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

Your MariaDB connection id is 2

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

MariaDB [(none)]> show databases;

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

| Database |

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

| information\_schema |

| test |

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

2 rows in set (0.00 sec)

MariaDB [(none)]> use test;

Database changed

MariaDB [test]> CREATE TABLE IF NOT EXISTS `countries` (

-> COUNTRY\_ID varchar(2) NOT NULL,

-> COUNTRY\_NAME varchar(40) DEFAULT NULL,

-> REGION\_ID decimal(10,0) DEFAULT NULL,

-> PRIMARY KEY (`COUNTRY\_ID`), KEY `COUNTR\_REG\_FK` (`REGION\_ID`)

-> ) ENGINE=MyISAM DEFAULT CHARSET=latin1;

Query OK, 0 rows affected (0.00 sec)

MariaDB [test]> INSERT INTO `countries` (`COUNTRY\_ID`, `COUNTRY\_NAME`, `REGION\_ID`) VALUES('AR', 'Argentina', '2'),('AU', 'Australia', '3'),('BE', 'Belgium', '1'),('BR', 'Brazil', '2'),('CA', 'Canada', '2'),('CH', 'Switzerland', '1'),('CN', 'China', '3'),('DE', 'Germany', '1'),('DK', 'Denmark', '1'),('EG', 'Egypt', '4'),('FR', 'France', '1'),('HK', 'HongKong', '3'),('IL', 'Israel', '4'),('IN', 'India', '3'),('IT', 'Italy', '1'),('JP', 'Japan', '3'),('KW', 'Kuwait', '4'),('MX', 'Mexico', '2'),('NG', 'Nigeria', '4'),('NL', 'Netherlands', '1'),('SG', 'Singapore', '3'),('UK', 'United Kingdom', '1'),('US', 'United States of America', '2'),('ZM', 'Zambia', '4'),('ZW', 'Zimbabwe', '4');

Query OK, 25 rows affected (0.00 sec)

Records: 25 Duplicates: 0 Warnings: 0

MariaDB [test]> CREATE TABLE IF NOT EXISTS `departments` ( `DEPARTMENT\_ID` decimal(4,0) NOT NULL DEFAULT '0', `DEPARTMENT\_NAME` varchar(30) NOT NULL, `MANAGER\_ID` decimal(6,0) DEFAULT NULL, `LOCATION\_ID` decimal(4,0) DEFAULT NULL, PRIMARY KEY (`DEPARTMENT\_ID`), KEY `DEPT\_MGR\_FK` (`MANAGER\_ID`), KEY `DEPT\_LOCATION\_IX` (`LOCATION\_ID`)) ENGINE=MyISAM DEFAULT CHARSET=latin1;

Query OK, 0 rows affected (0.00 sec)

MariaDB [test]> INSERT INTO `departments` (`DEPARTMENT\_ID`, `DEPARTMENT\_NAME`, `MANAGER\_ID`, `LOCATION\_ID`) VALUES('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');

Query OK, 27 rows affected (0.00 sec)

Records: 27 Duplicates: 0 Warnings: 0

MariaDB [test]> CREATE TABLE IF NOT EXISTS `employees` ( `EMPLOYEE\_ID` decimal(6,0) NOT NULL DEFAULT '0', `FIRST\_NAME` varchar(20) DEFAULT NULL, `LAST\_NAME` varchar(25) NOT NULL, `EMAIL` varchar(25) NOT NULL, `PHONE\_NUMBER` varchar(20) DEFAULT NULL, `HIRE\_DATE` date NOT NULL, `JOB\_ID` varchar(10) NOT NULL, `SALARY` decimal(8,2) DEFAULT NULL, `COMMISSION\_PCT` decimal(2,2) DEFAULT NULL, `MANAGER\_ID` decimal(6,0) DEFAULT NULL, `DEPARTMENT\_ID` decimal(4,0) DEFAULT NULL, PRIMARY KEY (`EMPLOYEE\_ID`), UNIQUE KEY `EMP\_EMAIL\_UK` (`EMAIL`), KEY `EMP\_DEPARTMENT\_IX` (`DEPARTMENT\_ID`), KEY `EMP\_JOB\_IX` (`JOB\_ID`), KEY `EMP\_MANAGER\_IX` (`MANAGER\_ID`), KEY `EMP\_NAME\_IX` (`LAST\_NAME`,`FIRST\_NAME`)) ENGINE=MyISAM DEFAULT CHARSET=latin1;

Query OK, 0 rows affected (0.02 sec)

MariaDB [test]> INSERT INTO `employees` (`EMPLOYEE\_ID`, `FIRST\_NAME`, `LAST\_NAME`, `EMAIL`, `PHONE\_NUMBER`, `HIRE\_DATE`, `JOB\_ID`, `SALARY`, `COMMISSION\_PCT`, `MANAGER\_ID`, `DEPARTMENT\_ID`) VALUES('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');

Query OK, 107 rows affected (0.00 sec)

Records: 107 Duplicates: 0 Warnings: 0

MariaDB [test]> CREATE TABLE IF NOT EXISTS `job\_history` ( `EMPLOYEE\_ID` decimal(6,0) NOT NULL, `START\_DATE` date NOT NULL, `END\_DATE` date NOT NULL, `JOB\_ID` varchar(10) NOT NULL, `DEPARTMENT\_ID` decimal(4,0) DEFAULT NULL, PRIMARY KEY (`EMPLOYEE\_ID`,`START\_DATE`), KEY `JHIST\_DEPARTMENT\_IX` (`DEPARTMENT\_ID`), KEY `JHIST\_EMPLOYEE\_IX` (`EMPLOYEE\_ID`), KEY `JHIST\_JOB\_IX` (`JOB\_ID`)) ENGINE=MyISAM DEFAULT CHARSET=latin1;

