Microsoft Windows [Version 10.0.22621.2283]

(c) Microsoft Corporation. All rights reserved.

C:\Users\Admin>cd\

C:\>xampp\mysql\bin\mysql -h localhost -u root

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

Your MariaDB connection id is 9

Server version: 10.4.28-MariaDB mariadb.org binary distribution

Copyright (c) 2000, 2018, Oracle, MariaDB Corporation Ab and others.

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

MariaDB [(none)]> create database hr;

Query OK, 1 row affected (0.002 sec)

MariaDB [(none)]> use hr;

Database changed

MariaDB [hr]> CREATE TABLE regions (region_id INT (11) UNSIGNED NOT NULL,region_name VARCHAR(25),PRIMARY KEY (region_id));

Query OK, 0 rows affected (0.022 sec)

MariaDB [hr]> CREATE TABLE countries(country_id CHAR(2) NOT NULL,country_name VARCHAR(40),region_id INT (11) UNSIGNED NOT NULL,PRIMARY KEY (country_id));

Query OK, 0 rows affected (0.035 sec)

MariaDB [hr]> CREATE TABLE locations (location_id INT (11) UNSIGNED NOT NULL AUTO_INCREMENT,street_address VARCHAR(40),postal_code VARCHAR(12),city VARCHAR(30) NOT NULL,state_province VARCHAR(25),country_id CHAR(2) NOT NULL,PRIMARY KEY (location_id));

Query OK, 0 rows affected (0.035 sec)

MariaDB [hr]> CREATE TABLE departments (department_id INT (11) UNSIGNED NOT NULL,department_name VARCHAR(30) NOT NULL,manager_id INT (11) UNSIGNED,location_id INT (11) UNSIGNED,PRIMARY KEY (department_id));

Query OK, 0 rows affected (0.034 sec)

MariaDB [hr]> CREATE TABLE jobs (job_id VARCHAR(10) NOT NULL,job_title VARCHAR(35) NOT NULL,min_salary DECIMAL(8, 0) UNSIGNED,max_salary DECIMAL(8, 0) UNSIGNED,PRIMARY KEY (job_id));

Query OK, 0 rows affected (0.020 sec)

MariaDB [hr]> CREATE TABLE employees (employee_id INT (11) UNSIGNED NOT NULL,first_name VARCHAR(20),last_name VARCHAR(25) NOT NULL,email VARCHAR(25) NOT NULL,phone_number VARCHAR(20),hire_date DATE NOT NULL,job_id VARCHAR(10) NOT NULL,salary DECIMAL(8, 2) NOT NULL,commission_pct DECIMAL(2, 2),manager_id INT (11) UNSIGNED,department_id INT (11) UNSIGNED,PRIMARY KEY (employee_id));

Query OK, 0 rows affected (0.019 sec)

MariaDB [hr]> CREATE TABLE job_history (employee_id INT (11) UNSIGNED NOT NULL,start_date DATE NOT NULL,end_date DATE NOT NULL,job_id VARCHAR(10) NOT NULL,department_id INT (11) UNSIGNED NOT NULL);

Query OK, 0 rows affected (0.017 sec)

MariaDB [hr]> ALTER TABLE job_history ADD UNIQUE INDEX (employee_id,start_date);

Query OK, 0 rows affected (0.039 sec)

Records: 0 Duplicates: 0 Warnings: 0

MariaDB [hr]> CREATE VIEW emp_details_view AS SELECT
e.employee_id,e.job_id,e.manager_id,e.department_id,d.location_id,l.country_id,e.first_name,e.last_n
ame,e.salary,e.commission_pct,d.department_name,j.job_title,l.city,l.state_province,c.country_name,r.
region_name FROM employees e,departments d,jobs j,locations l,countries c,regions r WHERE
e.department_id = d.department_id AND d.location_id = l.location_id AND l.country_id = c.country_id
AND c.region_id = r.region_id AND j.job_id = e.job_id;

Query OK, 0 rows affected (0.012 sec)

MariaDB [hr]> INSERT INTO regions(region_id,region_name) VALUES
(1,'Europe'),(2,'Americas'),(3,'Asia'),(4,'Middle East and Africa');

Query OK, 4 rows affected (0.005 sec)

Records: 4 Duplicates: 0 Warnings: 0

MariaDB [hr]> COMMIT;

Query OK, 0 rows affected (0.000 sec)

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

Query OK, 25 rows affected (0.005 sec)

Records: 25 Duplicates: 0 Warnings: 0

MariaDB [hr]> COMMIT;

Query OK, 0 rows affected (0.000 sec)

MariaDB [hr]> INSERT INTO locations VALUES (1000,'1297 Via Cola di Rie','00989','Roma',NULL,'IT'),(1100,'93091 Calle della Testa','10934','Venice',NULL,'IT'),(1200,'2017 Shinjuku-ku','1689','Tokyo','Tokyo Prefecture','JP'),(1300,'9450 Kamiya-cho','6823','Hiroshima',NULL,'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',NULL,'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',NULL,'SG'),(2400,'8204 Arthur St',NULL,'London',NULL,'UK'),(2500,'Magdalen Centre, The Oxford Science Park','OX9 9ZB','Oxford','Oxford','UK'),(2600,'9702 Chester Road','09629850293','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,','MX');

