id IN (SELECT manager\_id FROM

-> employees);

+------------+-----------+

| first\_name | last\_name |

+------------+-----------+

| Steven | King |

| Neena | Kochhar |

| Lex | De Haan |

| Alexander | Hunold |

| Nancy | Greenberg |

| Den | Raphaely |

| Matthew | Weiss |

| Adam | Fripp |

| Payam | Kaufling |

| Shanta | Vollman |

| Kevin | Mourgos |

| John | Russell |

| Karen | Partners |

| Alberto | Errazuriz |

| Gerald | Cambrault |

| Eleni | Zlotkey |

| Michael | Hartstein |

| Shelley | Higgins |

+------------+-----------+

18 rows in set (0.00 sec)

MariaDB [csd2204w18]> SELECT AVG(salary) FROM

-> employees;

+-------------+

| AVG(salary) |

+-------------+

| 6461.682243 |

+-------------+

1 row in set (0.00 sec)

MariaDB [csd2204w18]> SELECT first\_name, last\_name, salary

-> FROM employees

-> WHERE salary > (SELECT AVG(salary) FROM

-> employees);

+-------------+------------+----------+

| first\_name | last\_name | salary |

+-------------+------------+----------+

| Steven | King | 24000.00 |

| Neena | Kochhar | 17000.00 |

| Lex | De Haan | 17000.00 |

| Alexander | Hunold | 9000.00 |

| Nancy | Greenberg | 12000.00 |

| Daniel | Faviet | 9000.00 |

| John | Chen | 8200.00 |

| Ismael | Sciarra | 7700.00 |

| Jose Manuel | Urman | 7800.00 |

| Luis | Popp | 6900.00 |

| Den | Raphaely | 11000.00 |

| Matthew | Weiss | 8000.00 |

| Adam | Fripp | 8200.00 |

| Payam | Kaufling | 7900.00 |

| Shanta | Vollman | 6500.00 |

| John | Russell | 14000.00 |

| Karen | Partners | 13500.00 |

| Alberto | Errazuriz | 12000.00 |

| Gerald | Cambrault | 11000.00 |

| Eleni | Zlotkey | 10500.00 |

| Peter | Tucker | 10000.00 |

| David | Bernstein | 9500.00 |

| Peter | Hall | 9000.00 |

| Christopher | Olsen | 8000.00 |

| Nanette | Cambrault | 7500.00 |

| Oliver | Tuvault | 7000.00 |

| Janette | King | 10000.00 |

| Patrick | Sully | 9500.00 |

| Allan | McEwen | 9000.00 |

| Lindsey | Smith | 8000.00 |

| Louise | Doran | 7500.00 |

| Sarath | Sewall | 7000.00 |

| Clara | Vishney | 10500.00 |

| Danielle | Greene | 9500.00 |

| Mattea | Marvins | 7200.00 |

| David | Lee | 6800.00 |

| Lisa | Ozer | 11500.00 |

| Harrison | Bloom | 10000.00 |

| Tayler | Fox | 9600.00 |

| William | Smith | 7400.00 |

| Elizabeth | Bates | 7300.00 |

| Ellen | Abel | 11000.00 |

| Alyssa | Hutton | 8800.00 |

| Jonathon | Taylor | 8600.00 |

| Jack | Livingston | 8400.00 |

| Kimberely | Grant | 7000.00 |

| Michael | Hartstein | 13000.00 |

| Susan | Mavris | 6500.00 |

| Hermann | Baer | 10000.00 |

| Shelley | Higgins | 12000.00 |

| William | Gietz | 8300.00 |

+-------------+------------+----------+

51 rows in set (0.00 sec)

MariaDB [csd2204w18]> select \* from Jobs;

+------------+---------------------------------+------------+------------+

| JOB\_ID | JOB\_TITLE | MIN\_SALARY | MAX\_SALARY |

+------------+---------------------------------+------------+------------+

| AD\_PRES | President | 20000 | 40000 |

| AD\_VP | Administration Vice President | 15000 | 30000 |

| AD\_ASST | Administration Assistant | 3000 | 6000 |

| FI\_MGR | Finance Manager | 8200 | 16000 |

| FI\_ACCOUNT | Accountant | 4200 | 9000 |

| AC\_MGR | Accounting Manager | 8200 | 16000 |

| AC\_ACCOUNT | Public Accountant | 4200 | 9000 |

| SA\_MAN | Sales Manager | 10000 | 20000 |

| SA\_REP | Sales Representative | 6000 | 12000 |

| PU\_MAN | Purchasing Manager | 8000 | 15000 |

| PU\_CLERK | Purchasing Clerk | 2500 | 5500 |

| ST\_MAN | Stock Manager | 5500 | 8500 |

| ST\_CLERK | Stock Clerk | 2000 | 5000 |

| SH\_CLERK | Shipping Clerk | 2500 | 5500 |

| IT\_PROG | Programmer | 4000 | 10000 |

| MK\_MAN | Marketing Manager | 9000 | 15000 |

| MK\_REP | Marketing Representative | 4000 | 9000 |

| HR\_REP | Human Resources Representative | 4000 | 9000 |

| PR\_REP | Public Relations Representative | 4500 | 10500 |

+------------+---------------------------------+------------+------------+

19 rows in set (0.02 sec)

MariaDB [csd2204w18]> SELECT min\_salary

-> FROM jobs

-> WHERE employees.job\_id = jobs.job\_id;

ERROR 1054 (42S22): Unknown column 'employees.job\_id' in 'where clause'

MariaDB [csd2204w18]> select job\_id from employees where job\_id in (SELECT min\_salary

-> WHERE employees.job\_id = jobs.job\_id);

ERROR 1054 (42S22): Unknown column 'min\_salary' in 'field list'

MariaDB [csd2204w18]> select \* from employees;

+-------------+-------------+-------------+----------+--------------------+------------+------------+----------+----------------+------------+---------------+

| EMPLOYEE\_ID | FIRST\_NAME | LAST\_NAME | EMAIL | PHONE\_NUMBER | HIRE\_DATE | JOB\_ID | SALARY | COMMISSION\_PCT | MANAGER\_ID | DEPARTMENT\_ID |

+-------------+-------------+-------------+----------+--------------------+------------+------------+----------+----------------+------------+---------------+

| 100 | Steven | King | SKING | 515.123.4567 | 1987-06-17 | AD\_PRES | 24000.00 | 0.00 | 0 | 90 |

| 101 | Neena | Kochhar | NKOCHHAR | 515.123.4568 | 1987-06-18 | AD\_VP | 17000.00 | 0.00 | 100 | 90 |

| 102 | Lex | De Haan | LDEHAAN | 515.123.4569 | 1987-06-19 | AD\_VP | 17000.00 | 0.00 | 100 | 90 |

| 103 | Alexander | Hunold | AHUNOLD | 590.423.4567 | 1987-06-20 | IT\_PROG | 9000.00 | 0.00 | 102 | 60 |

| 104 | Bruce | Ernst | BERNST | 590.423.4568 | 1987-06-21 | IT\_PROG | 6000.00 | 0.00 | 103 | 60 |

| 105 | David | Austin | DAUSTIN | 590.423.4569 | 1987-06-22 | IT\_PROG | 4800.00 | 0.00 | 103 | 60 |

| 106 | Valli | Pataballa | VPATABAL | 590.423.4560 | 1987-06-23 | IT\_PROG | 4800.00 | 0.00 | 103 | 60 |

| 107 | Diana | Lorentz | DLORENTZ | 590.423.5567 | 1987-06-24 | IT\_PROG | 4200.00 | 0.00 | 103 | 60 |

| 108 | Nancy | Greenberg | NGREENBE | 515.124.4569 | 1987-06-25 | FI\_MGR | 12000.00 | 0.00 | 101 | 100 |

| 109 | Daniel | Faviet | DFAVIET | 515.124.4169 | 1987-06-26 | FI\_ACCOUNT | 9000.00 | 0.00 | 108 | 100 |

| 110 | John | Chen | JCHEN | 515.124.4269 | 1987-06-27 | FI\_ACCOUNT | 8200.00 | 0.00 | 108 | 100 |

| 111 | Ismael | Sciarra | ISCIARRA | 515.124.4369 | 1987-06-28 | FI\_ACCOUNT | 7700.00 | 0.00 | 108 | 100 |

| 112 | Jose Manuel | Urman | JMURMAN | 515.124.4469 | 1987-06-29 | FI\_ACCOUNT | 7800.00 | 0.00 | 108 | 100 |

| 113 | Luis | Popp | LPOPP | 515.124.4567 | 1987-06-30 | FI\_ACCOUNT | 6900.00 | 0.00 | 108 | 100 |

| 114 | Den | Raphaely | DRAPHEAL | 515.127.4561 | 1987-07-01 | PU\_MAN | 11000.00 | 0.00 | 100 | 30 |

| 115 | Alexander | Khoo | AKHOO | 515.127.4562 | 1987-07-02 | PU\_CLERK | 3100.00 | 0.00 | 114 | 30 |

| 116 | Shelli | Baida | SBAIDA | 515.127.4563 | 1987-07-03 | PU\_CLERK | 2900.00 | 0.00 | 114 | 30 |

| 117 | Sigal | Tobias | STOBIAS | 515.127.4564 | 1987-07-04 | PU\_CLERK | 2800.00 | 0.00 | 114 | 30 |

| 118 | Guy | Himuro | GHIMURO | 515.127.4565 | 1987-07-05 | PU\_CLERK | 2600.00 | 0.00 | 114 | 30 |

| 119 | Karen | Colmenares | KCOLMENA | 515.127.4566 | 1987-07-06 | PU\_CLERK | 2500.00 | 0.00 | 114 | 30 |

| 120 | Matthew | Weiss | MWEISS | 650.123.1234 | 1987-07-07 | ST\_MAN | 8000.00 | 0.00 | 100 | 50 |

| 121 | Adam | Fripp | AFRIPP | 650.123.2234 | 1987-07-08 | ST\_MAN | 8200.00 | 0.00 | 100 | 50 |

| 122 | Payam | Kaufling | PKAUFLIN | 650.123.3234 | 1987-07-09 | ST\_MAN | 7900.00 | 0.00 | 100 | 50 |

| 123 | Shanta | Vollman | SVOLLMAN | 650.123.4234 | 1987-07-10 | ST\_MAN | 6500.00 | 0.00 | 100 | 50 |

| 124 | Kevin | Mourgos | KMOURGOS | 650.123.5234 | 1987-07-11 | ST\_MAN | 5800.00 | 0.00 | 100 | 50 |

| 125 | Julia | Nayer | JNAYER | 650.124.1214 | 1987-07-12 | ST\_CLERK | 3200.00 | 0.00 | 120 | 50 |

| 126 | Irene | Mikkilineni | IMIKKILI | 650.124.1224 | 1987-07-13 | ST\_CLERK | 2700.00 | 0.00 | 120 | 50 |

| 127 | James | Landry | JLANDRY | 650.124.1334 | 1987-07-14 | ST\_CLERK | 2400.00 | 0.00 | 120 | 50 |

| 128 | Steven | Markle | SMARKLE | 650.124.1434 | 1987-07-15 | ST\_CLERK | 2200.00 | 0.00 | 120 | 50 |

| 129 | Laura | Bissot | LBISSOT | 650.124.5234 | 1987-07-16 | ST\_CLERK | 3300.00 | 0.00 | 121 | 50 |

| 130 | Mozhe | Atkinson | MATKINSO | 650.124.6234 | 1987-07-17 | ST\_CLERK | 2800.00 | 0.00 | 121 | 50 |

| 131 | James | Marlow | JAMRLOW | 650.124.7234 | 1987-07-18 | ST\_CLERK | 2500.00 | 0.00 | 121 | 50 |

| 132 | TJ | Olson | TJOLSON | 650.124.8234 | 1987-07-19 | ST\_CLERK | 2100.00 | 0.00 | 121 | 50 |

| 133 | Jason | Mallin | JMALLIN | 650.127.1934 | 1987-07-20 | ST\_CLERK | 3300.00 | 0.00 | 122 | 50 |

| 134 | Michael | Rogers | MROGERS | 650.127.1834 | 1987-07-21 | ST\_CLERK | 2900.00 | 0.00 | 122 | 50 |