Query OK, 0 rows affected (0.01 sec)

MariaDB [test]> INSERT INTO `job\_history` (`EMPLOYEE\_ID`, `START\_DATE`, `END\_DATE`, `JOB\_ID`, `DEPARTMENT\_ID`) VALUES('102', '1993-01-13', '1998-07-24', 'IT\_PROG', '60'),('101', '1989-09-21', '1993-10-27', 'AC\_ACCOUNT', '110'),('101', '1993-10-28', '1997-03-15', 'AC\_MGR', '110'),('201', '1996-02-17', '1999-12-19', 'MK\_REP', '20'),('114', '1998-03-24', '1999-12-31', 'ST\_CLERK', '50'),('122', '1999-01-01', '1999-12-31', 'ST\_CLERK', '50'),('200', '1987-09-17', '1993-06-17', 'AD\_ASST', '90'),('176', '1998-03-24', '1998-12-31', 'SA\_REP', '80'),('176', '1999-01-01', '1999-12-31', 'SA\_MAN', '80'),('200', '1994-07-01', '1998-12-31', 'AC\_ACCOUNT', '90'),('0', '0000-00-00', '0000-00-00', '', '0');

Query OK, 11 rows affected (0.00 sec)

Records: 11 Duplicates: 0 Warnings: 0

MariaDB [test]> CREATE TABLE IF NOT EXISTS `jobs` ( `JOB\_ID` varchar(10) NOT NULL DEFAULT '', `JOB\_TITLE` varchar(35) NOT NULL, `MIN\_SALARY` decimal(6,0) DEFAULT NULL, `MAX\_SALARY` decimal(6,0) DEFAULT NULL, PRIMARY KEY (`JOB\_ID`)) ENGINE=MyISAM DEFAULT CHARSET=latin1;

Query OK, 0 rows affected (0.02 sec)

MariaDB [test]> INSERT INTO `jobs` (`JOB\_ID`, `JOB\_TITLE`, `MIN\_SALARY`, `MAX\_SALARY`) VALUES('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');

Query OK, 19 rows affected (0.00 sec)

Records: 19 Duplicates: 0 Warnings: 0

MariaDB [test]> CREATE TABLE IF NOT EXISTS `locations` ( `LOCATION\_ID` decimal(4,0) NOT NULL DEFAULT '0', `STREET\_ADDRESS` varchar(40) DEFAULT NULL, `POSTAL\_CODE` varchar(12) DEFAULT NULL, `CITY` varchar(30) NOT NULL, `STATE\_PROVINCE` varchar(25) DEFAULT NULL, `COUNTRY\_ID` varchar(2) DEFAULT NULL, PRIMARY KEY (`LOCATION\_ID`), KEY `LOC\_CITY\_IX` (`CITY`), KEY `LOC\_COUNTRY\_IX` (`COUNTRY\_ID`), KEY `LOC\_STATE\_PROVINCE\_IX` (`STATE\_PROVINCE`)) ENGINE=MyISAM DEFAULT CHARSET=latin1;

Query OK, 0 rows affected (0.01 sec)

MariaDB [test]> INSERT INTO `locations` (`LOCATION\_ID`, `STREET\_ADDRESS`, `POSTAL\_CODE`, `CITY`, `STATE\_PROVINCE`, `COUNTRY\_ID`) VALUES('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', '"');

Query OK, 23 rows affected (0.00 sec)

Records: 23 Duplicates: 0 Warnings: 0

MariaDB [test]> CREATE TABLE IF NOT EXISTS `regions` ( `REGION\_ID` decimal(5,0) NOT NULL, `REGION\_NAME` varchar(25) DEFAULT NULL, PRIMARY KEY (`REGION\_ID`), UNIQUE KEY `sss` (`REGION\_NAME`)) ENGINE=MyISAM DEFAULT CHARSET=latin1;

Query OK, 0 rows affected (0.02 sec)

MariaDB [test]> INSERT INTO `regions` (`REGION\_ID`, `REGION\_NAME`) VALUES('1', 'Europe\r'),('2', 'Americas\r'),('3', 'Asia\r'),('4', 'Middle East and Africa\r');

Query OK, 4 rows affected (0.01 sec)

Records: 4 Duplicates: 0 Warnings: 0

MariaDB [test]> show tables;

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

| Tables\_in\_test |

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

| countries |

| departments |

| employees |

| job\_history |

| jobs |

| locations |

| regions |

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

7 rows in set (0.00 sec)

MariaDB [test]> 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 (0.00 sec)

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

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

| first\_name | last\_name | salary |

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

| Amit | Banda | 6200.00 |

| Charles | Johnson | 6200.00 |

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

2 rows in set (0.00 sec)

MariaDB [test]> 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 (0.00 sec)

MariaDB [test]> select first\_name, last\_name, salary from employees where department\_id = (select department\_id from departments where department\_name = 'IT');

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

| first\_name | last\_name | salary |

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

| Alexander | Hunold | 9000.00 |

| Bruce | Ernst | 6000.00 |

| David | Austin | 4800.00 |

| Valli | Pataballa | 4800.00 |

| Diana | Lorentz | 4200.00 |

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

5 rows in set (0.00 sec)

MariaDB [test]> select first\_name, last\_name, salary from employees where department\_id IN (select department\_id from departments where department\_name = 'IT');

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

| first\_name | last\_name | salary |

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

| Alexander | Hunold | 9000.00 |

| Bruce | Ernst | 6000.00 |

| David | Austin | 4800.00 |

| Valli | Pataballa | 4800.00 |

| Diana | Lorentz | 4200.00 |

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

5 rows in set (0.00 sec)

MariaDB [test]> select MAX(salary) from employees where department\_id IN (select department\_id from departments where department\_name = 'IT');