Query OK, 23 rows affected (0.022 sec)

Records: 23 Duplicates: 0 Warnings: 0

MariaDB [hr]> COMMIT;

Query OK, 0 rows affected (0.000 sec)

MariaDB [hr]> SET FOREIGN_KEY_CHECKS = 0;

Query OK, 0 rows affected (0.000 sec)

MariaDB [hr]> 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',NULL,1700),(130,'Corporate Tax',NULL,1700),(140,'Control And Credit',NULL,1700),(150,'Shareholder

Services',NULL,1700),(160,'Benefits',NULL,1700),(170,'Manufacturing',NULL,1700),(180,'Construction',NULL,1700),(190,'Contracting',NULL,1700),(200,'Operations',NULL,1700),(210,'IT Support',NULL,1700),(220,'NOC',NULL,1700),(230,'IT Helpdesk',NULL,1700),(240,'Government Sales',NULL,1700),(250,'Retail Sales',NULL,1700),(260,'Recruiting',NULL,1700),(270,'Payroll',NULL,1700);

Query OK, 27 rows affected (0.023 sec)

Records: 27 Duplicates: 0 Warnings: 0

MariaDB [hr]> SET FOREIGN_KEY_CHECKS = 1;

Query OK, 0 rows affected (0.000 sec)

MariaDB [hr]> COMMIT;

Query OK, 0 rows affected (0.000 sec)

MariaDB [hr]> 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 (0.007 sec)

Records: 19 Duplicates: 0 Warnings: 0

MariaDB [hr]> COMMIT;

Query OK, 0 rows affected (0.000 sec)

MariaDB [hr]> INSERT INTO employees VALUES (100,'Steven','King','SKING','515.123.4567',STR_TO_DATE('17-JUN-1987', '%d-%M-

%Y'),'AD_PRES',24000,NULL,NULL,90),(101,'Neena','Kochhar','NKOCHHAR','515.123.4568',STR_TO_DATE ('21-SEP-1989', '%d-%M-%Y'),'AD_VP',17000,NULL,100,90),(102,'Lex','De Haan','LDEHAAN','515.123.4569',STR_TO_DATE('13-JAN-1993', '%d-%M-%Y'),'AD_VP',17000,NULL,100,90),(103,'Alexander','Hunold','AHUNOLD','590.423.4567',STR_TO_DATE('0 3-JAN-1990', '%d-%M-%Y'),'IT_PROG',9000,NULL,102,60),(104,'Bruce','Ernst','BERNST','590.423.4568',STR_TO_DATE('21-MAY-1991', '%d-%M-%Y'),'IT_PROG',6000,NULL,103,60),(105,'David','Austin','DAUSTIN','590.423.4569',STR_TO_DATE('25-JUN-1997', '%d-%M-%Y'),'IT_PROG',4800,NULL,103,60),(106,'Valli','Pataballa','VPATABAL','590.423.4560',STR_TO_DATE('05-FEB-1998', '%d-%M-%Y'),'IT_PROG',4800,NULL,103,60),(107,'Diana','Lorentz','DLORENTZ','590.423.5567',STR_TO_DATE('07-FEB-1999', '%d-%M-%Y'),'IT_PROG',4200,NULL,103,60),(108,'Nancy','Greenberg','NGREENBE','515.124.4569',STR_TO_DATE(' 17-AUG-1994', '%d-%M-%Y'),'FI_MGR',12000,NULL,101,100),(109,'Daniel','Faviet','DFAVIET','515.124.4169',STR_TO_DATE('16-AUG-1994', '%d-%M-%Y'),'FI_ACCOUNT',9000,NULL,108,100),(110,'John','Chen','JCHEN','515.124.4269',STR_TO_DATE('28-SEP-1997', '%d-%M-%Y'),'FI_ACCOUNT',8200,NULL,108,100),(111,'Ismael','Sciarra','ISCIARRA','515.124.4369',STR_TO_DATE(' 30-SEP-1997', '%d-%M-%Y'),'FI_ACCOUNT',7700,NULL,108,100),(112,'Jose Manuel','Urman','JMURMAN','515.124.4469',STR_TO_DATE('07-MAR-1998', '%d-%M-%Y'),'FI_ACCOUNT',7800,NULL,108,100);

Query OK, 13 rows affected (0.005 sec)

Records: 13 Duplicates: 0 Warnings: 0

MariaDB [hr]> INSERT INTO employees(employee_id,first_name,last_name,email,phone_number,hire_date,job_id,salary,commissio n_pct,manager_id,department_id)VALUES (113,'Luis','Popp','LPOPP','515.124.4567',STR_TO_DATE('07-DEC-1999', '%d-%M-%Y'),'FI_ACCOUNT',6900,NULL,108,100),(114,'Den','Raphaely','DRAPHEAL','515.127.4561',STR_TO_DATE ('07-DEC-1994', '%d-%M-%Y'),'PU_MAN',11000,NULL,100,30),(115,'Alexander','Khoo','AKHOO','515.127.4562',STR_TO_DATE('18-MAY-1995', '%d-%M-%Y'),'PU_CLERK',3100,NULL,114,30),(116,'Shelli','Baida','SBAIDA','515.127.4563',STR_TO_DATE('24-DEC-1997', '%d-%M-%Y'),'PU_CLERK',2900,NULL,114,30),(117,'Sigal','Tobias','STOBIAS','515.127.4564',STR_TO_DATE('24-JUL-1997', '%d-%M-%Y'),'PU_CLERK',2800,NULL,114,30),(118,'Guy','Himuro','GHIMURO','515.127.4565',STR_TO_DATE('15-