| 135 | Ki | Gee | KGEE | 650.127.1734 | 1987-07-22 | ST\_CLERK | 2400.00 | 0.00 | 122 | 50 |

| 136 | Hazel | Philtanker | HPHILTAN | 650.127.1634 | 1987-07-23 | ST\_CLERK | 2200.00 | 0.00 | 122 | 50 |

| 137 | Renske | Ladwig | RLADWIG | 650.121.1234 | 1987-07-24 | ST\_CLERK | 3600.00 | 0.00 | 123 | 50 |

| 138 | Stephen | Stiles | SSTILES | 650.121.2034 | 1987-07-25 | ST\_CLERK | 3200.00 | 0.00 | 123 | 50 |

| 139 | John | Seo | JSEO | 650.121.2019 | 1987-07-26 | ST\_CLERK | 2700.00 | 0.00 | 123 | 50 |

| 140 | Joshua | Patel | JPATEL | 650.121.1834 | 1987-07-27 | ST\_CLERK | 2500.00 | 0.00 | 123 | 50 |

| 141 | Trenna | Rajs | TRAJS | 650.121.8009 | 1987-07-28 | ST\_CLERK | 3500.00 | 0.00 | 124 | 50 |

| 142 | Curtis | Davies | CDAVIES | 650.121.2994 | 1987-07-29 | ST\_CLERK | 3100.00 | 0.00 | 124 | 50 |

| 143 | Randall | Matos | RMATOS | 650.121.2874 | 1987-07-30 | ST\_CLERK | 2600.00 | 0.00 | 124 | 50 |

| 144 | Peter | Vargas | PVARGAS | 650.121.2004 | 1987-07-31 | ST\_CLERK | 2500.00 | 0.00 | 124 | 50 |

| 145 | John | Russell | JRUSSEL | 011.44.1344.429268 | 1987-08-01 | SA\_MAN | 14000.00 | 0.40 | 100 | 80 |

| 146 | Karen | Partners | KPARTNER | 011.44.1344.467268 | 1987-08-02 | SA\_MAN | 13500.00 | 0.30 | 100 | 80 |

| 147 | Alberto | Errazuriz | AERRAZUR | 011.44.1344.429278 | 1987-08-03 | SA\_MAN | 12000.00 | 0.30 | 100 | 80 |

| 148 | Gerald | Cambrault | GCAMBRAU | 011.44.1344.619268 | 1987-08-04 | SA\_MAN | 11000.00 | 0.30 | 100 | 80 |

| 149 | Eleni | Zlotkey | EZLOTKEY | 011.44.1344.429018 | 1987-08-05 | SA\_MAN | 10500.00 | 0.20 | 100 | 80 |

| 150 | Peter | Tucker | PTUCKER | 011.44.1344.129268 | 1987-08-06 | SA\_REP | 10000.00 | 0.30 | 145 | 80 |

| 151 | David | Bernstein | DBERNSTE | 011.44.1344.345268 | 1987-08-07 | SA\_REP | 9500.00 | 0.25 | 145 | 80 |

| 152 | Peter | Hall | PHALL | 011.44.1344.478968 | 1987-08-08 | SA\_REP | 9000.00 | 0.25 | 145 | 80 |

| 153 | Christopher | Olsen | COLSEN | 011.44.1344.498718 | 1987-08-09 | SA\_REP | 8000.00 | 0.20 | 145 | 80 |

| 154 | Nanette | Cambrault | NCAMBRAU | 011.44.1344.987668 | 1987-08-10 | SA\_REP | 7500.00 | 0.20 | 145 | 80 |

| 155 | Oliver | Tuvault | OTUVAULT | 011.44.1344.486508 | 1987-08-11 | SA\_REP | 7000.00 | 0.15 | 145 | 80 |

| 156 | Janette | King | JKING | 011.44.1345.429268 | 1987-08-12 | SA\_REP | 10000.00 | 0.35 | 146 | 80 |

| 157 | Patrick | Sully | PSULLY | 011.44.1345.929268 | 1987-08-13 | SA\_REP | 9500.00 | 0.35 | 146 | 80 |

| 158 | Allan | McEwen | AMCEWEN | 011.44.1345.829268 | 1987-08-14 | SA\_REP | 9000.00 | 0.35 | 146 | 80 |

| 159 | Lindsey | Smith | LSMITH | 011.44.1345.729268 | 1987-08-15 | SA\_REP | 8000.00 | 0.30 | 146 | 80 |

| 160 | Louise | Doran | LDORAN | 011.44.1345.629268 | 1987-08-16 | SA\_REP | 7500.00 | 0.30 | 146 | 80 |

| 161 | Sarath | Sewall | SSEWALL | 011.44.1345.529268 | 1987-08-17 | SA\_REP | 7000.00 | 0.25 | 146 | 80 |

| 162 | Clara | Vishney | CVISHNEY | 011.44.1346.129268 | 1987-08-18 | SA\_REP | 10500.00 | 0.25 | 147 | 80 |

| 163 | Danielle | Greene | DGREENE | 011.44.1346.229268 | 1987-08-19 | SA\_REP | 9500.00 | 0.15 | 147 | 80 |

| 164 | Mattea | Marvins | MMARVINS | 011.44.1346.329268 | 1987-08-20 | SA\_REP | 7200.00 | 0.10 | 147 | 80 |

| 165 | David | Lee | DLEE | 011.44.1346.529268 | 1987-08-21 | SA\_REP | 6800.00 | 0.10 | 147 | 80 |

| 166 | Sundar | Ande | SANDE | 011.44.1346.629268 | 1987-08-22 | SA\_REP | 6400.00 | 0.10 | 147 | 80 |

| 167 | Amit | Banda | ABANDA | 011.44.1346.729268 | 1987-08-23 | SA\_REP | 6200.00 | 0.10 | 147 | 80 |

| 168 | Lisa | Ozer | LOZER | 011.44.1343.929268 | 1987-08-24 | SA\_REP | 11500.00 | 0.25 | 148 | 80 |

| 169 | Harrison | Bloom | HBLOOM | 011.44.1343.829268 | 1987-08-25 | SA\_REP | 10000.00 | 0.20 | 148 | 80 |

| 170 | Tayler | Fox | TFOX | 011.44.1343.729268 | 1987-08-26 | SA\_REP | 9600.00 | 0.20 | 148 | 80 |

| 171 | William | Smith | WSMITH | 011.44.1343.629268 | 1987-08-27 | SA\_REP | 7400.00 | 0.15 | 148 | 80 |

| 172 | Elizabeth | Bates | EBATES | 011.44.1343.529268 | 1987-08-28 | SA\_REP | 7300.00 | 0.15 | 148 | 80 |

| 173 | Sundita | Kumar | SKUMAR | 011.44.1343.329268 | 1987-08-29 | SA\_REP | 6100.00 | 0.10 | 148 | 80 |

| 174 | Ellen | Abel | EABEL | 011.44.1644.429267 | 1987-08-30 | SA\_REP | 11000.00 | 0.30 | 149 | 80 |

| 175 | Alyssa | Hutton | AHUTTON | 011.44.1644.429266 | 1987-08-31 | SA\_REP | 8800.00 | 0.25 | 149 | 80 |

| 176 | Jonathon | Taylor | JTAYLOR | 011.44.1644.429265 | 1987-09-01 | SA\_REP | 8600.00 | 0.20 | 149 | 80 |

| 177 | Jack | Livingston | JLIVINGS | 011.44.1644.429264 | 1987-09-02 | SA\_REP | 8400.00 | 0.20 | 149 | 80 |

| 178 | Kimberely | Grant | KGRANT | 011.44.1644.429263 | 1987-09-03 | SA\_REP | 7000.00 | 0.15 | 149 | 0 |

| 179 | Charles | Johnson | CJOHNSON | 011.44.1644.429262 | 1987-09-04 | SA\_REP | 6200.00 | 0.10 | 149 | 80 |

| 180 | Winston | Taylor | WTAYLOR | 650.507.9876 | 1987-09-05 | SH\_CLERK | 3200.00 | 0.00 | 120 | 50 |

| 181 | Jean | Fleaur | JFLEAUR | 650.507.9877 | 1987-09-06 | SH\_CLERK | 3100.00 | 0.00 | 120 | 50 |

| 182 | Martha | Sullivan | MSULLIVA | 650.507.9878 | 1987-09-07 | SH\_CLERK | 2500.00 | 0.00 | 120 | 50 |

| 183 | Girard | Geoni | GGEONI | 650.507.9879 | 1987-09-08 | SH\_CLERK | 2800.00 | 0.00 | 120 | 50 |

| 184 | Nandita | Sarchand | NSARCHAN | 650.509.1876 | 1987-09-09 | SH\_CLERK | 4200.00 | 0.00 | 121 | 50 |

| 185 | Alexis | Bull | ABULL | 650.509.2876 | 1987-09-10 | SH\_CLERK | 4100.00 | 0.00 | 121 | 50 |

| 186 | Julia | Dellinger | JDELLING | 650.509.3876 | 1987-09-11 | SH\_CLERK | 3400.00 | 0.00 | 121 | 50 |

| 187 | Anthony | Cabrio | ACABRIO | 650.509.4876 | 1987-09-12 | SH\_CLERK | 3000.00 | 0.00 | 121 | 50 |

| 188 | Kelly | Chung | KCHUNG | 650.505.1876 | 1987-09-13 | SH\_CLERK | 3800.00 | 0.00 | 122 | 50 |

| 189 | Jennifer | Dilly | JDILLY | 650.505.2876 | 1987-09-14 | SH\_CLERK | 3600.00 | 0.00 | 122 | 50 |

| 190 | Timothy | Gates | TGATES | 650.505.3876 | 1987-09-15 | SH\_CLERK | 2900.00 | 0.00 | 122 | 50 |

| 191 | Randall | Perkins | RPERKINS | 650.505.4876 | 1987-09-16 | SH\_CLERK | 2500.00 | 0.00 | 122 | 50 |

| 192 | Sarah | Bell | SBELL | 650.501.1876 | 1987-09-17 | SH\_CLERK | 4000.00 | 0.00 | 123 | 50 |

| 193 | Britney | Everett | BEVERETT | 650.501.2876 | 1987-09-18 | SH\_CLERK | 3900.00 | 0.00 | 123 | 50 |

| 194 | Samuel | McCain | SMCCAIN | 650.501.3876 | 1987-09-19 | SH\_CLERK | 3200.00 | 0.00 | 123 | 50 |

| 195 | Vance | Jones | VJONES | 650.501.4876 | 1987-09-20 | SH\_CLERK | 2800.00 | 0.00 | 123 | 50 |

| 196 | Alana | Walsh | AWALSH | 650.507.9811 | 1987-09-21 | SH\_CLERK | 3100.00 | 0.00 | 124 | 50 |

| 197 | Kevin | Feeney | KFEENEY | 650.507.9822 | 1987-09-22 | SH\_CLERK | 3000.00 | 0.00 | 124 | 50 |

| 198 | Donald | OConnell | DOCONNEL | 650.507.9833 | 1987-09-23 | SH\_CLERK | 2600.00 | 0.00 | 124 | 50 |

| 199 | Douglas | Grant | DGRANT | 650.507.9844 | 1987-09-24 | SH\_CLERK | 2600.00 | 0.00 | 124 | 50 |

| 200 | Jennifer | Whalen | JWHALEN | 515.123.4444 | 1987-09-25 | AD\_ASST | 4400.00 | 0.00 | 101 | 10 |

| 201 | Michael | Hartstein | MHARTSTE | 515.123.5555 | 1987-09-26 | MK\_MAN | 13000.00 | 0.00 | 100 | 20 |

| 202 | Pat | Fay | PFAY | 603.123.6666 | 1987-09-27 | MK\_REP | 6000.00 | 0.00 | 201 | 20 |

| 203 | Susan | Mavris | SMAVRIS | 515.123.7777 | 1987-09-28 | HR\_REP | 6500.00 | 0.00 | 101 | 40 |

| 204 | Hermann | Baer | HBAER | 515.123.8888 | 1987-09-29 | PR\_REP | 10000.00 | 0.00 | 101 | 70 |

| 205 | Shelley | Higgins | SHIGGINS | 515.123.8080 | 1987-09-30 | AC\_MGR | 12000.00 | 0.00 | 101 | 110 |

| 206 | William | Gietz | WGIETZ | 515.123.8181 | 1987-10-01 | AC\_ACCOUNT | 8300.00 | 0.00 | 205 | 110 |