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

| MAX(salary) |

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

| 9000.00 |

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

1 row in set (0.00 sec)

MariaDB [test]> 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 (0.00 sec)

MariaDB [test]> 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 (0.02 sec)

MariaDB [test]> desc location;

ERROR 1146 (42S02): Table 'test.location' doesn't exist

MariaDB [test]> 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 (0.00 sec)

MariaDB [test]> select country\_id from locations;

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

| country\_id |

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

| " |

| AU |

| BR |

| CA |

| CA |

| CH |

| CH |

| CN |

| DE |

| IN |

| IT |

| IT |

| JP |

| JP |

| NL |

| Ox |

| SG |

| UK |

| UK |

| US |

| US |

| US |

| US |

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

23 rows in set (0.00 sec)

MariaDB [test]> select location\_id from locations where country\_id ='US';

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

| location\_id |

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

| 1400 |

| 1500 |

| 1600 |

| 1700 |

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

4 rows in set (0.00 sec)

MariaDB [test]> select department\_id from departments where location\_id in (select location\_id from locations where country\_id ='US');

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

| department\_id |

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

| 60 |

| 50 |

| 10 |

| 30 |

| 90 |

| 100 |

| 110 |

| 120 |

| 130 |

| 140 |

| 150 |

| 160 |

| 170 |

| 180 |

| 190 |

| 200 |

| 210 |

| 220 |

| 230 |

| 240 |

| 250 |

| 260 |

| 270 |

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

23 rows in set (0.02 sec)

MariaDB [test]> select department\_id, location\_id from departments where location\_id in (select location\_id from locations where country\_id ='US');

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

| department\_id | location\_id |

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

| 60 | 1400 |

| 50 | 1500 |

| 10 | 1700 |

| 30 | 1700 |

| 90 | 1700 |

| 100 | 1700 |

| 110 | 1700 |

| 120 | 1700 |

| 130 | 1700 |

| 140 | 1700 |

| 150 | 1700 |

| 160 | 1700 |

| 170 | 1700 |

| 180 | 1700 |

| 190 | 1700 |

| 200 | 1700 |

| 210 | 1700 |

| 220 | 1700 |

| 230 | 1700 |

| 240 | 1700 |

| 250 | 1700 |

| 260 | 1700 |

| 270 | 1700 |

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

23 rows in set (0.00 sec)

MariaDB [test]> select first\_name, last\_name, department\_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 | department\_id |

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

| Alexander | Hunold | 60 |

| Bruce | Ernst | 60 |

| David | Austin | 60 |

| Valli | Pataballa | 60 |

| Diana | Lorentz | 60 |

| Matthew | Weiss | 50 |

| Adam | Fripp | 50 |

| Payam | Kaufling | 50 |

| Shanta | Vollman | 50 |

| Kevin | Mourgos | 50 |

| Julia | Nayer | 50 |

| Irene | Mikkilineni | 50 |

| James | Landry | 50 |

| Steven | Markle | 50 |

| Laura | Bissot | 50 |

| Mozhe | Atkinson | 50 |

| James | Marlow | 50 |

| TJ | Olson | 50 |

| Jason | Mallin | 50 |

| Michael | Rogers | 50 |

| Ki | Gee | 50 |

| Hazel | Philtanker | 50 |

| Renske | Ladwig | 50 |

| Stephen | Stiles | 50 |

| John | Seo | 50 |

| Joshua | Patel | 50 |

| Trenna | Rajs | 50 |

| Curtis | Davies | 50 |

| Randall | Matos | 50 |

| Peter | Vargas | 50 |

| Winston | Taylor | 50 |

| Jean | Fleaur | 50 |

| Martha | Sullivan | 50 |

| Girard | Geoni | 50 |

| Nandita | Sarchand | 50 |

| Alexis | Bull | 50 |

| Julia | Dellinger | 50 |

| Anthony | Cabrio | 50 |

| Kelly | Chung | 50 |

| Jennifer | Dilly | 50 |

| Timothy | Gates | 50 |

| Randall | Perkins | 50 |

| Sarah | Bell | 50 |

| Britney | Everett | 50 |

| Samuel | McCain | 50 |

| Vance | Jones | 50 |

| Alana | Walsh | 50 |

| Kevin | Feeney | 50 |

| Donald | OConnell | 50 |

| Douglas | Grant | 50 |

| Jennifer | Whalen | 10 |

| Den | Raphaely | 30 |

| Alexander | Khoo | 30 |

| Shelli | Baida | 30 |

| Sigal | Tobias | 30 |

| Guy | Himuro | 30 |

| Karen | Colmenares | 30 |

| Steven | King | 90 |

| Neena | Kochhar | 90 |

| Lex | De Haan | 90 |

| Nancy | Greenberg | 100 |

| Daniel | Faviet | 100 |

| John | Chen | 100 |

| Ismael | Sciarra | 100 |

| Jose Manuel | Urman | 100 |

| Luis | Popp | 100 |

| Shelley | Higgins | 110 |

| William | Gietz | 110 |

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

68 rows in set (0.01 sec)

MariaDB [test]> 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 [test]> 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 [test]> select AVG(salary) from employees;

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

| AVG(salary) |

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

| 6461.682243 |

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

1 row in set (0.00 sec)

MariaDB [test]> 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 [test]> 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 [test]> select first\_name, last\_name, salary from employees where department\_id in (select department\_id from departments where department\_id LIKE "IT%" AND salary > select AVG(salary) 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 'select AVG(salary) from employees' at line 1

ERROR: No query specified

MariaDB [test]> select first\_name, last\_name, salary from employees where department\_id in (select department\_id from departments where department\_id LIKE "IT%" AND salary > select AVG(salary) 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 'select AVG(salary) from employees' at line 1