NOV-1998', '%d-%M-%Y'),'PU_CLERK',2600,NULL,114,30),(119,'Karen','Colmenares','KCOLMENA','515.127.4566',STR_TO_DATE('10-AUG-1999', '%d-%M-%Y'),'PU_CLERK',2500,NULL,114,30),(120,'Matthew','Weiss','MWEISS','650.123.1234',STR_TO_DATE('18-JUL-1996', '%d-%M-%Y'),'ST_MAN',8000,NULL,100,50),(121,'Adam','Fripp','AFRIPP','650.123.2234',STR_TO_DATE('10-APR-1997', '%d-%M-%Y'),'ST_MAN',8200,NULL,100,50),(122,'Payam','Kaufling','PKAUFLIN','650.123.3234',STR_TO_DATE('01-MAY-1995', '%d-%M-%Y'),'ST_MAN',7900,NULL,100,50),(123,'Shanta','Vollman','SVOLLMAN','650.123.4234',STR_TO_DATE('10-OCT-1997', '%d-%M-%Y'),'ST_MAN',6500,NULL,100,50),(124,'Kevin','Mourgos','KMOURGOS','650.123.5234',STR_TO_DATE('16-NOV-1999', '%d-%M-%Y'),'ST_MAN',5800,NULL,100,50),(125,'Julia','Nayer','JNAYER','650.124.1214',STR_TO_DATE('16-JUL-1997', '%d-%M-%Y'),'ST_CLERK',3200,NULL,120,50);

Query OK, 13 rows affected (0.007 sec)

Records: 13 Duplicates: 0 Warnings: 0

MariaDB [hr]> INSERT INTO employees (employee_id,first_name,last_name,email,phone_number,hire_date,job_id,salary,commission_pct,manager_id,department_id) VALUES (126,'Irene','Mikkilineni','IMIKKILI','650.124.1224',STR_TO_DATE('28-SEP-1998', '%d-%M-%Y'),'ST_CLERK',2700,NULL,120,50),(127,'James','Landry','JLANDRY','650.124.1334',STR_TO_DATE('14-JAN-1999', '%d-%M-%Y'),'ST_CLERK',2400,NULL,120,50),(128,'Steven','Markle','SMARKLE','650.124.1434',STR_TO_DATE('08-MAR-2000', '%d-%M-%Y'),'ST_CLERK',2200,NULL,120,50),(129,'Laura','Bissot','LBISSOT','650.124.5234',STR_TO_DATE('20-AUG-1997', '%d-%M-%Y'),'ST_CLERK',3300,NULL,121,50),(130,'Mozhe','Atkinson','MATKINSO','650.124.6234',STR_TO_DATE('30-OCT-1997', '%d-%M-%Y'),'ST_CLERK',2800,NULL,121,50),(131,'James','Marlow','JAMRLOW','650.124.7234',STR_TO_DATE('16-FEB-1997', '%d-%M-%Y'),'ST_CLERK',2500,NULL,121,50),(132,'TJ','Olson','TJOLSON','650.124.8234',STR_TO_DATE('10-APR-1999', '%d-%M-%Y'),'ST_CLERK',2100,NULL,121,50),(133,'Jason','Mallin','JMALLIN','650.127.1934',STR_TO_DATE('14-JUN-1996', '%d-%M-%Y'),'ST_CLERK',3300,NULL,122,50),(134,'Michael','Rogers','MROGERS','650.127.1834',STR_TO_DATE('26-AUG-1998', '%d-%M-%Y'),'ST_CLERK',2900,NULL,122,50),(135,'Ki','Gee','KGEE','650.127.1734',STR_TO_DATE('12-DEC-1999',

'%d-%M-%Y'),'ST_CLERK',2400,NULL,122,50),(136,'Hazel','Philtanker','HPHILTAN','650.127.1634',STR_TO_DATE('06-FEB-2000', '%d-%M-%Y'),'ST_CLERK',2200,NULL,122,50),(137,'Renske','Ladwig','RLADWIG','650.121.1234',STR_TO_DATE('14-JUL-1995', '%d-%M-%Y'),'ST_CLERK',3600,NULL,123,50),(138,'Stephen','Stiles','SSTILES','650.121.2034',STR_TO_DATE('26-OCT-1997', '%d-%M-%Y'),'ST_CLERK',3200,NULL,123,50),(139,'John','Seo','JSEO','650.121.2019',STR_TO_DATE('12-FEB-1998', '%d-%M-%Y'),'ST_CLERK',2700,NULL,123,50),(140,'Joshua','Patel','JPATEL','650.121.1834',STR_TO_DATE('06-APR-1998', '%d-%M-%Y'),'ST_CLERK',2500,NULL,123,50);