+-------------+-------------+-------------+----------+--------------------+------------+------------+----------+----------------+------------+---------------+

107 rows in set (0.00 sec)

MariaDB [csd2204w18]> desc departments;

+-----------------+--------------+------+-----+---------+-------+

| Field | Type | Null | Key | Default | Extra |

+-----------------+--------------+------+-----+---------+-------+

| DEPARTMENT\_ID | decimal(4,0) | NO | PRI | 0 | |

| DEPARTMENT\_NAME | varchar(30) | NO | | NULL | |

| MANAGER\_ID | decimal(6,0) | YES | MUL | NULL | |

| LOCATION\_ID | decimal(4,0) | YES | MUL | NULL | |

+-----------------+--------------+------+-----+---------+-------+

4 rows in set (0.01 sec)

MariaDB [csd2204w18]> desc employees;

+----------------+--------------+------+-----+---------+-------+

| Field | Type | Null | Key | Default | Extra |

+----------------+--------------+------+-----+---------+-------+

| EMPLOYEE\_ID | decimal(6,0) | NO | PRI | 0 | |

| FIRST\_NAME | varchar(20) | YES | | NULL | |

| LAST\_NAME | varchar(25) | NO | MUL | NULL | |

| EMAIL | varchar(25) | NO | UNI | NULL | |

| PHONE\_NUMBER | varchar(20) | YES | | NULL | |

| HIRE\_DATE | date | NO | | NULL | |

| JOB\_ID | varchar(10) | NO | MUL | NULL | |

| SALARY | decimal(8,2) | YES | | NULL | |

| COMMISSION\_PCT | decimal(2,2) | YES | | NULL | |

| MANAGER\_ID | decimal(6,0) | YES | MUL | NULL | |

| DEPARTMENT\_ID | decimal(4,0) | YES | MUL | NULL | |

+----------------+--------------+------+-----+---------+-------+

11 rows in set (0.01 sec)

MariaDB [csd2204w18]> Select department\_id from departments where deoaertment\_name='it';

ERROR 1054 (42S22): Unknown column 'deoaertment\_name' in 'where clause'

MariaDB [csd2204w18]> Select department\_id from departments where department\_name='it';

+---------------+

| department\_id |

+---------------+

| 60 |

+---------------+

1 row in set (0.00 sec)

MariaDB [csd2204w18]> Select department\_id from departments where department\_name like '%it%';

+---------------+

| department\_id |

+---------------+

| 60 |

| 140 |

| 160 |

| 210 |

| 230 |

| 260 |

+---------------+

6 rows in set (0.00 sec)

MariaDB [csd2204w18]> ALL(SELECT avg(salary)

-> FROM employees

-> GROUP BY department\_id;

ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MariaDB server version for the right syntax to use near 'ALL(SELECT avg(salary)

FROM employees

GROUP BY department\_id' at line 1

MariaDB [csd2204w18]> SELECT avg(salary)

-> FROM employees

-> GROUP BY department\_id;

+--------------+

| avg(salary) |

+--------------+

| 7000.000000 |

| 4400.000000 |

| 9500.000000 |

| 4150.000000 |

| 6500.000000 |

| 3475.555556 |

| 5760.000000 |

| 10000.000000 |

| 8955.882353 |

| 19333.333333 |

| 8600.000000 |

| 10150.000000 |

+--------------+

12 rows in set (0.01 sec)

MariaDB [csd2204w18]> SELECT \* FROM employees

-> WHERE salary > ALL(SELECT avg(salary)

-> FROM employees

-> GROUP BY department\_id);

+-------------+------------+-----------+-------+--------------+------------+---------+----------+----------------+------------+---------------+

| EMPLOYEE\_ID | FIRST\_NAME | LAST\_NAME | EMAIL | PHONE\_NUMBER | HIRE\_DATE | JOB\_ID | SALARY | COMMISSION\_PCT | MANAGER\_ID | DEPARTMENT\_ID |

+-------------+------------+-----------+-------+--------------+------------+---------+----------+----------------+------------+---------------+

| 100 | Steven | King | SKING | 515.123.4567 | 1987-06-17 | AD\_PRES | 24000.00 | 0.00 | 0 | 90 |

+-------------+------------+-----------+-------+--------------+------------+---------+----------+----------------+------------+---------------+

1 row in set (0.00 sec)

MariaDB [csd2204w18]> desc locations;

+----------------+--------------+------+-----+---------+-------+

| Field | Type | Null | Key | Default | Extra |

+----------------+--------------+------+-----+---------+-------+

| LOCATION\_ID | decimal(4,0) | NO | PRI | 0 | |

| STREET\_ADDRESS | varchar(40) | YES | | NULL | |

| POSTAL\_CODE | varchar(12) | YES | | NULL | |

| CITY | varchar(30) | NO | MUL | NULL | |

| STATE\_PROVINCE | varchar(25) | YES | MUL | NULL | |

| COUNTRY\_ID | varchar(2) | YES | MUL | NULL | |

+----------------+--------------+------+-----+---------+-------+

6 rows in set (0.01 sec)

MariaDB [csd2204w18]> select location\_id from locations where country\_id='us';

+-------------+

| location\_id |

+-------------+

| 1400 |

| 1500 |

| 1600 |

| 1700 |

+-------------+

4 rows in set (0.00 sec)

MariaDB [csd2204w18]> select manager\_id from departments where location\_id=(1400,1500,1600,1700);

ERROR 1241 (21000): Operand should contain 1 column(s)

MariaDB [csd2204w18]> SELECT location\_id FROM locations

-> WHERE country\_id='US';

+-------------+

| location\_id |

+-------------+

| 1400 |

| 1500 |

| 1600 |

| 1700 |

+-------------+

4 rows in set (0.00 sec)

MariaDB [csd2204w18]> SELECT department\_id

-> FROM departments WHERE location\_id='1400','1500','1600','1700';

ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MariaDB server version for the right syntax to use near ''1500','1600','1700'' at line 2

MariaDB [csd2204w18]> FROM departments WHERE location\_id='1400','1500','1600','1700';

ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MariaDB server version for the right syntax to use near 'FROM departments WHERE location\_id='1400','1500','1600','1700'' at line 1

MariaDB [csd2204w18]> FROM departments WHERE location\_id=('1400','1500','1600','1700');

ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MariaDB server version for the right syntax to use near 'FROM departments WHERE location\_id=('1400','1500','1600','1700')' at line 1

MariaDB [csd2204w18]> FROM departments WHERE location\_id in (1400,1500,1600,1700);

ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MariaDB server version for the right syntax to use near 'FROM departments WHERE location\_id in (1400,1500,1600,1700)' at line 1

MariaDB [csd2204w18]> select department\_id FROM departments WHERE location\_id in (1400,1500,1600,1700);

+---------------+

| department\_id |

+---------------+

| 10 |

| 30 |

| 50 |

| 60 |

| 90 |

| 100 |

| 110 |

| 120 |

| 130 |

| 140 |

| 150 |

| 160 |

| 170 |

| 180 |

| 190 |

| 200 |

| 210 |

| 220 |

| 230 |

| 240 |

| 250 |

| 260 |

| 270 |

+---------------+

23 rows in set (0.00 sec)

MariaDB [csd2204w18]> SELECT first\_name, last\_name FROM employees

-> WHERE manager\_id in

-> (select employee\_id FROM employees

-> WHERE department\_id

-> IN (SELECT department\_id

-> FROM departments WHERE location\_id

-> IN (SELECT location\_id FROM locations

-> WHERE country\_id='US')));

+-------------+-------------+

| first\_name | last\_name |

+-------------+-------------+

| Neena | Kochhar |

| Lex | De Haan |

| Alexander | Hunold |

| Bruce | Ernst |

| David | Austin |

| Valli | Pataballa |

| Diana | Lorentz |

| Nancy | Greenberg |

| Daniel | Faviet |

| John | Chen |

| Ismael | Sciarra |

| Jose Manuel | Urman |

| Luis | Popp |

| Den | Raphaely |

| Alexander | Khoo |

| Shelli | Baida |

| Sigal | Tobias |

| Guy | Himuro |

| Karen | Colmenares |

| Matthew | Weiss |

| Adam | Fripp |

| Payam | Kaufling |

| Shanta | Vollman |

| Kevin | Mourgos |

| Julia | Nayer |

| Irene | Mikkilineni |

| James | Landry |

| Steven | Markle |

| Laura | Bissot |

| Mozhe | Atkinson |

| James | Marlow |

| TJ | Olson |

| Jason | Mallin |

| Michael | Rogers |

| Ki | Gee |

| Hazel | Philtanker |

| Renske | Ladwig |

| Stephen | Stiles |

| John | Seo |

| Joshua | Patel |

| Trenna | Rajs |

| Curtis | Davies |

| Randall | Matos |

| Peter | Vargas |

| John | Russell |

| Karen | Partners |

| Alberto | Errazuriz |

| Gerald | Cambrault |

| Eleni | Zlotkey |

| Winston | Taylor |

| Jean | Fleaur |

| Martha | Sullivan |

| Girard | Geoni |

| Nandita | Sarchand |

| Alexis | Bull |

| Julia | Dellinger |

| Anthony | Cabrio |

| Kelly | Chung |

| Jennifer | Dilly |

| Timothy | Gates |

| Randall | Perkins |

| Sarah | Bell |

| Britney | Everett |

| Samuel | McCain |

| Vance | Jones |

| Alana | Walsh |

| Kevin | Feeney |

| Donald | OConnell |

| Douglas | Grant |

| Jennifer | Whalen |

| Michael | Hartstein |

| Susan | Mavris |

| Hermann | Baer |

| Shelley | Higgins |

| William | Gietz |

+-------------+-------------+

75 rows in set (0.00 sec)

MariaDB [csd2204w18]> SELECT first\_name, last\_name FROM employees where manager\_id in (select department\_id from departments where location\_id in (select location\_id from locations where country\_id='us'));

+------------+-------------+

| first\_name | last\_name |

+------------+-------------+

| Neena | Kochhar |

| Lex | De Haan |

| Den | Raphaely |

| Matthew | Weiss |

| Adam | Fripp |

| Payam | Kaufling |

| Shanta | Vollman |

| Kevin | Mourgos |

| John | Russell |

| Karen | Partners |

| Alberto | Errazuriz |

| Gerald | Cambrault |

| Eleni | Zlotkey |

| Michael | Hartstein |

| Julia | Nayer |

| Irene | Mikkilineni |

| James | Landry |

| Steven | Markle |

| Winston | Taylor |

| Jean | Fleaur |

| Martha | Sullivan |

| Girard | Geoni |

+------------+-------------+

22 rows in set (0.00 sec)

MariaDB [csd2204w18]> select first\_name, last\_name from employees where manager\_id in (select employee\_id from employees where manager\_id=employee\_id);

Empty set (0.00 sec)

MariaDB [csd2204w18]> select first\_name, last\_name from employees where employee\_id in (select employee\_id from employees where manager\_id=employee\_id);

Empty set (0.00 sec)

MariaDB [csd2204w18]> select manager\_id from employees;

+------------+

| manager\_id |

+------------+

| 0 |

| 100 |

| 100 |

| 100 |

| 100 |

| 100 |

| 100 |

| 100 |

| 100 |

| 100 |

| 100 |

| 100 |

| 100 |

| 100 |

| 100 |

| 101 |

| 101 |

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| 102 |

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| 108 |

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| 108 |

| 114 |

| 114 |

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| 120 |

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| 148 |

| 148 |

| 148 |

| 148 |

| 148 |

| 148 |

| 149 |

| 149 |

| 149 |

| 149 |

| 149 |

| 149 |

| 201 |

| 205 |

+------------+

107 rows in set (0.00 sec)

MariaDB [csd2204w18]> select distinct manager\_id from employees;

+------------+

| manager\_id |

+------------+

| 0 |

| 100 |

| 101 |

| 102 |

| 103 |

| 108 |

| 114 |

| 120 |

| 121 |

| 122 |

| 123 |

| 124 |

| 145 |

| 146 |

| 147 |

| 148 |

| 149 |

| 201 |

| 205 |

+------------+

19 rows in set (0.00 sec)