MariaDB [test]> select first\_name, last\_name, salary from employees where department\_id in (select department\_id from departments where department\_id LIKE "IT%" AND salary > (select AVG(salary) 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 1

MariaDB [test]> 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);

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 [test]> 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 [test]> 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 (0.02 sec)

MariaDB [test]> select min(salary) from employees;

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

| min(salary) |

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

| 2100.00 |

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

1 row in set (0.00 sec)

MariaDB [test]> select first\_name, last\_name, from employees where salary = (select min(salary) 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 'from employees where salary = (select min(salary) from employees)' at line 1

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

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

| first\_name | last\_name |

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

| TJ | Olson |

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

1 row in set (0.00 sec)

MariaDB [test]> select avg(salary), department\_id from employees group by department\_id;

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

| avg(salary) | department\_id |

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

| 7000.000000 | 0 |

| 4400.000000 | 10 |

| 9500.000000 | 20 |

| 4150.000000 | 30 |

| 6500.000000 | 40 |

| 3475.555556 | 50 |

| 5760.000000 | 60 |

| 10000.000000 | 70 |

| 8955.882353 | 80 |

| 19333.333333 | 90 |

| 8600.000000 | 100 |

| 10150.000000 | 110 |

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

12 rows in set (0.00 sec)

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

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

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

Empty set (0.00 sec)

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

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

| first\_name | last\_name | salary |

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

| Steven | King | 24000.00 |

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

1 row in set (0.00 sec)

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

Empty set (0.00 sec)

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

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

| first\_name | last\_name | salary |

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

| Neena | Kochhar | 17000.00 |

| Lex | De Haan | 17000.00 |

| Bruce | Ernst | 6000.00 |

| Diana | Lorentz | 4200.00 |

| Luis | Popp | 6900.00 |

| Karen | Colmenares | 2500.00 |

| Shanta | Vollman | 6500.00 |

| James | Marlow | 2500.00 |

| TJ | Olson | 2100.00 |

| Joshua | Patel | 2500.00 |

| Peter | Vargas | 2500.00 |

| Peter | Tucker | 10000.00 |

| Oliver | Tuvault | 7000.00 |

| Janette | King | 10000.00 |

| Sarath | Sewall | 7000.00 |

| Harrison | Bloom | 10000.00 |

| Sundita | Kumar | 6100.00 |

| Kimberely | Grant | 7000.00 |

| Martha | Sullivan | 2500.00 |

| Nandita | Sarchand | 4200.00 |

| Randall | Perkins | 2500.00 |

| Jennifer | Whalen | 4400.00 |

| Pat | Fay | 6000.00 |

| Susan | Mavris | 6500.00 |

| Hermann | Baer | 10000.00 |

| William | Gietz | 8300.00 |

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

26 rows in set (0.00 sec)

MariaDB [test]> select first\_name, last\_name, salary from employees where salary = any(select min(salary) from employees group by department\_id);

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

| first\_name | last\_name | salary |

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

| Neena | Kochhar | 17000.00 |

| Lex | De Haan | 17000.00 |

| Bruce | Ernst | 6000.00 |

| Diana | Lorentz | 4200.00 |

| Luis | Popp | 6900.00 |

| Karen | Colmenares | 2500.00 |

| Shanta | Vollman | 6500.00 |

| James | Marlow | 2500.00 |

| TJ | Olson | 2100.00 |

| Joshua | Patel | 2500.00 |

| Peter | Vargas | 2500.00 |

| Peter | Tucker | 10000.00 |

| Oliver | Tuvault | 7000.00 |

| Janette | King | 10000.00 |

| Sarath | Sewall | 7000.00 |

| Harrison | Bloom | 10000.00 |

| Sundita | Kumar | 6100.00 |

| Kimberely | Grant | 7000.00 |

| Martha | Sullivan | 2500.00 |

| Nandita | Sarchand | 4200.00 |

| Randall | Perkins | 2500.00 |

| Jennifer | Whalen | 4400.00 |

| Pat | Fay | 6000.00 |

| Susan | Mavris | 6500.00 |

| Hermann | Baer | 10000.00 |

| William | Gietz | 8300.00 |

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

26 rows in set (0.00 sec)

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

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

| first\_name | last\_name | salary |

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

| Shanta | Vollman | 6500.00 |

| Peter | Tucker | 10000.00 |

| David | Bernstein | 9500.00 |

| Oliver | Tuvault | 7000.00 |

| Janette | King | 10000.00 |

| Patrick | Sully | 9500.00 |

| Sarath | Sewall | 7000.00 |

| Danielle | Greene | 9500.00 |

| Harrison | Bloom | 10000.00 |

| Jonathon | Taylor | 8600.00 |

| Kimberely | Grant | 7000.00 |

| Jennifer | Whalen | 4400.00 |

| Susan | Mavris | 6500.00 |

| Hermann | Baer | 10000.00 |

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

14 rows in set (0.00 sec)

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

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

| first\_name | last\_name | salary |

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

| Neena | Kochhar | 17000.00 |

| Lex | De Haan | 17000.00 |

| Bruce | Ernst | 6000.00 |

| Diana | Lorentz | 4200.00 |

| Luis | Popp | 6900.00 |

| Karen | Colmenares | 2500.00 |

| Shanta | Vollman | 6500.00 |

| James | Marlow | 2500.00 |

| TJ | Olson | 2100.00 |

| Joshua | Patel | 2500.00 |

| Peter | Vargas | 2500.00 |

| Peter | Tucker | 10000.00 |

| Oliver | Tuvault | 7000.00 |

| Janette | King | 10000.00 |

| Sarath | Sewall | 7000.00 |

| Harrison | Bloom | 10000.00 |

| Sundita | Kumar | 6100.00 |

| Kimberely | Grant | 7000.00 |

| Martha | Sullivan | 2500.00 |

| Nandita | Sarchand | 4200.00 |

| Randall | Perkins | 2500.00 |

| Jennifer | Whalen | 4400.00 |

| Pat | Fay | 6000.00 |

| Susan | Mavris | 6500.00 |

| Hermann | Baer | 10000.00 |

| William | Gietz | 8300.00 |

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

26 rows in set (0.00 sec)