Query OK, 15 rows affected (0.006 sec)

Records: 15 Duplicates: 0 Warnings: 0

MariaDB [hr]> INSERT INTO employees(employee_id,first_name,last_name,email,phone_number,hire_date,job_id,salary,commission_pct,manager_id,department_id) VALUES (141,'Trenna','Rajs','TRAJS','650.121.8009',STR_TO_DATE('17-OCT-1995', '%d-%M-%Y'),'ST_CLERK',3500,NULL,124,50),(142,'Curtis','Davies','CDAVIES','650.121.2994',STR_TO_DATE('29-JAN-1997', '%d-%M-%Y'),'ST_CLERK',3100,NULL,124,50),(143,'Randall','Matos','RMATOS','650.121.2874',STR_TO_DATE('15-MAR-1998', '%d-%M-%Y'),'ST_CLERK',2600,NULL,124,50),(144,'Peter','Vargas','PVARGAS','650.121.2004',STR_TO_DATE('09-JUL-1998', '%d-%M-%Y'),'ST_CLERK',2500,NULL,124,50),(145,'John','Russell','JRUSSEL','011.44.1344.429268',STR_TO_DATE('01-OCT-1996', '%d-%M-%Y'),'SA_MAN',14000,.4,100,80),(146,'Karen','Partners','KPARTNER','011.44.1344.467268',STR_TO_DATE('05-JAN-1997', '%d-%M-%Y'),'SA_MAN',13500,.3,100,80),(147,'Alberto','Errazuriz','AERRAZUR','011.44.1344.429278',STR_TO_DATE('10-MAR-1997', '%d-%M-%Y'),'SA_MAN',12000,.3,100,80),(148,'Gerald','Cambrault','GCAMBRAU','011.44.1344.619268',STR_TO_DATE('15-OCT-1999', '%d-%M-%Y'),'SA_MAN',11000,.3,100,80),(149,'Eleni','Zlotkey','EZLOTKEY','011.44.1344.429018',STR_TO_DATE('29-JAN-2000', '%d-%M-%Y'),'SA_MAN',10500,.2,100,80),(150,'Peter','Tucker','PTUCKER','011.44.1344.129268',STR_TO_DATE('30-JAN-1997', '%d-%M-%Y'),'SA_REP',10000,.3,145,80),(151,'David','Bernstein','DBERNSTE','011.44.1344.345268',STR_TO_DATE('24-MAR-1997', '%d-%M-%Y'),'SA_REP',9500,.25,145,80),(152,'Peter','Hall','PHALL','011.44.1344.478968',STR_TO_DATE('20-AUG-1997', '%d-%M-%Y'),'SA_REP',9000,.25,145,80),(153,'Christopher','Olsen','COLSEN','011.44.1344.498718',STR_TO_DATE(

'30-MAR-1998', '%d-%M-%Y'),'SA_REP',8000,.2,145,80),(154,'Nanette','Cambrault','NCAMBRAU','011.44.1344.987668',STR_TO_DATE('09-DEC-1998', '%d-%M-%Y'),'SA_REP',7500,.2,145,80),(155,'Oliver','Tuvault','OTUVAULT','011.44.1344.486508',STR_TO_DATE('23-NOV-1999', '%d-%M-%Y'),'SA_REP',7000,.15,145,80),(156,'Janette','King','JKING','011.44.1345.429268',STR_TO_DATE('30-JAN-1996', '%d-%M-%Y'),'SA_REP',10000,.35,146,80),(157,'Patrick','Sully','PSULLY','011.44.1345.929268',STR_TO_DATE('04-MAR-1996', '%d-%M-%Y'),'SA_REP',9500,.35,146,80),(158,'Allan','McEwen','AMCEWEN','011.44.1345.829268',STR_TO_DATE('01-AUG-1996', '%d-%M-%Y'),'SA_REP',9000,.35,146,80),(159,'Lindsey','Smith','LSMITH','011.44.1345.729268',STR_TO_DATE('10-MAR-1997', '%d-%M-%Y'),'SA_REP',8000,.3,146,80),(160,'Louise','Doran','LDORAN','011.44.1345.629268',STR_TO_DATE('15-DEC-1997', '%d-%M-%Y'),'SA_REP',7500,.3,146,80),(161,'Sarath','Sewall','SSEWALL','011.44.1345.529268',STR_TO_DATE('03-NOV-1998', '%d-%M-%Y'),'SA_REP',7000,.25,146,80),(162,'Clara','Vishney','CVISHNEY','011.44.1346.129268',STR_TO_DATE('11-NOV-1997', '%d-%M-%Y'),'SA_REP',10500,.25,147,80),(163,'Danielle','Greene','DGREENE','011.44.1346.229268',STR_TO_DATE('19-MAR-1999', '%d-%M-%Y'),'SA_REP',9500,.15,147,80),(164,'Mattea','Marvins','MMARVINS','011.44.1346.329268',STR_TO_DATE('24-JAN-2000', '%d-%M-%Y'),'SA_REP',7200,.10,147,80),(165,'David','Lee','DLEE','011.44.1346.529268',STR_TO_DATE('23-FEB-2000', '%d-%M-%Y'),'SA_REP',6800,.1,147,80),(166,'Sundar','Ande','SANDE','011.44.1346.629268',STR_TO_DATE('24-MAR-2000', '%d-%M-%Y'),'SA_REP',6400,.10,147,80),(167,'Amit','Banda','ABANDA','011.44.1346.729268',STR_TO_DATE('21-APR-2000', '%d-%M-%Y'),'SA_REP',6200,.10,147,80),(168,'Lisa','Ozer','LOZER','011.44.1343.929268',STR_TO_DATE('11-MAR-1997', '%d-%M-%Y'),'SA_REP',11500,.25,148,80),(169,'Harrison','Bloom','HBLOOM','011.44.1343.829268',STR_TO_DATE('23-MAR-1998', '%d-%M-%Y'),'SA_REP',10000,.20,148,80),(170,'Tayler','Fox','TFOX','011.44.1343.729268',STR_TO_DATE('24-JAN-1998', '%d-%M-%Y'),'SA_REP',9600,.20,148,80),(171,'William','Smith','WSMITH','011.44.1343.629268',STR_TO_DATE('23-FEB-1999', '%d-%M-%Y'),'SA_REP',7400,.15,148,80),(172,'Elizabeth','Bates','EBATES','011.44.1343.529268',STR_TO_DATE('24-MAR-1999', '%d-%M-%Y'),'SA_REP',7300,.15,148,80),(173,'Sundita','Kumar','SKUMAR','011.44.1343.329268',STR_TO_DATE('21-APR-2000', '%d-%M-