MariaDB [csd2204w18]> select first\_name, last\_name from employees where employee\_id in (select distinct manager\_id from employees);

+------------+-----------+

| first\_name | last\_name |

+------------+-----------+

| Steven | King |

| Neena | Kochhar |

| Lex | De Haan |

| Alexander | Hunold |

| Nancy | Greenberg |

| Den | Raphaely |

| Matthew | Weiss |

| Adam | Fripp |

| Payam | Kaufling |

| Shanta | Vollman |

| Kevin | Mourgos |

| John | Russell |

| Karen | Partners |

| Alberto | Errazuriz |

| Gerald | Cambrault |

| Eleni | Zlotkey |

| Michael | Hartstein |

| Shelley | Higgins |

+------------+-----------+

18 rows in set (0.00 sec)

MariaDB [csd2204w18]> show index from employees;

+-----------+------------+-------------------+--------------+---------------+-----------+-------------+----------+--------+------+------------+---------+---------------+

| Table | Non\_unique | Key\_name | Seq\_in\_index | Column\_name | Collation | Cardinality | Sub\_part | Packed | Null | Index\_type | Comment | Index\_comment |

+-----------+------------+-------------------+--------------+---------------+-----------+-------------+----------+--------+------+------------+---------+---------------+

| employees | 0 | PRIMARY | 1 | EMPLOYEE\_ID | A | 107 | NULL | NULL | | BTREE | | |

| employees | 0 | EMP\_EMAIL\_UK | 1 | EMAIL | A | 107 | NULL | NULL | | BTREE | | |

| employees | 1 | EMP\_DEPARTMENT\_IX | 1 | DEPARTMENT\_ID | A | 11 | NULL | NULL | YES | BTREE | | |

| employees | 1 | EMP\_JOB\_IX | 1 | JOB\_ID | A | 17 | NULL | NULL | | BTREE | | |

| employees | 1 | EMP\_MANAGER\_IX | 1 | MANAGER\_ID | A | 17 | NULL | NULL | YES | BTREE | | |

| employees | 1 | EMP\_NAME\_IX | 1 | LAST\_NAME | A | 107 | NULL | NULL | | BTREE | | |

| employees | 1 | EMP\_NAME\_IX | 2 | FIRST\_NAME | A | 107 | NULL | NULL | YES | BTREE | | |

+-----------+------------+-------------------+--------------+---------------+-----------+-------------+----------+--------+------+------------+---------+---------------+

7 rows in set (0.00 sec)

MariaDB [csd2204w18]> Find the name (first\_name, last\_name), and salary of the

-> employees whose salary is greater than the average salary.

-> ;

ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MariaDB server version for the right syntax to use near 'Find the name (first\_name, last\_name), and salary of the

employees whose salary ' at line 1

MariaDB [csd2204w18]> select first\_name, last\_name from employees where salary > (select avg(salary) from employees);

+-------------+------------+

| first\_name | last\_name |

+-------------+------------+

| Steven | King |

| Neena | Kochhar |

| Lex | De Haan |

| Alexander | Hunold |

| Nancy | Greenberg |

| Daniel | Faviet |

| John | Chen |

| Ismael | Sciarra |

| Jose Manuel | Urman |

| Luis | Popp |

| Den | Raphaely |

| Matthew | Weiss |

| Adam | Fripp |

| Payam | Kaufling |

| Shanta | Vollman |

| John | Russell |

| Karen | Partners |

| Alberto | Errazuriz |

| Gerald | Cambrault |

| Eleni | Zlotkey |

| Peter | Tucker |

| David | Bernstein |

| Peter | Hall |

| Christopher | Olsen |

| Nanette | Cambrault |

| Oliver | Tuvault |

| Janette | King |

| Patrick | Sully |

| Allan | McEwen |

| Lindsey | Smith |

| Louise | Doran |

| Sarath | Sewall |

| Clara | Vishney |

| Danielle | Greene |

| Mattea | Marvins |

| David | Lee |

| Lisa | Ozer |

| Harrison | Bloom |

| Tayler | Fox |

| William | Smith |

| Elizabeth | Bates |

| Ellen | Abel |

| Alyssa | Hutton |

| Jonathon | Taylor |

| Jack | Livingston |

| Kimberely | Grant |

| Michael | Hartstein |

| Susan | Mavris |

| Hermann | Baer |

| Shelley | Higgins |

| William | Gietz |

+-------------+------------+

51 rows in set (0.00 sec)

MariaDB [csd2204w18]> select first\_name, last\_name from employees where employee\_id IN (select distinct manager\_id from employees);

+------------+-----------+

| first\_name | last\_name |

+------------+-----------+

| Steven | King |

| Neena | Kochhar |

| Lex | De Haan |

| Alexander | Hunold |

| Nancy | Greenberg |

| Den | Raphaely |

| Matthew | Weiss |

| Adam | Fripp |

| Payam | Kaufling |

| Shanta | Vollman |

| Kevin | Mourgos |

| John | Russell |

| Karen | Partners |

| Alberto | Errazuriz |

| Gerald | Cambrault |

| Eleni | Zlotkey |

| Michael | Hartstein |

| Shelley | Higgins |

+------------+-----------+

18 rows in set (0.00 sec)

MariaDB [csd2204w18]> desc jobs;

+------------+--------------+------+-----+---------+-------+

| Field | Type | Null | Key | Default | Extra |

+------------+--------------+------+-----+---------+-------+

| JOB\_ID | varchar(10) | NO | PRI | | |

| JOB\_TITLE | varchar(35) | NO | | NULL | |

| MIN\_SALARY | decimal(6,0) | YES | | NULL | |

| MAX\_SALARY | decimal(6,0) | YES | | NULL | |

+------------+--------------+------+-----+---------+-------+

4 rows in set (0.01 sec)

MariaDB [csd2204w18]> select first\_name, last\_name, salary from employees where salary = (select min-salary from jobs order by job title);

ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MariaDB server version for the right syntax to use near 'title)' at line 1

MariaDB [csd2204w18]> select first\_name, last\_name, salary from employees where salary = (select min-salary from jobs order by job\_title);

ERROR 1054 (42S22): Unknown column 'min' in 'field list'

MariaDB [csd2204w18]> select first\_name, last\_name, salary from employees where salary = (select min\_salary from jobs order by job\_title);

ERROR 1242 (21000): Subquery returns more than 1 row

MariaDB [csd2204w18]> select first\_name,last\_name,salary from employees where salary = (select min(salary) from employees);

+------------+-----------+---------+

| first\_name | last\_name | salary |

+------------+-----------+---------+

| TJ | Olson | 2100.00 |

+------------+-----------+---------+

1 row in set (0.00 sec)

MariaDB [csd2204w18]> select first\_name,last\_name,salary from employees where salary = (select min\_salary from jobs where employees.job\_id = jobs.job\_id);

+------------+------------+---------+

| first\_name | last\_name | salary |

+------------+------------+---------+

| Karen | Colmenares | 2500.00 |

| Martha | Sullivan | 2500.00 |

| Randall | Perkins | 2500.00 |

+------------+------------+---------+

3 rows in set (0.00 sec)

MariaDB [csd2204w18]> desc jobs;

+------------+--------------+------+-----+---------+-------+

| Field | Type | Null | Key | Default | Extra |

+------------+--------------+------+-----+---------+-------+

| JOB\_ID | varchar(10) | NO | PRI | | |

| JOB\_TITLE | varchar(35) | NO | | NULL | |

| MIN\_SALARY | decimal(6,0) | YES | | NULL | |

| MAX\_SALARY | decimal(6,0) | YES | | NULL | |

+------------+--------------+------+-----+---------+-------+

4 rows in set (0.01 sec)

MariaDB [csd2204w18]> select first\_name, last\_name, salary from employees where employees.salary = (select min\_salary from jobs where employees.job\_id = jobs.job\_id);

+------------+------------+---------+

| first\_name | last\_name | salary |

+------------+------------+---------+

| Karen | Colmenares | 2500.00 |

| Martha | Sullivan | 2500.00 |

| Randall | Perkins | 2500.00 |

+------------+------------+---------+

3 rows in set (0.00 sec)

MariaDB [csd2204w18]> select first\_name, last\_name, salary from employees where salary > (select avg(salary) from employees where department\_id in (select department\_id from departments where department\_name = 'it'));

+-------------+------------+----------+

| first\_name | last\_name | salary |

+-------------+------------+----------+

| Steven | King | 24000.00 |

| Neena | Kochhar | 17000.00 |

| Lex | De Haan | 17000.00 |

| Alexander | Hunold | 9000.00 |

| Bruce | Ernst | 6000.00 |

| Nancy | Greenberg | 12000.00 |

| Daniel | Faviet | 9000.00 |

| John | Chen | 8200.00 |

| Ismael | Sciarra | 7700.00 |

| Jose Manuel | Urman | 7800.00 |

| Luis | Popp | 6900.00 |

| Den | Raphaely | 11000.00 |

| Matthew | Weiss | 8000.00 |

| Adam | Fripp | 8200.00 |

| Payam | Kaufling | 7900.00 |

| Shanta | Vollman | 6500.00 |

| Kevin | Mourgos | 5800.00 |

| John | Russell | 14000.00 |

| Karen | Partners | 13500.00 |

| Alberto | Errazuriz | 12000.00 |

| Gerald | Cambrault | 11000.00 |

| Eleni | Zlotkey | 10500.00 |

| Peter | Tucker | 10000.00 |

| David | Bernstein | 9500.00 |

| Peter | Hall | 9000.00 |

| Christopher | Olsen | 8000.00 |

| Nanette | Cambrault | 7500.00 |

| Oliver | Tuvault | 7000.00 |

| Janette | King | 10000.00 |

| Patrick | Sully | 9500.00 |

| Allan | McEwen | 9000.00 |

| Lindsey | Smith | 8000.00 |

| Louise | Doran | 7500.00 |

| Sarath | Sewall | 7000.00 |

| Clara | Vishney | 10500.00 |

| Danielle | Greene | 9500.00 |

| Mattea | Marvins | 7200.00 |

| David | Lee | 6800.00 |

| Sundar | Ande | 6400.00 |

| Amit | Banda | 6200.00 |

| Lisa | Ozer | 11500.00 |

| Harrison | Bloom | 10000.00 |

| Tayler | Fox | 9600.00 |

| William | Smith | 7400.00 |

| Elizabeth | Bates | 7300.00 |

| Sundita | Kumar | 6100.00 |

| Ellen | Abel | 11000.00 |

| Alyssa | Hutton | 8800.00 |

| Jonathon | Taylor | 8600.00 |

| Jack | Livingston | 8400.00 |

| Kimberely | Grant | 7000.00 |

| Charles | Johnson | 6200.00 |

| Michael | Hartstein | 13000.00 |

| Pat | Fay | 6000.00 |

| Susan | Mavris | 6500.00 |

| Hermann | Baer | 10000.00 |

| Shelley | Higgins | 12000.00 |

| William | Gietz | 8300.00 |

+-------------+------------+----------+

58 rows in set (0.00 sec)

MariaDB [csd2204w18]> SELECT first\_name, last\_name, salary

-> FROM employees

-> WHERE department\_id IN (SELECT department\_id

-> FROM departments

-> WHERE department\_name LIKE 'IT%')

-> AND salary > (SELECT avg(salary)

-> FROM employees);

+------------+-----------+---------+

| first\_name | last\_name | salary |

+------------+-----------+---------+

| Alexander | Hunold | 9000.00 |

+------------+-----------+---------+

1 row in set (0.00 sec)

MariaDB [csd2204w18]> select first\_name, last\_name, salary from employees where salary > (select avg(salary) from employees where department\_id in (select department\_id from departments where department\_name like 'it%'));