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

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

| first\_name | last\_name | salary |

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

| Shanta | Vollman | 6500.00 |

| Peter | Tucker | 10000.00 |

| David | Bernstein | 9500.00 |

| Oliver | Tuvault | 7000.00 |

| Janette | King | 10000.00 |

| Patrick | Sully | 9500.00 |

| Sarath | Sewall | 7000.00 |

| Danielle | Greene | 9500.00 |

| Harrison | Bloom | 10000.00 |

| Jonathon | Taylor | 8600.00 |

| Kimberely | Grant | 7000.00 |

| Jennifer | Whalen | 4400.00 |

| Susan | Mavris | 6500.00 |

| Hermann | Baer | 10000.00 |

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

14 rows in set (0.00 sec)

MariaDB [test]> select first\_name, last\_name, salary from employees where salary > in(select min(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 'in(select min(salary) from employees group by department\_id)' at line 1

MariaDB [test]> select first\_name, last\_name, salary from employees where salary > all (select salaryfrom employees where job\_id ='SH\_CLERK') ORDER BY salary;

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

MariaDB [test]> select first\_name, last\_name, salary from employees where salary > all (select salary from employees where job\_id ='SH\_CLERK') ORDER BY salary;

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

| first\_name | last\_name | salary |

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

| Jennifer | Whalen | 4400.00 |

| David | Austin | 4800.00 |

| Valli | Pataballa | 4800.00 |

| Kevin | Mourgos | 5800.00 |

| Bruce | Ernst | 6000.00 |

| Pat | Fay | 6000.00 |

| Sundita | Kumar | 6100.00 |

| Amit | Banda | 6200.00 |

| Charles | Johnson | 6200.00 |

| Sundar | Ande | 6400.00 |

| Susan | Mavris | 6500.00 |

| Shanta | Vollman | 6500.00 |

| David | Lee | 6800.00 |

| Luis | Popp | 6900.00 |

| Sarath | Sewall | 7000.00 |

| Oliver | Tuvault | 7000.00 |

| Kimberely | Grant | 7000.00 |

| Mattea | Marvins | 7200.00 |

| Elizabeth | Bates | 7300.00 |

| William | Smith | 7400.00 |

| Nanette | Cambrault | 7500.00 |

| Louise | Doran | 7500.00 |

| Ismael | Sciarra | 7700.00 |

| Jose Manuel | Urman | 7800.00 |

| Payam | Kaufling | 7900.00 |

| Lindsey | Smith | 8000.00 |

| Matthew | Weiss | 8000.00 |

| Christopher | Olsen | 8000.00 |

| Adam | Fripp | 8200.00 |

| John | Chen | 8200.00 |

| William | Gietz | 8300.00 |

| Jack | Livingston | 8400.00 |

| Jonathon | Taylor | 8600.00 |

| Alyssa | Hutton | 8800.00 |

| Allan | McEwen | 9000.00 |

| Peter | Hall | 9000.00 |

| Alexander | Hunold | 9000.00 |

| Daniel | Faviet | 9000.00 |

| Patrick | Sully | 9500.00 |

| Danielle | Greene | 9500.00 |

| David | Bernstein | 9500.00 |

| Tayler | Fox | 9600.00 |

| Hermann | Baer | 10000.00 |

| Harrison | Bloom | 10000.00 |

| Janette | King | 10000.00 |

| Peter | Tucker | 10000.00 |

| Eleni | Zlotkey | 10500.00 |

| Clara | Vishney | 10500.00 |

| Gerald | Cambrault | 11000.00 |

| Ellen | Abel | 11000.00 |

| Den | Raphaely | 11000.00 |

| Lisa | Ozer | 11500.00 |

| Alberto | Errazuriz | 12000.00 |

| Shelley | Higgins | 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 |

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

61 rows in set (0.00 sec)

MariaDB [test]> select first\_name, last\_name, salary, job\_id from employees where salary > all (select salary from employees where job\_id ='SH\_CLERK') ORDER BY salary;