%Y'),'SA_REP',6100,.10,148,80),(174,'Ellen','Abel','EABEL','011.44.1644.429267',STR_TO_DATE('11-MAY-1996', '%d-%M-%Y'),'SA_REP',11000,.30,149,80);

Query OK, 34 rows affected (0.007 sec)

Records: 34 Duplicates: 0 Warnings: 0

MariaDB [hr]> INSERT INTO employees(employee_id,first_name,last_name,email,phone_number,hire_date,job_id,salary,commission_pct,manager_id,department_id) VALUES (175,'Alyssa','Hutton','AHUTTON','011.44.1644.429266',STR_TO_DATE('19-MAR-1997', '%d-%M-%Y'),'SA_REP',8800,.25,149,80),(176,'Jonathon','Taylor','JTAYLOR','011.44.1644.429265',STR_TO_DATE('24-MAR-1998', '%d-%M-%Y'),'SA_REP',8600,.20,149,80),(177,'Jack','Livingston','JLIVINGS','011.44.1644.429264',STR_TO_DATE('23-APR-1998', '%d-%M-%Y'),'SA_REP',8400,.20,149,80),(178,'Kimberely','Grant','KGRANT','011.44.1644.429263',STR_TO_DATE('24-MAY-1999', '%d-%M-%Y'),'SA_REP',7000,.15,149,NULL),(179,'Charles','Johnson','CJOHNSON','011.44.1644.429262',STR_TO_DATE('04-JAN-2000', '%d-%M-%Y'),'SA_REP',6200,.10,149,80),(180,'Winston','Taylor','WTAYLOR','650.507.9876',STR_TO_DATE('24-JAN-1998', '%d-%M-%Y'),'SH_CLERK',3200,NULL,120,50),(181,'Jean','Fleaur','JFLEAUR','650.507.9877',STR_TO_DATE('23-FEB-1998', '%d-%M-%Y'),'SH_CLERK',3100,NULL,120,50),(182,'Martha','Sullivan','MSULLIVA','650.507.9878',STR_TO_DATE('21-JUN-1999', '%d-%M-%Y'),'SH_CLERK',2500,NULL,120,50),(183,'Girard','Geoni','GGEONI','650.507.9879',STR_TO_DATE('03-FEB-2000', '%d-%M-%Y'),'SH_CLERK',2800,NULL,120,50),(184,'Nandita','Sarchand','NSARCHAN','650.509.1876',STR_TO_DATE('27-JAN-1996', '%d-%M-%Y'),'SH_CLERK',4200,NULL,121,50),(185,'Alexis','Bull','ABULL','650.509.2876',STR_TO_DATE('20-FEB-1997', '%d-%M-%Y'),'SH_CLERK',4100,NULL,121,50);

Query OK, 11 rows affected (0.006 sec)

Records: 11 Duplicates: 0 Warnings: 0

MariaDB [hr]> INSERT INTO employees (employee_id,first_name,last_name,email,phone_number,hire_date,job_id,salary,commission_pct,manager_id,department_id) VALUES (186,'Julia','Dellinger','JDELLING','650.509.3876',STR_TO_DATE('24-JUN-1998', '%d-%M-