+-------------+------------+----------+

| first\_name | last\_name | salary |

+-------------+------------+----------+

| Steven | King | 24000.00 |

| Neena | Kochhar | 17000.00 |

| Lex | De Haan | 17000.00 |

| Alexander | Hunold | 9000.00 |

| Bruce | Ernst | 6000.00 |

| Nancy | Greenberg | 12000.00 |

| Daniel | Faviet | 9000.00 |

| John | Chen | 8200.00 |

| Ismael | Sciarra | 7700.00 |

| Jose Manuel | Urman | 7800.00 |

| Luis | Popp | 6900.00 |

| Den | Raphaely | 11000.00 |

| Matthew | Weiss | 8000.00 |

| Adam | Fripp | 8200.00 |

| Payam | Kaufling | 7900.00 |

| Shanta | Vollman | 6500.00 |

| Kevin | Mourgos | 5800.00 |

| John | Russell | 14000.00 |

| Karen | Partners | 13500.00 |

| Alberto | Errazuriz | 12000.00 |

| Gerald | Cambrault | 11000.00 |

| Eleni | Zlotkey | 10500.00 |

| Peter | Tucker | 10000.00 |

| David | Bernstein | 9500.00 |

| Peter | Hall | 9000.00 |

| Christopher | Olsen | 8000.00 |

| Nanette | Cambrault | 7500.00 |

| Oliver | Tuvault | 7000.00 |

| Janette | King | 10000.00 |

| Patrick | Sully | 9500.00 |

| Allan | McEwen | 9000.00 |

| Lindsey | Smith | 8000.00 |

| Louise | Doran | 7500.00 |

| Sarath | Sewall | 7000.00 |

| Clara | Vishney | 10500.00 |

| Danielle | Greene | 9500.00 |

| Mattea | Marvins | 7200.00 |

| David | Lee | 6800.00 |

| Sundar | Ande | 6400.00 |

| Amit | Banda | 6200.00 |

| Lisa | Ozer | 11500.00 |

| Harrison | Bloom | 10000.00 |

| Tayler | Fox | 9600.00 |

| William | Smith | 7400.00 |

| Elizabeth | Bates | 7300.00 |

| Sundita | Kumar | 6100.00 |

| Ellen | Abel | 11000.00 |

| Alyssa | Hutton | 8800.00 |

| Jonathon | Taylor | 8600.00 |

| Jack | Livingston | 8400.00 |

| Kimberely | Grant | 7000.00 |

| Charles | Johnson | 6200.00 |

| Michael | Hartstein | 13000.00 |

| Pat | Fay | 6000.00 |

| Susan | Mavris | 6500.00 |

| Hermann | Baer | 10000.00 |

| Shelley | Higgins | 12000.00 |

| William | Gietz | 8300.00 |

+-------------+------------+----------+

58 rows in set (0.00 sec)

MariaDB [csd2204w18]> select first\_name, last\_name, salary from employees where salary > (select avg(salary) from employees where department\_id and (select department\_id from departments where department\_name like 'it%'));

ERROR 1242 (21000): Subquery returns more than 1 row

MariaDB [csd2204w18]> select first\_name, last\_name, salary from employees where salary > (select avg(salary) from employees) and (select department\_id from departments where department\_name like 'it%'));

ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MariaDB server version for the right syntax to use near ')' at line 1

MariaDB [csd2204w18]> select first\_name, last\_name, salary from employees where salary > (select avg(salary) from employees) and department\_id in (select department\_id from departments where department\_name like 'it%'));

ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MariaDB server version for the right syntax to use near ')' at line 1

MariaDB [csd2204w18]> select first\_name, last\_name, salary from employees where salary > (select avg(salary) from employees) and department\_id in (select department\_id from departments where department\_name like 'it%' ));

ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MariaDB server version for the right syntax to use near ')' at line 1

MariaDB [csd2204w18]> select first\_name, last\_name, salary from employees where salary > (select avg(salary) from employees) and department\_id in (select department\_id from departments where department\_name like 'it%' );

+------------+-----------+---------+

| first\_name | last\_name | salary |

+------------+-----------+---------+

| Alexander | Hunold | 9000.00 |

+------------+-----------+---------+

1 row in set (0.00 sec)

MariaDB [csd2204w18]> select first\_name, last\_name, salary from employees where salary > (select slary from employees where last\_name = 'bell') order by first\_name;

ERROR 1054 (42S22): Unknown column 'slary' in 'field list'

MariaDB [csd2204w18]> select first\_name, last\_name, salary from employees where salary > (select salary from employees where last\_name = 'bell') order by first\_name;

+-------------+------------+----------+

| first\_name | last\_name | salary |

+-------------+------------+----------+

| Adam | Fripp | 8200.00 |

| Alberto | Errazuriz | 12000.00 |

| Alexander | Hunold | 9000.00 |

| Alexis | Bull | 4100.00 |

| Allan | McEwen | 9000.00 |

| Alyssa | Hutton | 8800.00 |

| Amit | Banda | 6200.00 |

| Bruce | Ernst | 6000.00 |

| Charles | Johnson | 6200.00 |

| Christopher | Olsen | 8000.00 |

| Clara | Vishney | 10500.00 |

| Daniel | Faviet | 9000.00 |

| Danielle | Greene | 9500.00 |

| David | Lee | 6800.00 |

| David | Austin | 4800.00 |

| David | Bernstein | 9500.00 |

| Den | Raphaely | 11000.00 |

| Diana | Lorentz | 4200.00 |

| Eleni | Zlotkey | 10500.00 |

| Elizabeth | Bates | 7300.00 |

| Ellen | Abel | 11000.00 |

| Gerald | Cambrault | 11000.00 |

| Harrison | Bloom | 10000.00 |

| Hermann | Baer | 10000.00 |

| Ismael | Sciarra | 7700.00 |

| Jack | Livingston | 8400.00 |

| Janette | King | 10000.00 |

| Jennifer | Whalen | 4400.00 |

| John | Russell | 14000.00 |

| John | Chen | 8200.00 |

| Jonathon | Taylor | 8600.00 |

| Jose Manuel | Urman | 7800.00 |

| Karen | Partners | 13500.00 |

| Kevin | Mourgos | 5800.00 |

| Kimberely | Grant | 7000.00 |

| Lex | De Haan | 17000.00 |

| Lindsey | Smith | 8000.00 |

| Lisa | Ozer | 11500.00 |

| Louise | Doran | 7500.00 |

| Luis | Popp | 6900.00 |

| Mattea | Marvins | 7200.00 |

| Matthew | Weiss | 8000.00 |

| Michael | Hartstein | 13000.00 |

| Nancy | Greenberg | 12000.00 |

| Nandita | Sarchand | 4200.00 |

| Nanette | Cambrault | 7500.00 |

| Neena | Kochhar | 17000.00 |

| Oliver | Tuvault | 7000.00 |

| Pat | Fay | 6000.00 |

| Patrick | Sully | 9500.00 |

| Payam | Kaufling | 7900.00 |

| Peter | Hall | 9000.00 |

| Peter | Tucker | 10000.00 |

| Sarath | Sewall | 7000.00 |

| Shanta | Vollman | 6500.00 |

| Shelley | Higgins | 12000.00 |

| Steven | King | 24000.00 |

| Sundar | Ande | 6400.00 |

| Sundita | Kumar | 6100.00 |

| Susan | Mavris | 6500.00 |

| Tayler | Fox | 9600.00 |

| Valli | Pataballa | 4800.00 |

| William | Smith | 7400.00 |

| William | Gietz | 8300.00 |

+-------------+------------+----------+

64 rows in set (0.00 sec)

MariaDB [csd2204w18]> select first\_name, last\_name, salary from employees where employees.salary = (select min

-> ;

ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MariaDB server version for the right syntax to use near '' at line 1

MariaDB [csd2204w18]> select first\_name, last\_name, salary from employees where employees.salary = (select min\_salary from jobs);

ERROR 1242 (21000): Subquery returns more than 1 row

MariaDB [csd2204w18]> select first\_name, last\_name, salary from employees where employees.salary = (select min\_salary from jobs);

ERROR 1242 (21000): Subquery returns more than 1 row

MariaDB [csd2204w18]> select \* from employees where salary = (select min(salary) from employees);

+-------------+------------+-----------+---------+--------------+------------+----------+---------+----------------+------------+---------------+

| EMPLOYEE\_ID | FIRST\_NAME | LAST\_NAME | EMAIL | PHONE\_NUMBER | HIRE\_DATE | JOB\_ID | SALARY | COMMISSION\_PCT | MANAGER\_ID | DEPARTMENT\_ID |

+-------------+------------+-----------+---------+--------------+------------+----------+---------+----------------+------------+---------------+

| 132 | TJ | Olson | TJOLSON | 650.124.8234 | 1987-07-19 | ST\_CLERK | 2100.00 | 0.00 | 121 | 50 |

+-------------+------------+-----------+---------+--------------+------------+----------+---------+----------------+------------+---------------+

1 row in set (0.00 sec)

MariaDB [csd2204w18]> select \* from employees where salary = (select min(min\_salary) from jobs);

Empty set (0.00 sec)

MariaDB [csd2204w18]> select \* from employees where salary = (select min(min\_salary)+1000 from jobs);

+-------------+------------+-----------+---------+--------------+------------+----------+---------+----------------+------------+---------------+

| EMPLOYEE\_ID | FIRST\_NAME | LAST\_NAME | EMAIL | PHONE\_NUMBER | HIRE\_DATE | JOB\_ID | SALARY | COMMISSION\_PCT | MANAGER\_ID | DEPARTMENT\_ID |

+-------------+------------+-----------+---------+--------------+------------+----------+---------+----------------+------------+---------------+

| 187 | Anthony | Cabrio | ACABRIO | 650.509.4876 | 1987-09-12 | SH\_CLERK | 3000.00 | 0.00 | 121 | 50 |

| 197 | Kevin | Feeney | KFEENEY | 650.507.9822 | 1987-09-22 | SH\_CLERK | 3000.00 | 0.00 | 124 | 50 |

+-------------+------------+-----------+---------+--------------+------------+----------+---------+----------------+------------+---------------+

2 rows in set (0.00 sec)

MariaDB [csd2204w18]> select first\_name, last\_name, salary from employees where salary > (select avg(salary) from employees);

+-------------+------------+----------+

| first\_name | last\_name | salary |

+-------------+------------+----------+

| Steven | King | 24000.00 |

| Neena | Kochhar | 17000.00 |

| Lex | De Haan | 17000.00 |

| Alexander | Hunold | 9000.00 |

| Nancy | Greenberg | 12000.00 |

| Daniel | Faviet | 9000.00 |

| John | Chen | 8200.00 |

| Ismael | Sciarra | 7700.00 |

| Jose Manuel | Urman | 7800.00 |

| Luis | Popp | 6900.00 |

| Den | Raphaely | 11000.00 |

| Matthew | Weiss | 8000.00 |

| Adam | Fripp | 8200.00 |

| Payam | Kaufling | 7900.00 |

| Shanta | Vollman | 6500.00 |

| John | Russell | 14000.00 |

| Karen | Partners | 13500.00 |

| Alberto | Errazuriz | 12000.00 |

| Gerald | Cambrault | 11000.00 |

| Eleni | Zlotkey | 10500.00 |

| Peter | Tucker | 10000.00 |

| David | Bernstein | 9500.00 |

| Peter | Hall | 9000.00 |

| Christopher | Olsen | 8000.00 |

| Nanette | Cambrault | 7500.00 |

| Oliver | Tuvault | 7000.00 |

| Janette | King | 10000.00 |

| Patrick | Sully | 9500.00 |

| Allan | McEwen | 9000.00 |

| Lindsey | Smith | 8000.00 |

| Louise | Doran | 7500.00 |

| Sarath | Sewall | 7000.00 |

| Clara | Vishney | 10500.00 |

| Danielle | Greene | 9500.00 |

| Mattea | Marvins | 7200.00 |

| David | Lee | 6800.00 |

| Lisa | Ozer | 11500.00 |

| Harrison | Bloom | 10000.00 |

| Tayler | Fox | 9600.00 |

| William | Smith | 7400.00 |

| Elizabeth | Bates | 7300.00 |

| Ellen | Abel | 11000.00 |

| Alyssa | Hutton | 8800.00 |

| Jonathon | Taylor | 8600.00 |

| Jack | Livingston | 8400.00 |

| Kimberely | Grant | 7000.00 |

| Michael | Hartstein | 13000.00 |

| Susan | Mavris | 6500.00 |

| Hermann | Baer | 10000.00 |

| Shelley | Higgins | 12000.00 |

| William | Gietz | 8300.00 |

+-------------+------------+----------+

51 rows in set (0.00 sec)

MariaDB [csd2204w18]> SELECT first\_name, last\_name, salary

-> FROM employees

-> WHERE department\_id IN (SELECT department\_id

-> FROM departments

-> WHERE department\_name LIKE 'IT%')