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

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

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

| Jennifer | Whalen | 4400.00 | AD\_ASST |

| David | Austin | 4800.00 | IT\_PROG |

| Valli | Pataballa | 4800.00 | IT\_PROG |

| Kevin | Mourgos | 5800.00 | ST\_MAN |

| Bruce | Ernst | 6000.00 | IT\_PROG |

| Pat | Fay | 6000.00 | MK\_REP |

| Sundita | Kumar | 6100.00 | SA\_REP |

| Amit | Banda | 6200.00 | SA\_REP |

| Charles | Johnson | 6200.00 | SA\_REP |

| Sundar | Ande | 6400.00 | SA\_REP |

| Susan | Mavris | 6500.00 | HR\_REP |

| Shanta | Vollman | 6500.00 | ST\_MAN |

| David | Lee | 6800.00 | SA\_REP |

| Luis | Popp | 6900.00 | FI\_ACCOUNT |

| Sarath | Sewall | 7000.00 | SA\_REP |

| Oliver | Tuvault | 7000.00 | SA\_REP |

| Kimberely | Grant | 7000.00 | SA\_REP |

| Mattea | Marvins | 7200.00 | SA\_REP |

| Elizabeth | Bates | 7300.00 | SA\_REP |

| William | Smith | 7400.00 | SA\_REP |

| Nanette | Cambrault | 7500.00 | SA\_REP |

| Louise | Doran | 7500.00 | SA\_REP |

| Ismael | Sciarra | 7700.00 | FI\_ACCOUNT |

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

| Payam | Kaufling | 7900.00 | ST\_MAN |

| Lindsey | Smith | 8000.00 | SA\_REP |

| Matthew | Weiss | 8000.00 | ST\_MAN |

| Christopher | Olsen | 8000.00 | SA\_REP |

| Adam | Fripp | 8200.00 | ST\_MAN |

| John | Chen | 8200.00 | FI\_ACCOUNT |

| William | Gietz | 8300.00 | AC\_ACCOUNT |

| Jack | Livingston | 8400.00 | SA\_REP |

| Jonathon | Taylor | 8600.00 | SA\_REP |

| Alyssa | Hutton | 8800.00 | SA\_REP |

| Allan | McEwen | 9000.00 | SA\_REP |

| Peter | Hall | 9000.00 | SA\_REP |

| Alexander | Hunold | 9000.00 | IT\_PROG |

| Daniel | Faviet | 9000.00 | FI\_ACCOUNT |

| Patrick | Sully | 9500.00 | SA\_REP |

| Danielle | Greene | 9500.00 | SA\_REP |

| David | Bernstein | 9500.00 | SA\_REP |

| Tayler | Fox | 9600.00 | SA\_REP |

| Hermann | Baer | 10000.00 | PR\_REP |

| Harrison | Bloom | 10000.00 | SA\_REP |

| Janette | King | 10000.00 | SA\_REP |

| Peter | Tucker | 10000.00 | SA\_REP |

| Eleni | Zlotkey | 10500.00 | SA\_MAN |

| Clara | Vishney | 10500.00 | SA\_REP |

| Gerald | Cambrault | 11000.00 | SA\_MAN |

| Ellen | Abel | 11000.00 | SA\_REP |

| Den | Raphaely | 11000.00 | PU\_MAN |

| Lisa | Ozer | 11500.00 | SA\_REP |

| Alberto | Errazuriz | 12000.00 | SA\_MAN |

| Shelley | Higgins | 12000.00 | AC\_MGR |

| Nancy | Greenberg | 12000.00 | FI\_MGR |

| Michael | Hartstein | 13000.00 | MK\_MAN |

| Karen | Partners | 13500.00 | SA\_MAN |

| John | Russell | 14000.00 | SA\_MAN |

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

| Neena | Kochhar | 17000.00 | AD\_VP |

| Steven | King | 24000.00 | AD\_PRES |

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

61 rows in set (0.00 sec)

MariaDB [test]> 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 [test]> 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;