%Y'),'SH_CLERK',3400,NULL,121,50),(187,'Anthony','Cabrio','ACABRIO','650.509.4876',STR_TO_DATE('07-FEB-1999', '%d-%M-%Y'),'SH_CLERK',3000,NULL,121,50),(188,'Kelly','Chung','KCHUNG','650.505.1876',STR_TO_DATE('14-JUN-1997', '%d-%M-%Y'),'SH_CLERK',3800,NULL,122,50),(189,'Jennifer','Dilly','JDILLY','650.505.2876',STR_TO_DATE('13-AUG-1997', '%d-%M-%Y'),'SH_CLERK',3600,NULL,122,50),(190,'Timothy','Gates','TGATES','650.505.3876',STR_TO_DATE('11-JUL-1998', '%d-%M-%Y'),'SH_CLERK',2900,NULL,122,50),(191,'Randall','Perkins','RPERKINS','650.505.4876',STR_TO_DATE('19-DEC-1999', '%d-%M-%Y'),'SH_CLERK',2500,NULL,122,50),(192,'Sarah','Bell','SBELL','650.501.1876',STR_TO_DATE('04-FEB-1996', '%d-%M-%Y'),'SH_CLERK',4000,NULL,123,50),(193,'Britney','Everett','BEVERETT','650.501.2876',STR_TO_DATE('03-MAR-1997', '%d-%M-%Y'),'SH_CLERK',3900,NULL,123,50),(194,'Samuel','McCain','SMCCAIN','650.501.3876',STR_TO_DATE('01-JUL-1998', '%d-%M-%Y'),'SH_CLERK',3200,NULL,123,50),(195,'Vance','Jones','VJONES','650.501.4876',STR_TO_DATE('17-MAR-1999', '%d-%M-%Y'),'SH_CLERK',2800,NULL,123,50),(196,'Alana','Walsh','AWALSH','650.507.9811',STR_TO_DATE('24-APR-1998', '%d-%M-%Y'),'SH_CLERK',3100,NULL,124,50),(197,'Kevin','Feeney','KFEENEY','650.507.9822',STR_TO_DATE('23-MAY-1998', '%d-%M-%Y'),'SH_CLERK',3000,NULL,124,50),(198,'Donald','OConnell','DOCONNEL','650.507.9833',STR_TO_DATE('21-JUN-1999', '%d-%M-%Y'),'SH_CLERK',2600,NULL,124,50),(199,'Douglas','Grant','DGRANT','650.507.9844',STR_TO_DATE('13-JAN-2000', '%d-%M-%Y'),'SH_CLERK',2600,NULL,124,50),(200,'Jennifer','Whalen','JWHALEN','515.123.4444',STR_TO_DATE('17-SEP-1987', '%d-%M-%Y'),'AD_ASST',4400,NULL,101,10),(201,'Michael','Hartstein','MHARTSTE','515.123.5555',STR_TO_DATE('17-FEB-1996', '%d-%M-%Y'),'MK_MAN',13000,NULL,100,20),(202,'Pat','Fay','PFAY','603.123.6666',STR_TO_DATE('17-AUG-1997', '%d-%M-%Y'),'MK_REP',6000,NULL,201,20),(203,'Susan','Mavris','SMAVRIS','515.123.7777',STR_TO_DATE('07-JUN-1994', '%d-%M-%Y'),'HR_REP',6500,NULL,101,40),(204,'Hermann','Baer','HBAER','515.123.8888',STR_TO_DATE('07-JUN-1994', '%d-%M-%Y'),'PR_REP',10000,NULL,101,70),(205,'Shelley','Higgins','SHIGGINS','515.123.8080',STR_TO_DATE('07-JUN-1994', '%d-%M-%Y'),'AC_MGR',12000,NULL,101,110),(206,'William','Gietz','WGIETZ','51hr5.123.8181',STR_TO_DATE('07-JUN-1994', '%d-%M-%Y'),'AC_ACCOUNT',8300,NULL,205,110);

Query OK, 21 rows affected (0.022 sec)

Records: 21 Duplicates: 0 Warnings: 0

MariaDB [hr]> INSERT INTO job_history (employee_id,start_date,end_date,job_id,department_id) VALUES (102,STR_TO_DATE('13-Jan-1993', '%d-%M-%Y'),STR_TO_DATE('24-Jul-1998', '%d-%M-%Y'),'IT_PROG',60),(101,STR_TO_DATE('21-Sep-1989', '%d-%M-%Y'),STR_TO_DATE('27-Oct-1993', '%d-%M-%Y'),'AC_ACCOUNT',110),(101,STR_TO_DATE('28-Oct-1993','%d-%M-%Y'),STR_TO_DATE('15-Mar-1997','%d-%M-%Y'),'AC_MGR',110),(201,STR_TO_DATE('27-Feb-1996','%d-%M-%Y'),STR_TO_DATE('19-Dec-1999','%d-%M-%Y'),'MK_REP',20),(114,STR_TO_DATE('24-Mar-1998','%d-%M-%Y'),STR_TO_DATE('31-Dec-1999','%d-%M-%Y'),'ST_CLERK',50),(122,STR_TO_DATE('01-Jan-1999','%d-%M-%Y'),STR_TO_DATE('31-Dec-1999','%d-%M-%Y'),'ST_CLERK',50),(200,STR_TO_DATE('17-Sep-1987','%d-%M-%Y'),STR_TO_DATE('17-Jun-1993','%d-%M-%Y'),'AD_ASST',90),(176,STR_TO_DATE('24-Mar-1998','%d-%M-%Y'),STR_TO_DATE('31-Dec-1998','%d-%M-%Y'),'SA_REP',80),(176,STR_TO_DATE('01-Jan-1999','%d-%M-%Y'),STR_TO_DATE('31-Dec-1999','%d-%M-%Y'),'SA_MAN',80),(200,STR_TO_DATE('01-Jul-1994','%d-%M-%Y'),STR_TO_DATE('31-Dec-1998','%d-%M-%Y'),'AC_ACCOUNT',90);