-> AND salary > (SELECT avg(salary)

-> FROM employees);

+------------+-----------+---------+

| first\_name | last\_name | salary |

+------------+-----------+---------+

| Alexander | Hunold | 9000.00 |

+------------+-----------+---------+

1 row in set (0.00 sec)

MariaDB [csd2204w18]> SELECT \* FROM employees

-> WHERE salary > ALL(SELECT avg(salary)

-> FROM employees

-> GROUP BY department\_id);

+-------------+------------+-----------+-------+--------------+------------+---------+----------+----------------+------------+---------------+

| EMPLOYEE\_ID | FIRST\_NAME | LAST\_NAME | EMAIL | PHONE\_NUMBER | HIRE\_DATE | JOB\_ID | SALARY | COMMISSION\_PCT | MANAGER\_ID | DEPARTMENT\_ID |

+-------------+------------+-----------+-------+--------------+------------+---------+----------+----------------+------------+---------------+

| 100 | Steven | King | SKING | 515.123.4567 | 1987-06-17 | AD\_PRES | 24000.00 | 0.00 | 0 | 90 |

+-------------+------------+-----------+-------+--------------+------------+---------+----------+----------------+------------+---------------+

1 row in set (0.00 sec)

MariaDB [csd2204w18]> select first\_name,last\_name,salary from employees where salary > (select min(salary) from employees where job\_id = "SH\_CLERK") order by salary asc;

+-------------+-------------+----------+

| first\_name | last\_name | salary |

+-------------+-------------+----------+

| Donald | OConnell | 2600.00 |

| Douglas | Grant | 2600.00 |

| Randall | Matos | 2600.00 |

| Guy | Himuro | 2600.00 |

| Irene | Mikkilineni | 2700.00 |

| John | Seo | 2700.00 |

| Sigal | Tobias | 2800.00 |

| Girard | Geoni | 2800.00 |

| Vance | Jones | 2800.00 |

| Mozhe | Atkinson | 2800.00 |

| Michael | Rogers | 2900.00 |

| Timothy | Gates | 2900.00 |

| Shelli | Baida | 2900.00 |

| Kevin | Feeney | 3000.00 |

| Anthony | Cabrio | 3000.00 |

| Alexander | Khoo | 3100.00 |

| Alana | Walsh | 3100.00 |

| Jean | Fleaur | 3100.00 |

| Curtis | Davies | 3100.00 |

| Winston | Taylor | 3200.00 |

| Julia | Nayer | 3200.00 |

| Stephen | Stiles | 3200.00 |

| Samuel | McCain | 3200.00 |

| Laura | Bissot | 3300.00 |

| Jason | Mallin | 3300.00 |

| Julia | Dellinger | 3400.00 |

| Trenna | Rajs | 3500.00 |

| Renske | Ladwig | 3600.00 |

| Jennifer | Dilly | 3600.00 |

| Kelly | Chung | 3800.00 |

| Britney | Everett | 3900.00 |

| Sarah | Bell | 4000.00 |

| Alexis | Bull | 4100.00 |

| Diana | Lorentz | 4200.00 |

| Nandita | Sarchand | 4200.00 |

| Jennifer | Whalen | 4400.00 |

| Valli | Pataballa | 4800.00 |

| David | Austin | 4800.00 |

| Kevin | Mourgos | 5800.00 |

| Pat | Fay | 6000.00 |

| Bruce | Ernst | 6000.00 |

| Sundita | Kumar | 6100.00 |

| Charles | Johnson | 6200.00 |

| Amit | Banda | 6200.00 |

| Sundar | Ande | 6400.00 |

| Susan | Mavris | 6500.00 |

| Shanta | Vollman | 6500.00 |

| David | Lee | 6800.00 |

| Luis | Popp | 6900.00 |

| Oliver | Tuvault | 7000.00 |

| Kimberely | Grant | 7000.00 |

| Sarath | Sewall | 7000.00 |

| Mattea | Marvins | 7200.00 |

| Elizabeth | Bates | 7300.00 |

| William | Smith | 7400.00 |

| Louise | Doran | 7500.00 |

| Nanette | Cambrault | 7500.00 |

| Ismael | Sciarra | 7700.00 |

| Jose Manuel | Urman | 7800.00 |

| Payam | Kaufling | 7900.00 |

| Lindsey | Smith | 8000.00 |

| Christopher | Olsen | 8000.00 |

| Matthew | Weiss | 8000.00 |

| John | Chen | 8200.00 |

| Adam | Fripp | 8200.00 |

| William | Gietz | 8300.00 |

| Jack | Livingston | 8400.00 |

| Jonathon | Taylor | 8600.00 |

| Alyssa | Hutton | 8800.00 |

| Allan | McEwen | 9000.00 |

| Daniel | Faviet | 9000.00 |

| Alexander | Hunold | 9000.00 |

| Peter | Hall | 9000.00 |

| Patrick | Sully | 9500.00 |

| Danielle | Greene | 9500.00 |

| David | Bernstein | 9500.00 |

| Tayler | Fox | 9600.00 |

| Hermann | Baer | 10000.00 |

| Peter | Tucker | 10000.00 |

| Janette | King | 10000.00 |

| Harrison | Bloom | 10000.00 |

| Eleni | Zlotkey | 10500.00 |

| Clara | Vishney | 10500.00 |

| Den | Raphaely | 11000.00 |

| Ellen | Abel | 11000.00 |

| Gerald | Cambrault | 11000.00 |

| Lisa | Ozer | 11500.00 |

| Shelley | Higgins | 12000.00 |

| Alberto | Errazuriz | 12000.00 |

| Nancy | Greenberg | 12000.00 |

| Michael | Hartstein | 13000.00 |

| Karen | Partners | 13500.00 |

| John | Russell | 14000.00 |

| Lex | De Haan | 17000.00 |

| Neena | Kochhar | 17000.00 |

| Steven | King | 24000.00 |

+-------------+-------------+----------+

96 rows in set (0.00 sec)

MariaDB [csd2204w18]> select first\_name, last\_name, salary from employees where salary > (select avg(salary) from employees group by department\_id);

ERROR 1242 (21000): Subquery returns more than 1 row

MariaDB [csd2204w18]> select first\_name, last\_name, salary from employees where salary > all(select avg(salary) from employees group by department\_id);

+------------+-----------+----------+

| first\_name | last\_name | salary |

+------------+-----------+----------+

| Steven | King | 24000.00 |

+------------+-----------+----------+

1 row in set (0.00 sec)

MariaDB [csd2204w18]> select first\_name, last\_name, salary from employees where salary > (select job\_id from jobs where job\_id = 'sh\_clerk) order by salary desc;

'> '

-> ;

ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MariaDB server version for the right syntax to use near '' at line 1

MariaDB [csd2204w18]> select first\_name, last\_name, salary from employees where salary > (select job\_id from jobs where job\_id = 'sh\_clerk) order by salary desc ;

'> '

-> ;

ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MariaDB server version for the right syntax to use near '' at line 1

MariaDB [csd2204w18]> SELECT first\_name,last\_name, job\_id, salary

-> FROM employees WHERE salary >

-> ALL (SELECT salary FROM employees

-> WHERE job\_id = 'SH\_CLERK') ORDER BY salary ;

+-------------+------------+------------+----------+

| first\_name | last\_name | job\_id | salary |

+-------------+------------+------------+----------+

| Jennifer | Whalen | AD\_ASST | 4400.00 |

| David | Austin | IT\_PROG | 4800.00 |

| Valli | Pataballa | IT\_PROG | 4800.00 |

| Kevin | Mourgos | ST\_MAN | 5800.00 |

| Bruce | Ernst | IT\_PROG | 6000.00 |

| Pat | Fay | MK\_REP | 6000.00 |

| Sundita | Kumar | SA\_REP | 6100.00 |

| Amit | Banda | SA\_REP | 6200.00 |

| Charles | Johnson | SA\_REP | 6200.00 |

| Sundar | Ande | SA\_REP | 6400.00 |

| Susan | Mavris | HR\_REP | 6500.00 |

| Shanta | Vollman | ST\_MAN | 6500.00 |

| David | Lee | SA\_REP | 6800.00 |

| Luis | Popp | FI\_ACCOUNT | 6900.00 |

| Sarath | Sewall | SA\_REP | 7000.00 |

| Oliver | Tuvault | SA\_REP | 7000.00 |

| Kimberely | Grant | SA\_REP | 7000.00 |

| Mattea | Marvins | SA\_REP | 7200.00 |

| Elizabeth | Bates | SA\_REP | 7300.00 |

| William | Smith | SA\_REP | 7400.00 |

| Nanette | Cambrault | SA\_REP | 7500.00 |

| Louise | Doran | SA\_REP | 7500.00 |

| Ismael | Sciarra | FI\_ACCOUNT | 7700.00 |

| Jose Manuel | Urman | FI\_ACCOUNT | 7800.00 |

| Payam | Kaufling | ST\_MAN | 7900.00 |

| Lindsey | Smith | SA\_REP | 8000.00 |

| Matthew | Weiss | ST\_MAN | 8000.00 |

| Christopher | Olsen | SA\_REP | 8000.00 |

| Adam | Fripp | ST\_MAN | 8200.00 |

| John | Chen | FI\_ACCOUNT | 8200.00 |

| William | Gietz | AC\_ACCOUNT | 8300.00 |

| Jack | Livingston | SA\_REP | 8400.00 |

| Jonathon | Taylor | SA\_REP | 8600.00 |

| Alyssa | Hutton | SA\_REP | 8800.00 |

| Allan | McEwen | SA\_REP | 9000.00 |

| Peter | Hall | SA\_REP | 9000.00 |

| Alexander | Hunold | IT\_PROG | 9000.00 |

| Daniel | Faviet | FI\_ACCOUNT | 9000.00 |

| Patrick | Sully | SA\_REP | 9500.00 |

| Danielle | Greene | SA\_REP | 9500.00 |

| David | Bernstein | SA\_REP | 9500.00 |

| Tayler | Fox | SA\_REP | 9600.00 |

| Hermann | Baer | PR\_REP | 10000.00 |

| Harrison | Bloom | SA\_REP | 10000.00 |

| Janette | King | SA\_REP | 10000.00 |

| Peter | Tucker | SA\_REP | 10000.00 |

| Eleni | Zlotkey | SA\_MAN | 10500.00 |

| Clara | Vishney | SA\_REP | 10500.00 |

| Gerald | Cambrault | SA\_MAN | 11000.00 |

| Ellen | Abel | SA\_REP | 11000.00 |

| Den | Raphaely | PU\_MAN | 11000.00 |

| Lisa | Ozer | SA\_REP | 11500.00 |

| Alberto | Errazuriz | SA\_MAN | 12000.00 |

| Shelley | Higgins | AC\_MGR | 12000.00 |

| Nancy | Greenberg | FI\_MGR | 12000.00 |

| Michael | Hartstein | MK\_MAN | 13000.00 |

| Karen | Partners | SA\_MAN | 13500.00 |

| John | Russell | SA\_MAN | 14000.00 |

| Lex | De Haan | AD\_VP | 17000.00 |

| Neena | Kochhar | AD\_VP | 17000.00 |

| Steven | King | AD\_PRES | 24000.00 |

+-------------+------------+------------+----------+

61 rows in set (0.00 sec)

MariaDB [csd2204w18]> SELECT b.first\_name,b.last\_name

-> FROM employees b WHERE NOT EXISTS

-> (SELECT 'X' FROM employees a

-> WHERE a.manager\_id = b.employee\_id);