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

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

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

| 178 | Kimberely | Grant | NULL |

| 205 | Shelley | Higgins | Accounting |

| 206 | William | Gietz | Accounting |

| 200 | Jennifer | Whalen | Administration |

| 100 | Steven | King | Executive |

| 102 | Lex | De Haan | Executive |

| 101 | Neena | Kochhar | Executive |

| 112 | Jose Manuel | Urman | Finance |

| 113 | Luis | Popp | Finance |

| 111 | Ismael | Sciarra | Finance |

| 110 | John | Chen | Finance |

| 109 | Daniel | Faviet | Finance |

| 108 | Nancy | Greenberg | Finance |

| 203 | Susan | Mavris | Human Resources |

| 103 | Alexander | Hunold | IT |

| 104 | Bruce | Ernst | IT |

| 105 | David | Austin | IT |

| 107 | Diana | Lorentz | IT |

| 106 | Valli | Pataballa | IT |

| 202 | Pat | Fay | Marketing |

| 201 | Michael | Hartstein | Marketing |

| 204 | Hermann | Baer | Public Relations |

| 118 | Guy | Himuro | Purchasing |

| 114 | Den | Raphaely | Purchasing |

| 115 | Alexander | Khoo | Purchasing |

| 116 | Shelli | Baida | Purchasing |

| 117 | Sigal | Tobias | Purchasing |

| 119 | Karen | Colmenares | Purchasing |

| 163 | Danielle | Greene | Sales |

| 162 | Clara | Vishney | Sales |

| 161 | Sarath | Sewall | Sales |

| 160 | Louise | Doran | Sales |

| 159 | Lindsey | Smith | Sales |

| 158 | Allan | McEwen | Sales |

| 157 | Patrick | Sully | Sales |

| 156 | Janette | King | Sales |

| 155 | Oliver | Tuvault | Sales |

| 154 | Nanette | Cambrault | Sales |

| 153 | Christopher | Olsen | Sales |

| 164 | Mattea | Marvins | Sales |

| 165 | David | Lee | Sales |

| 167 | Amit | Banda | Sales |

| 177 | Jack | Livingston | Sales |

| 176 | Jonathon | Taylor | Sales |

| 175 | Alyssa | Hutton | Sales |

| 174 | Ellen | Abel | Sales |

| 173 | Sundita | Kumar | Sales |

| 172 | Elizabeth | Bates | Sales |

| 171 | William | Smith | Sales |

| 170 | Tayler | Fox | Sales |

| 169 | Harrison | Bloom | Sales |

| 168 | Lisa | Ozer | Sales |

| 179 | Charles | Johnson | Sales |

| 152 | Peter | Hall | Sales |

| 145 | John | Russell | Sales |

| 146 | Karen | Partners | Sales |

| 147 | Alberto | Errazuriz | Sales |

| 148 | Gerald | Cambrault | Sales |

| 149 | Eleni | Zlotkey | Sales |

| 150 | Peter | Tucker | Sales |

| 151 | David | Bernstein | Sales |

| 166 | Sundar | Ande | Sales |

| 194 | Samuel | McCain | Shipping |

| 193 | Britney | Everett | Shipping |

| 192 | Sarah | Bell | Shipping |

| 191 | Randall | Perkins | Shipping |

| 190 | Timothy | Gates | Shipping |

| 189 | Jennifer | Dilly | Shipping |

| 188 | Kelly | Chung | Shipping |

| 187 | Anthony | Cabrio | Shipping |

| 186 | Julia | Dellinger | Shipping |

| 195 | Vance | Jones | Shipping |

| 196 | Alana | Walsh | Shipping |

| 197 | Kevin | Feeney | Shipping |

| 180 | Winston | Taylor | Shipping |

| 120 | Matthew | Weiss | Shipping |

| 121 | Adam | Fripp | Shipping |

| 122 | Payam | Kaufling | Shipping |

| 123 | Shanta | Vollman | Shipping |

| 124 | Kevin | Mourgos | Shipping |

| 125 | Julia | Nayer | Shipping |

| 199 | Douglas | Grant | Shipping |

| 198 | Donald | OConnell | Shipping |

| 185 | Alexis | Bull | Shipping |

| 184 | Nandita | Sarchand | Shipping |

| 183 | Girard | Geoni | Shipping |

| 135 | Ki | Gee | Shipping |

| 136 | Hazel | Philtanker | Shipping |

| 137 | Renske | Ladwig | Shipping |

| 138 | Stephen | Stiles | Shipping |

| 139 | John | Seo | Shipping |

| 140 | Joshua | Patel | Shipping |

| 141 | Trenna | Rajs | Shipping |

| 142 | Curtis | Davies | Shipping |

| 143 | Randall | Matos | Shipping |

| 134 | Michael | Rogers | Shipping |

| 133 | Jason | Mallin | Shipping |

| 182 | Martha | Sullivan | Shipping |

| 181 | Jean | Fleaur | Shipping |

| 126 | Irene | Mikkilineni | Shipping |

| 127 | James | Landry | Shipping |

| 128 | Steven | Markle | Shipping |

| 129 | Laura | Bissot | Shipping |

| 130 | Mozhe | Atkinson | Shipping |

| 131 | James | Marlow | Shipping |

| 132 | TJ | Olson | Shipping |

| 144 | Peter | Vargas | Shipping |

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

107 rows in set (0.00 sec)

MariaDB [test]> select employee\_id, first\_name from employees as a where salary > ( select avg(salary) from employees where department\_id = a.department\_id );

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

| employee\_id | first\_name |

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

| 100 | Steven |

| 103 | Alexander |

| 104 | Bruce |

| 108 | Nancy |

| 109 | Daniel |

| 114 | Den |

| 120 | Matthew |

| 121 | Adam |

| 122 | Payam |

| 123 | Shanta |

| 124 | Kevin |

| 137 | Renske |

| 141 | Trenna |

| 145 | John |

| 146 | Karen |

| 147 | Alberto |

| 148 | Gerald |

| 149 | Eleni |

| 150 | Peter |

| 151 | David |

| 152 | Peter |

| 156 | Janette |

| 157 | Patrick |

| 158 | Allan |

| 162 | Clara |

| 163 | Danielle |

| 168 | Lisa |

| 169 | Harrison |

| 170 | Tayler |

| 174 | Ellen |

| 184 | Nandita |

| 185 | Alexis |

| 188 | Kelly |

| 189 | Jennifer |

| 192 | Sarah |

| 193 | Britney |

| 201 | Michael |

| 205 | Shelley |

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

38 rows in set (0.00 sec)

MariaDB [test]> set @p=0;

Query OK, 0 rows affected (0.00 sec)

MariaDB [test]> select p, employee\_id from (select @p := @p +1 as p, employee\_id from employees)a where MOD(a.p,2) = 0;

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

| p | employee\_id |

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

| 2 | 101 |

| 4 | 103 |

| 6 | 105 |

| 8 | 107 |

| 10 | 109 |

| 12 | 111 |

| 14 | 113 |

| 16 | 115 |

| 18 | 117 |

| 20 | 119 |

| 22 | 121 |

| 24 | 123 |

| 26 | 125 |

| 28 | 127 |

| 30 | 129 |

| 32 | 131 |

| 34 | 133 |

| 36 | 135 |

| 38 | 137 |

| 40 | 139 |

| 42 | 141 |

| 44 | 143 |

| 46 | 145 |

| 48 | 147 |

| 50 | 149 |

| 52 | 151 |

| 54 | 153 |

| 56 | 155 |

| 58 | 157 |

| 60 | 159 |

| 62 | 161 |

| 64 | 163 |

| 66 | 165 |

| 68 | 167 |

| 70 | 169 |

| 72 | 171 |

| 74 | 173 |

| 76 | 175 |

| 78 | 177 |

| 80 | 179 |

| 82 | 181 |

| 84 | 183 |

| 86 | 185 |

| 88 | 187 |

| 90 | 189 |

| 92 | 191 |

| 94 | 193 |

| 96 | 195 |

| 98 | 197 |

| 100 | 199 |

| 102 | 201 |

| 104 | 203 |

| 106 | 205 |

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

53 rows in set (0.00 sec)

MariaDB [test]> select p, employee\_id from (select @p := @p +1 as p, employee\_id from employees)a where MOD(a.p,2) != 0;