Query OK, 10 rows affected (0.006 sec)

Records: 10 Duplicates: 0 Warnings: 0

MariaDB [hr]> ALTER TABLE countries ADD FOREIGN KEY (region_id) REFERENCES regions(region_id);

Query OK, 25 rows affected (0.078 sec)

Records: 25 Duplicates: 0 Warnings: 0

MariaDB [hr]> ALTER TABLE locations ADD FOREIGN KEY (country_id) REFERENCES countries(country_id);

Query OK, 23 rows affected (0.077 sec)

Records: 23 Duplicates: 0 Warnings: 0

MariaDB [hr]> ALTER TABLE departments ADD FOREIGN KEY (location_id) REFERENCES locations(location_id);

Query OK, 27 rows affected (0.076 sec)

Records: 27 Duplicates: 0 Warnings: 0

MariaDB [hr]> ALTER TABLE employees ADD FOREIGN KEY (job_id) REFERENCES jobs(job_id);

Query OK, 107 rows affected (0.074 sec)

Records: 107 Duplicates: 0 Warnings: 0

MariaDB [hr]> ALTER TABLE employees ADD FOREIGN KEY (department_id) REFERENCES departments(department_id);

Query OK, 107 rows affected (0.079 sec)

Records: 107 Duplicates: 0 Warnings: 0

MariaDB [hr]> ALTER TABLE employees ADD FOREIGN KEY (manager_id) REFERENCES employees(employee_id);

Query OK, 107 rows affected (0.083 sec)

Records: 107 Duplicates: 0 Warnings: 0

MariaDB [hr]> ALTER TABLE departments ADD FOREIGN KEY (manager_id) REFERENCES employees (employee_id);

Query OK, 27 rows affected (0.079 sec)

Records: 27 Duplicates: 0 Warnings: 0

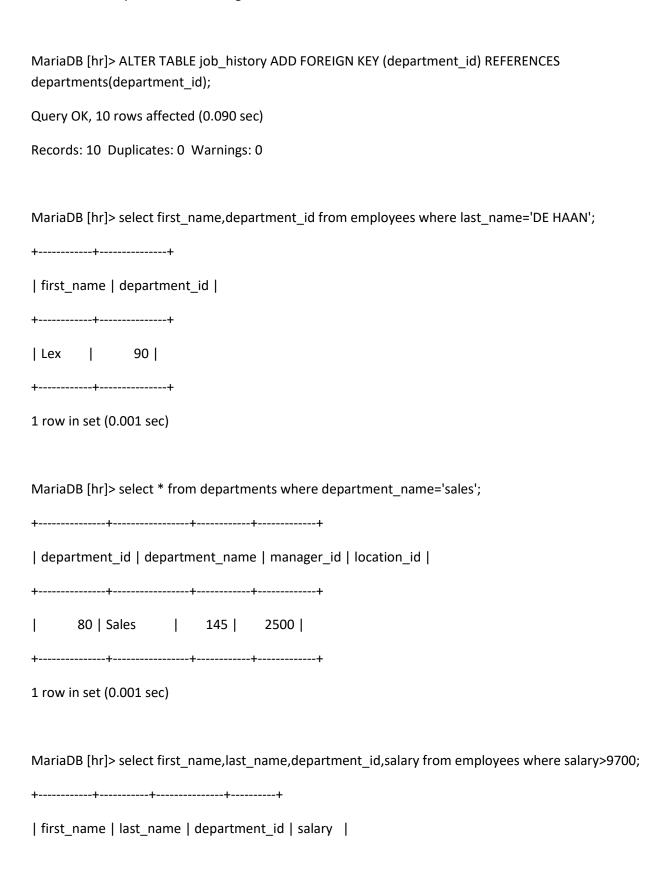MariaDB [hr]> ALTER TABLE job_history ADD FOREIGN KEY (employee_id) REFERENCES employees(employee_id);

Query OK, 10 rows affected (0.060 sec)

Records: 10 Duplicates: 0 Warnings: 0

MariaDB [hr]> ALTER TABLE job_history ADD FOREIGN KEY (job_id) REFERENCES jobs(job_id);

Query OK, 10 rows affected (0.084 sec)

Records: 10 Duplicates: 0 Warnings: 0

MariaDB [hr]> ALTER TABLE job_history ADD FOREIGN KEY (department_id) REFERENCES departments(department_id);

Query OK, 10 rows affected (0.090 sec)

Records: 10 Duplicates: 0 Warnings: 0

MariaDB [hr]> select first_name,department_id from employees where last_name='DE HAAN';

```
+------------+---------------+
| first_name | department_id |
+------------+---------------+
| Lex        |            90 |
+------------+---------------+
```