+-------------+-------------+

| first\_name | last\_name |

+-------------+-------------+

| Bruce | Ernst |

| David | Austin |

| Valli | Pataballa |

| Diana | Lorentz |

| Daniel | Faviet |

| John | Chen |

| Ismael | Sciarra |

| Jose Manuel | Urman |

| Luis | Popp |

| Alexander | Khoo |

| Shelli | Baida |

| Sigal | Tobias |

| Guy | Himuro |

| Karen | Colmenares |

| Julia | Nayer |

| Irene | Mikkilineni |

| James | Landry |

| Steven | Markle |

| Laura | Bissot |

| Mozhe | Atkinson |

| James | Marlow |

| TJ | Olson |

| Jason | Mallin |

| Michael | Rogers |

| Ki | Gee |

| Hazel | Philtanker |

| Renske | Ladwig |

| Stephen | Stiles |

| John | Seo |

| Joshua | Patel |

| Trenna | Rajs |

| Curtis | Davies |

| Randall | Matos |

| Peter | Vargas |

| Peter | Tucker |

| David | Bernstein |

| Peter | Hall |

| Christopher | Olsen |

| Nanette | Cambrault |

| Oliver | Tuvault |

| Janette | King |

| Patrick | Sully |

| Allan | McEwen |

| Lindsey | Smith |

| Louise | Doran |

| Sarath | Sewall |

| Clara | Vishney |

| Danielle | Greene |

| Mattea | Marvins |

| David | Lee |

| Sundar | Ande |

| Amit | Banda |

| Lisa | Ozer |

| Harrison | Bloom |

| Tayler | Fox |

| William | Smith |

| Elizabeth | Bates |

| Sundita | Kumar |

| Ellen | Abel |

| Alyssa | Hutton |

| Jonathon | Taylor |

| Jack | Livingston |

| Kimberely | Grant |

| Charles | Johnson |

| Winston | Taylor |

| Jean | Fleaur |

| Martha | Sullivan |

| Girard | Geoni |

| Nandita | Sarchand |

| Alexis | Bull |

| Julia | Dellinger |

| Anthony | Cabrio |

| Kelly | Chung |

| Jennifer | Dilly |

| Timothy | Gates |

| Randall | Perkins |

| Sarah | Bell |

| Britney | Everett |

| Samuel | McCain |

| Vance | Jones |

| Alana | Walsh |

| Kevin | Feeney |

| Donald | OConnell |

| Douglas | Grant |

| Jennifer | Whalen |

| Pat | Fay |

| Susan | Mavris |

| Hermann | Baer |

| William | Gietz |

+-------------+-------------+

89 rows in set (0.00 sec)

MariaDB [csd2204w18]> SELECT employee\_id, first\_name, last\_name,

-> -> (SELECT department\_name FROM departments d

-> -> WHERE e.department\_id = d.department\_id) department

-> -> FROM employees e ORDER BY department;

ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MariaDB server version for the right syntax to use near '> (SELECT department\_name FROM departments d

-> WHERE e.department\_id = d.d' at line 2

MariaDB [csd2204w18]> SELECT employee\_id, first\_name, last\_name,

-> -> (SELECT department\_name FROM departments d

-> -> WHERE e.department\_id = d.department\_id) department

-> -> FROM employees e ORDER BY department;

ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MariaDB server version for the right syntax to use near '> (SELECT department\_name FROM departments d

-> WHERE e.department\_id = d.d' at line 2

MariaDB [csd2204w18]> select first\_name, last\_name, employee\_id from employees where department\_id all (select department\_name from departments);

ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MariaDB server version for the right syntax to use near 'all (select department\_name from departments)' at line 1

MariaDB [csd2204w18]> select employees.employee\_id, employees.first\_name, employees.department\_id, departments.department\_name from employees

-> inner join departments

-> on employees.department\_id = departments.department\_id;

+-------------+-------------+---------------+------------------+

| employee\_id | first\_name | department\_id | department\_name |

+-------------+-------------+---------------+------------------+

| 100 | Steven | 90 | Executive |

| 101 | Neena | 90 | Executive |

| 102 | Lex | 90 | Executive |

| 103 | Alexander | 60 | IT |

| 104 | Bruce | 60 | IT |

| 105 | David | 60 | IT |

| 106 | Valli | 60 | IT |

| 107 | Diana | 60 | IT |

| 108 | Nancy | 100 | Finance |

| 109 | Daniel | 100 | Finance |

| 110 | John | 100 | Finance |

| 111 | Ismael | 100 | Finance |

| 112 | Jose Manuel | 100 | Finance |

| 113 | Luis | 100 | Finance |

| 114 | Den | 30 | Purchasing |

| 115 | Alexander | 30 | Purchasing |

| 116 | Shelli | 30 | Purchasing |

| 117 | Sigal | 30 | Purchasing |

| 118 | Guy | 30 | Purchasing |

| 119 | Karen | 30 | Purchasing |

| 120 | Matthew | 50 | Shipping |

| 121 | Adam | 50 | Shipping |

| 122 | Payam | 50 | Shipping |

| 123 | Shanta | 50 | Shipping |

| 124 | Kevin | 50 | Shipping |

| 125 | Julia | 50 | Shipping |

| 126 | Irene | 50 | Shipping |

| 127 | James | 50 | Shipping |

| 128 | Steven | 50 | Shipping |

| 129 | Laura | 50 | Shipping |

| 130 | Mozhe | 50 | Shipping |

| 131 | James | 50 | Shipping |

| 132 | TJ | 50 | Shipping |

| 133 | Jason | 50 | Shipping |

| 134 | Michael | 50 | Shipping |

| 135 | Ki | 50 | Shipping |

| 136 | Hazel | 50 | Shipping |

| 137 | Renske | 50 | Shipping |

| 138 | Stephen | 50 | Shipping |

| 139 | John | 50 | Shipping |

| 140 | Joshua | 50 | Shipping |

| 141 | Trenna | 50 | Shipping |

| 142 | Curtis | 50 | Shipping |

| 143 | Randall | 50 | Shipping |

| 144 | Peter | 50 | Shipping |

| 145 | John | 80 | Sales |

| 146 | Karen | 80 | Sales |

| 147 | Alberto | 80 | Sales |

| 148 | Gerald | 80 | Sales |

| 149 | Eleni | 80 | Sales |

| 150 | Peter | 80 | Sales |

| 151 | David | 80 | Sales |

| 152 | Peter | 80 | Sales |

| 153 | Christopher | 80 | Sales |

| 154 | Nanette | 80 | Sales |

| 155 | Oliver | 80 | Sales |

| 156 | Janette | 80 | Sales |

| 157 | Patrick | 80 | Sales |

| 158 | Allan | 80 | Sales |

| 159 | Lindsey | 80 | Sales |

| 160 | Louise | 80 | Sales |

| 161 | Sarath | 80 | Sales |

| 162 | Clara | 80 | Sales |

| 163 | Danielle | 80 | Sales |

| 164 | Mattea | 80 | Sales |

| 165 | David | 80 | Sales |

| 166 | Sundar | 80 | Sales |

| 167 | Amit | 80 | Sales |

| 168 | Lisa | 80 | Sales |

| 169 | Harrison | 80 | Sales |

| 170 | Tayler | 80 | Sales |

| 171 | William | 80 | Sales |

| 172 | Elizabeth | 80 | Sales |

| 173 | Sundita | 80 | Sales |

| 174 | Ellen | 80 | Sales |

| 175 | Alyssa | 80 | Sales |

| 176 | Jonathon | 80 | Sales |

| 177 | Jack | 80 | Sales |

| 179 | Charles | 80 | Sales |

| 180 | Winston | 50 | Shipping |

| 181 | Jean | 50 | Shipping |

| 182 | Martha | 50 | Shipping |

| 183 | Girard | 50 | Shipping |

| 184 | Nandita | 50 | Shipping |

| 185 | Alexis | 50 | Shipping |

| 186 | Julia | 50 | Shipping |

| 187 | Anthony | 50 | Shipping |

| 188 | Kelly | 50 | Shipping |

| 189 | Jennifer | 50 | Shipping |

| 190 | Timothy | 50 | Shipping |

| 191 | Randall | 50 | Shipping |

| 192 | Sarah | 50 | Shipping |

| 193 | Britney | 50 | Shipping |

| 194 | Samuel | 50 | Shipping |

| 195 | Vance | 50 | Shipping |

| 196 | Alana | 50 | Shipping |

| 197 | Kevin | 50 | Shipping |

| 198 | Donald | 50 | Shipping |

| 199 | Douglas | 50 | Shipping |

| 200 | Jennifer | 10 | Administration |

| 201 | Michael | 20 | Marketing |

| 202 | Pat | 20 | Marketing |

| 203 | Susan | 40 | Human Resources |

| 204 | Hermann | 70 | Public Relations |

| 205 | Shelley | 110 | Accounting |

| 206 | William | 110 | Accounting |

+-------------+-------------+---------------+------------------+

106 rows in set (0.00 sec)

MariaDB [csd2204w18]> desc products;

+--------------+---------------+------+-----+---------+----------------+

| Field | Type | Null | Key | Default | Extra |

+--------------+---------------+------+-----+---------+----------------+

| Code | int(3) | NO | PRI | NULL | auto\_increment |

| Name | varchar(255) | NO | | NULL | |

| Price | decimal(10,0) | NO | | NULL | |

| Manufacturer | int(3) | YES | MUL | NULL | |

+--------------+---------------+------+-----+---------+----------------+

4 rows in set (0.03 sec)

MariaDB [csd2204w18]> desc manu;

+-------+-------------+------+-----+---------+----------------+

| Field | Type | Null | Key | Default | Extra |

+-------+-------------+------+-----+---------+----------------+

| Code | int(3) | NO | PRI | NULL | auto\_increment |

| Name | varchar(50) | NO | | NULL | |

+-------+-------------+------+-----+---------+----------------+

2 rows in set (0.02 sec)

MariaDB [csd2204w18]> SELECT COUNT(\*),p.manufacturer,m.name

-> FROM products as p

-> inner join manu m

-> ON m.code=p.manufacturer

-> GROUP BY manufacturer having manufacturer < 4;

+----------+--------------+-----------------+

| COUNT(\*) | manufacturer | name |

+----------+--------------+-----------------+

| 1 | 1 | Sony |

| 3 | 2 | Creative Labs |

| 2 | 3 | Hewlett-Packard |

+----------+--------------+-----------------+

3 rows in set (0.00 sec)

MariaDB [csd2204w18]> select \* from manu;

+------+-------------------+

| Code | Name |

+------+-------------------+

| 1 | Sony |

| 2 | Creative Labs |

| 3 | Hewlett-Packard |

| 4 | Iomega |

| 5 | Fujitsu |

| 6 | apple |

| 7 | moxDroid Labs Inc |

| 8 | Dell |

| 9 | Bell Labs |

| 10 | Creative Labs |

| 11 | Hewlett-Packard |

| 12 | Iomega |

| 13 | Fujitsu |

| 14 | Winchester |

| 15 | moxDroid Labs Inc |

| 16 | Dell |

| 17 | Bell Labs |

+------+-------------------+

17 rows in set (0.00 sec)

MariaDB [csd2204w18]> select \* from products;

+------+-----------------+-------+--------------+

| Code | Name | Price | Manufacturer |

+------+-----------------+-------+--------------+

| 1 | Hard drive | 240 | 5 |

| 2 | Memory | 120 | 6 |

| 3 | ZIP drive | 150 | 4 |

| 4 | Floppy disk | 5 | 6 |

| 5 | Monitor | 240 | 1 |

| 6 | DVD drive | 180 | 2 |

| 7 | CD drive | 90 | 2 |

| 8 | Printer | 270 | 3 |

| 9 | Toner cartridge | 66 | 3 |

| 10 | DVD burner | 180 | 2 |

| 11 | Printer | 40 | 7 |

| 12 | Toner cartridge | 54 | 7 |

| 13 | DVD burner | 78 | 7 |

+------+-----------------+-------+--------------+

13 rows in set (0.00 sec)

MariaDB [csd2204w18]> SELECT COUNT(\*),p.manufacturer,m.name

-> FROM products as p

-> inner join manu m

-> ON m.code=p.manufacturer

-> GROUP BY manufacturer having count(manufacturer)

-> > 2;

+----------+--------------+-------------------+

| COUNT(\*) | manufacturer | name |

+----------+--------------+-------------------+

| 3 | 2 | Creative Labs |

| 3 | 7 | moxDroid Labs Inc |

+----------+--------------+-------------------+

2 rows in set (0.00 sec)

MariaDB [csd2204w18]> SELECT COUNT(\*),p.manufacturer,m.name

-> FROM products as p

-> inner join manu m

-> ON m.code=p.manufacturer

-> GROUP BY manufacturer having count(\*) = 2;

+----------+--------------+-----------------+

| COUNT(\*) | manufacturer | name |

+----------+--------------+-----------------+

| 2 | 3 | Hewlett-Packard |

| 2 | 6 | apple |

+----------+--------------+-----------------+

2 rows in set (0.00 sec)