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

| p | employee\_id |

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

| 109 | 101 |

| 111 | 103 |

| 113 | 105 |

| 115 | 107 |

| 117 | 109 |

| 119 | 111 |

| 121 | 113 |

| 123 | 115 |

| 125 | 117 |

| 127 | 119 |

| 129 | 121 |

| 131 | 123 |

| 133 | 125 |

| 135 | 127 |

| 137 | 129 |

| 139 | 131 |

| 141 | 133 |

| 143 | 135 |

| 145 | 137 |

| 147 | 139 |

| 149 | 141 |

| 151 | 143 |

| 153 | 145 |

| 155 | 147 |

| 157 | 149 |

| 159 | 151 |

| 161 | 153 |

| 163 | 155 |

| 165 | 157 |

| 167 | 159 |

| 169 | 161 |

| 171 | 163 |

| 173 | 165 |

| 175 | 167 |

| 177 | 169 |

| 179 | 171 |

| 181 | 173 |

| 183 | 175 |

| 185 | 177 |

| 187 | 179 |

| 189 | 181 |

| 191 | 183 |

| 193 | 185 |

| 195 | 187 |

| 197 | 189 |

| 199 | 191 |

| 201 | 193 |

| 203 | 195 |

| 205 | 197 |

| 207 | 199 |

| 209 | 201 |

| 211 | 203 |

| 213 | 205 |

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

53 rows in set (0.00 sec)

MariaDB [test]> set @p=0;

Query OK, 0 rows affected (0.00 sec)

MariaDB [test]> select p, employee\_id from (select @p := @p +1 as p, employee\_id from employees)a where MOD(a.p,2) != 0;

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

| p | employee\_id |

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

| 1 | 100 |

| 3 | 102 |

| 5 | 104 |

| 7 | 106 |

| 9 | 108 |

| 11 | 110 |

| 13 | 112 |

| 15 | 114 |

| 17 | 116 |

| 19 | 118 |

| 21 | 120 |

| 23 | 122 |

| 25 | 124 |

| 27 | 126 |

| 29 | 128 |

| 31 | 130 |

| 33 | 132 |

| 35 | 134 |

| 37 | 136 |

| 39 | 138 |

| 41 | 140 |

| 43 | 142 |

| 45 | 144 |

| 47 | 146 |

| 49 | 148 |

| 51 | 150 |

| 53 | 152 |

| 55 | 154 |

| 57 | 156 |

| 59 | 158 |

| 61 | 160 |

| 63 | 162 |

| 65 | 164 |

| 67 | 166 |

| 69 | 168 |

| 71 | 170 |

| 73 | 172 |

| 75 | 174 |

| 77 | 176 |

| 79 | 178 |

| 81 | 180 |

| 83 | 182 |

| 85 | 184 |

| 87 | 186 |

| 89 | 188 |

| 91 | 190 |

| 93 | 192 |

| 95 | 194 |

| 97 | 196 |

| 99 | 198 |

| 101 | 200 |

| 103 | 202 |

| 105 | 204 |

| 107 | 206 |

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

54 rows in set (0.00 sec)

MariaDB [test]> select count(distinct salary) from employees;

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

| count(distinct salary) |

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

| 57 |

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

1 row in set (0.02 sec)

MariaDB [test]> select distinct (salary)s from employees order by s;

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

| s |

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

| 2100.00 |

| 2200.00 |

| 2400.00 |

| 2500.00 |

| 2600.00 |

| 2700.00 |

| 2800.00 |

| 2900.00 |

| 3000.00 |

| 3100.00 |

| 3200.00 |

| 3300.00 |

| 3400.00 |

| 3500.00 |

| 3600.00 |

| 3800.00 |

| 3900.00 |

| 4000.00 |

| 4100.00 |

| 4200.00 |

| 4400.00 |

| 4800.00 |

| 5800.00 |

| 6000.00 |

| 6100.00 |

| 6200.00 |

| 6400.00 |

| 6500.00 |

| 6800.00 |

| 6900.00 |

| 7000.00 |

| 7200.00 |

| 7300.00 |

| 7400.00 |

| 7500.00 |

| 7700.00 |

| 7800.00 |

| 7900.00 |

| 8000.00 |

| 8200.00 |

| 8300.00 |

| 8400.00 |

| 8600.00 |

| 8800.00 |

| 9000.00 |

| 9500.00 |

| 9600.00 |

| 10000.00 |

| 10500.00 |

| 11000.00 |

| 11500.00 |

| 12000.00 |

| 13000.00 |

| 13500.00 |

| 14000.00 |

| 17000.00 |

| 24000.00 |

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

57 rows in set (0.00 sec)

MariaDB [test]> select distinct (salary)s from employees order by s desc;

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

| s |

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

| 24000.00 |

| 17000.00 |

| 14000.00 |

| 13500.00 |

| 13000.00 |

| 12000.00 |

| 11500.00 |

| 11000.00 |

| 10500.00 |

| 10000.00 |

| 9600.00 |

| 9500.00 |

| 9000.00 |

| 8800.00 |

| 8600.00 |

| 8400.00 |

| 8300.00 |

| 8200.00 |

| 8000.00 |

| 7900.00 |

| 7800.00 |

| 7700.00 |

| 7500.00 |

| 7400.00 |

| 7300.00 |

| 7200.00 |

| 7000.00 |

| 6900.00 |

| 6800.00 |

| 6500.00 |

| 6400.00 |

| 6200.00 |

| 6100.00 |

| 6000.00 |

| 5800.00 |

| 4800.00 |

| 4400.00 |

| 4200.00 |

| 4100.00 |

| 4000.00 |

| 3900.00 |

| 3800.00 |

| 3600.00 |

| 3500.00 |

| 3400.00 |

| 3300.00 |

| 3200.00 |

| 3100.00 |

| 3000.00 |

| 2900.00 |

| 2800.00 |

| 2700.00 |

| 2600.00 |

| 2500.00 |

| 2400.00 |

| 2200.00 |

| 2100.00 |

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

57 rows in set (0.00 sec)

MariaDB [test]> select salary from employees where 5= (select distinct (salary)s from employees order by s desc);

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

MariaDB [test]> select salary from employees where 5 in (select distinct (salary)s from employees order by s desc);

Empty set (0.00 sec)

MariaDB [test]>