MariaDB [csd2204w18]> SELECT COUNT(\*),p.manufacturer,m.name

-> FROM products as p

-> inner join manu m

-> ON m.code=p.manufacturer

-> GROUP BY manufacturer having count(manufacturer) = 2;

+----------+--------------+-----------------+

| COUNT(\*) | manufacturer | name |

+----------+--------------+-----------------+

| 2 | 3 | Hewlett-Packard |

| 2 | 6 | apple |

+----------+--------------+-----------------+

2 rows in set (0.00 sec)

MariaDB [csd2204w18]> SELECT PRODUCTS.CODE, PRODUCTS.NAME, MANU.NAME

-> FROM PRODUCTS

-> LEFT JOIN MANU

-> ON PRODUCTS.CODE = MANU.CODE;

+------+-----------------+-------------------+

| CODE | NAME | NAME |

+------+-----------------+-------------------+

| 1 | Hard drive | Sony |

| 2 | Memory | Creative Labs |

| 3 | ZIP drive | Hewlett-Packard |

| 4 | Floppy disk | Iomega |

| 5 | Monitor | Fujitsu |

| 6 | DVD drive | apple |

| 7 | CD drive | moxDroid Labs Inc |

| 8 | Printer | Dell |

| 9 | Toner cartridge | Bell Labs |

| 10 | DVD burner | Creative Labs |

| 11 | Printer | Hewlett-Packard |

| 12 | Toner cartridge | Iomega |

| 13 | DVD burner | Fujitsu |

+------+-----------------+-------------------+

13 rows in set (0.00 sec)

MariaDB [csd2204w18]> SELECT PRODUCTS.CODE, PRODUCTS.NAME, MANU.NAME

-> FROM PRODUCTS

-> RIGHT JOIN MANU

-> ON PRODUCTS.CODE = MANU.CODE;

+------+-----------------+-------------------+

| CODE | NAME | NAME |

+------+-----------------+-------------------+

| 1 | Hard drive | Sony |

| 2 | Memory | Creative Labs |

| 3 | ZIP drive | Hewlett-Packard |

| 4 | Floppy disk | Iomega |

| 5 | Monitor | Fujitsu |

| 6 | DVD drive | apple |

| 7 | CD drive | moxDroid Labs Inc |

| 8 | Printer | Dell |

| 9 | Toner cartridge | Bell Labs |

| 10 | DVD burner | Creative Labs |

| 11 | Printer | Hewlett-Packard |

| 12 | Toner cartridge | Iomega |

| 13 | DVD burner | Fujitsu |

| NULL | NULL | Winchester |

| NULL | NULL | moxDroid Labs Inc |

| NULL | NULL | Dell |

| NULL | NULL | Bell Labs |

+------+-----------------+-------------------+

17 rows in set (0.00 sec)

MariaDB [csd2204w18]> SELECT PRODUCTS.CODE, PRODUCTS.NAME, MANU.NAME

-> FROM PRODUCTS

-> LEFT JOIN MANU

-> ON PRODUCTS.CODE = MANU.CODE

-> UNION

-> SELECT PRODUCTS.CODE, PRODUCTS.NAME, MANU.NAME

-> FROM PRODUCTS

-> RIGHT JOIN MANU

-> ON PRODUCTS.CODE = MANU.CODE;

+------+-----------------+-------------------+

| CODE | NAME | NAME |

+------+-----------------+-------------------+

| 1 | Hard drive | Sony |

| 2 | Memory | Creative Labs |

| 3 | ZIP drive | Hewlett-Packard |

| 4 | Floppy disk | Iomega |

| 5 | Monitor | Fujitsu |

| 6 | DVD drive | apple |

| 7 | CD drive | moxDroid Labs Inc |

| 8 | Printer | Dell |

| 9 | Toner cartridge | Bell Labs |

| 10 | DVD burner | Creative Labs |

| 11 | Printer | Hewlett-Packard |

| 12 | Toner cartridge | Iomega |

| 13 | DVD burner | Fujitsu |

| NULL | NULL | Winchester |

| NULL | NULL | moxDroid Labs Inc |

| NULL | NULL | Dell |

| NULL | NULL | Bell Labs |

+------+-----------------+-------------------+

17 rows in set (0.00 sec)

MariaDB [csd2204w18]> SELECT P1.CODE, P1.NAME, P2.NAME

-> FROM Products P1, Products P2

-> WHERE P1.CODE <> P2.CODE;

+------+-----------------+-----------------+

| CODE | NAME | NAME |

+------+-----------------+-----------------+

| 2 | Memory | Hard drive |

| 3 | ZIP drive | Hard drive |

| 4 | Floppy disk | Hard drive |

| 5 | Monitor | Hard drive |

| 6 | DVD drive | Hard drive |

| 7 | CD drive | Hard drive |

| 8 | Printer | Hard drive |

| 9 | Toner cartridge | Hard drive |

| 10 | DVD burner | Hard drive |

| 11 | Printer | Hard drive |

| 12 | Toner cartridge | Hard drive |

| 13 | DVD burner | Hard drive |

| 1 | Hard drive | Memory |

| 3 | ZIP drive | Memory |

| 4 | Floppy disk | Memory |

| 5 | Monitor | Memory |

| 6 | DVD drive | Memory |

| 7 | CD drive | Memory |

| 8 | Printer | Memory |

| 9 | Toner cartridge | Memory |

| 10 | DVD burner | Memory |

| 11 | Printer | Memory |

| 12 | Toner cartridge | Memory |

| 13 | DVD burner | Memory |

| 1 | Hard drive | ZIP drive |

| 2 | Memory | ZIP drive |

| 4 | Floppy disk | ZIP drive |

| 5 | Monitor | ZIP drive |

| 6 | DVD drive | ZIP drive |

| 7 | CD drive | ZIP drive |

| 8 | Printer | ZIP drive |

| 9 | Toner cartridge | ZIP drive |

| 10 | DVD burner | ZIP drive |

| 11 | Printer | ZIP drive |

| 12 | Toner cartridge | ZIP drive |

| 13 | DVD burner | ZIP drive |

| 1 | Hard drive | Floppy disk |

| 2 | Memory | Floppy disk |

| 3 | ZIP drive | Floppy disk |

| 5 | Monitor | Floppy disk |

| 6 | DVD drive | Floppy disk |

| 7 | CD drive | Floppy disk |

| 8 | Printer | Floppy disk |

| 9 | Toner cartridge | Floppy disk |

| 10 | DVD burner | Floppy disk |

| 11 | Printer | Floppy disk |

| 12 | Toner cartridge | Floppy disk |

| 13 | DVD burner | Floppy disk |

| 1 | Hard drive | Monitor |

| 2 | Memory | Monitor |

| 3 | ZIP drive | Monitor |

| 4 | Floppy disk | Monitor |

| 6 | DVD drive | Monitor |

| 7 | CD drive | Monitor |

| 8 | Printer | Monitor |

| 9 | Toner cartridge | Monitor |

| 10 | DVD burner | Monitor |

| 11 | Printer | Monitor |

| 12 | Toner cartridge | Monitor |

| 13 | DVD burner | Monitor |

| 1 | Hard drive | DVD drive |

| 2 | Memory | DVD drive |

| 3 | ZIP drive | DVD drive |

| 4 | Floppy disk | DVD drive |

| 5 | Monitor | DVD drive |

| 7 | CD drive | DVD drive |

| 8 | Printer | DVD drive |

| 9 | Toner cartridge | DVD drive |

| 10 | DVD burner | DVD drive |

| 11 | Printer | DVD drive |

| 12 | Toner cartridge | DVD drive |

| 13 | DVD burner | DVD drive |

| 1 | Hard drive | CD drive |

| 2 | Memory | CD drive |

| 3 | ZIP drive | CD drive |

| 4 | Floppy disk | CD drive |

| 5 | Monitor | CD drive |

| 6 | DVD drive | CD drive |

| 8 | Printer | CD drive |

| 9 | Toner cartridge | CD drive |

| 10 | DVD burner | CD drive |

| 11 | Printer | CD drive |

| 12 | Toner cartridge | CD drive |

| 13 | DVD burner | CD drive |

| 1 | Hard drive | Printer |

| 2 | Memory | Printer |

| 3 | ZIP drive | Printer |

| 4 | Floppy disk | Printer |

| 5 | Monitor | Printer |

| 6 | DVD drive | Printer |

| 7 | CD drive | Printer |

| 9 | Toner cartridge | Printer |

| 10 | DVD burner | Printer |

| 11 | Printer | Printer |

| 12 | Toner cartridge | Printer |

| 13 | DVD burner | Printer |

| 1 | Hard drive | Toner cartridge |

| 2 | Memory | Toner cartridge |

| 3 | ZIP drive | Toner cartridge |

| 4 | Floppy disk | Toner cartridge |

| 5 | Monitor | Toner cartridge |

| 6 | DVD drive | Toner cartridge |

| 7 | CD drive | Toner cartridge |

| 8 | Printer | Toner cartridge |

| 10 | DVD burner | Toner cartridge |

| 11 | Printer | Toner cartridge |

| 12 | Toner cartridge | Toner cartridge |

| 13 | DVD burner | Toner cartridge |

| 1 | Hard drive | DVD burner |

| 2 | Memory | DVD burner |

| 3 | ZIP drive | DVD burner |

| 4 | Floppy disk | DVD burner |

| 5 | Monitor | DVD burner |

| 6 | DVD drive | DVD burner |

| 7 | CD drive | DVD burner |

| 8 | Printer | DVD burner |

| 9 | Toner cartridge | DVD burner |

| 11 | Printer | DVD burner |

| 12 | Toner cartridge | DVD burner |

| 13 | DVD burner | DVD burner |

| 1 | Hard drive | Printer |

| 2 | Memory | Printer |

| 3 | ZIP drive | Printer |

| 4 | Floppy disk | Printer |

| 5 | Monitor | Printer |

| 6 | DVD drive | Printer |

| 7 | CD drive | Printer |

| 8 | Printer | Printer |

| 9 | Toner cartridge | Printer |

| 10 | DVD burner | Printer |

| 12 | Toner cartridge | Printer |

| 13 | DVD burner | Printer |

| 1 | Hard drive | Toner cartridge |

| 2 | Memory | Toner cartridge |

| 3 | ZIP drive | Toner cartridge |

| 4 | Floppy disk | Toner cartridge |

| 5 | Monitor | Toner cartridge |

| 6 | DVD drive | Toner cartridge |

| 7 | CD drive | Toner cartridge |

| 8 | Printer | Toner cartridge |

| 9 | Toner cartridge | Toner cartridge |

| 10 | DVD burner | Toner cartridge |

| 11 | Printer | Toner cartridge |

| 13 | DVD burner | Toner cartridge |

| 1 | Hard drive | DVD burner |

| 2 | Memory | DVD burner |

| 3 | ZIP drive | DVD burner |

| 4 | Floppy disk | DVD burner |

| 5 | Monitor | DVD burner |

| 6 | DVD drive | DVD burner |

| 7 | CD drive | DVD burner |

| 8 | Printer | DVD burner |

| 9 | Toner cartridge | DVD burner |

| 10 | DVD burner | DVD burner |

| 11 | Printer | DVD burner |

| 12 | Toner cartridge | DVD burner |

+------+-----------------+-----------------+

156 rows in set (0.03 sec)

MariaDB [csd2204w18]> SELECT P1.CODE, P1.NAME, P2.NAME

-> FROM Products P1, Products P2

-> WHERE P1.CODE = P2.CODE;

+------+-----------------+-----------------+

| CODE | NAME | NAME |

+------+-----------------+-----------------+

| 1 | Hard drive | Hard drive |

| 2 | Memory | Memory |

| 3 | ZIP drive | ZIP drive |

| 4 | Floppy disk | Floppy disk |

| 5 | Monitor | Monitor |

| 6 | DVD drive | DVD drive |

| 7 | CD drive | CD drive |

| 8 | Printer | Printer |

| 9 | Toner cartridge | Toner cartridge |

| 10 | DVD burner | DVD burner |

| 11 | Printer | Printer |

| 12 | Toner cartridge | Toner cartridge |

| 13 | DVD burner | DVD burner |

+------+-----------------+-----------------+

13 rows in set (0.00 sec)

MariaDB [csd2204w18]>