1 row in set (0.001 sec)

MariaDB [hr]> select * from departments where department_name='sales';

```
+---------------+-----------------+------------+-------------+
| department_id | department_name | manager_id | location_id |
+---------------+-----------------+------------+-------------+
|            80 | Sales           |        145 |        2500 |
+---------------+-----------------+------------+-------------+
```

1 row in set (0.001 sec)

MariaDB [hr]> select first_name,last_name,department_id,salary from employees where salary>9700;

```
+------------+-----------+---------------+----------+
| first_name | last_name | department_id | salary   |
```

```
+------------+-----------+--------------+----------+
| Steven     | King      |          90 | 24000.00 |
| Neena      | Kochhar   |          90 | 17000.00 |
| Lex        | De Haan   |          90 | 17000.00 |
| Nancy      | Greenberg |         100 | 12000.00 |
| Den        | Raphaely  |          30 | 11000.00 |
| John       | Russell   |          80 | 14000.00 |
| Karen      | Partners  |          80 | 13500.00 |
| Alberto    | Errazuriz |          80 | 12000.00 |
| Gerald     | Cambrault |          80 | 11000.00 |
| Eleni      | Zlotkey   |          80 | 10500.00 |
| Peter      | Tucker    |          80 | 10000.00 |
| Janette    | King      |          80 | 10000.00 |
| Clara      | Vishney   |          80 | 10500.00 |
| Lisa       | Ozer      |          80 | 11500.00 |
| Harrison   | Bloom     |          80 | 10000.00 |
| Ellen      | Abel      |          80 | 11000.00 |
| Michael    | Hartstein |          20 | 13000.00 |
| Hermann    | Baer      |          70 | 10000.00 |
| Shelley    | Higgins   |         110 | 12000.00 |
+------------+-----------+--------------+----------+
19 rows in set (0.001 sec)
```

MariaDB [hr]> select * from employees where hire_date<'1992-01-01';

```
+------------+-----------+----------+---------+--------------+-----------+--------+---------+---------------+-----------+--------------+
```

| 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 | NULL | NULL | 90 |

| 101 | Neena | Kochhar | NKOCHHAR | 515.123.4568 | 1989-09-21 | AD_VP | 17000.00 | NULL | 100 | 90 |

| 103 | Alexander | Hunold | AHUNOLD | 590.423.4567 | 1990-01-03 | IT_PROG | 9000.00 | NULL | 102 | 60 |

| 104 | Bruce | Ernst | BERNST | 590.423.4568 | 1991-05-21 | IT_PROG | 6000.00 | NULL | 103 | 60 |

| 200 | Jennifer | Whalen | JWHALEN | 515.123.4444 | 1987-09-17 | AD_ASST | 4400.00 | NULL | 101 | 10 |

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

5 rows in set (0.001 sec)

MariaDB [hr]> select employee_id,first_name,job_id,department_id from employees where department_id in(20,60,80);

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

| employee_id | first_name | job_id | department_id |

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

| 103 | Alexander | IT_PROG | 60 |

| 104 | Bruce | IT_PROG | 60 |

| 105 | David | IT_PROG | 60 |

| 106 | Valli | IT_PROG | 60 |

| 107 | Diana | IT_PROG | 60 |

| 145 | John | SA_MAN | 80 |

146	Karen	SA_MAN	80
147	Alberto	SA_MAN	80
148	Gerald	SA_MAN	80
149	Eleni	SA_MAN	80
150	Peter	SA_REP	80
151	David	SA_REP	80
152	Peter	SA_REP	80
153	Christopher	SA_REP	80
154	Nanette	SA_REP	80
155	Oliver	SA_REP	80
156	Janette	SA_REP	80
157	Patrick	SA_REP	80
158	Allan	SA_REP	80
159	Lindsey	SA_REP	80
160	Louise	SA_REP	80
161	Sarath	SA_REP	80
162	Clara	SA_REP	80
163	Danielle	SA_REP	80
164	Mattea	SA_REP	80
165	David	SA_REP	80
166	Sundar	SA_REP	80
167	Amit	SA_REP	80
168	Lisa	SA_REP	80
169	Harrison	SA_REP	80
170	Tayler	SA_REP	80

```
|         171 | William   | SA_REP  |          80 |
|         172 | Elizabeth | SA_REP  |          80 |
|         173 | Sundita   | SA_REP  |          80 |
|         174 | Ellen     | SA_REP  |          80 |
|         175 | Alyssa    | SA_REP  |          80 |
|         176 | Jonathon  | SA_REP  |          80 |
|         177 | Jack      | SA_REP  |          80 |
|         179 | Charles   | SA_REP  |          80 |
|         201 | Michael   | MK_MAN  |          20 |
|         202 | Pat       | MK_REP  |          20 |
+-------------+-------------+---------+---------------+
41 rows in set (0.001 sec)
```

MariaDB [hr]> select employee_id,first_name,job_id,department_id from employees where department_id not in(20,60,80);

```
+-------------+-------------+------------+---------------+
| employee_id | first_name  | job_id     | department_id |
+-------------+-------------+------------+---------------+
|         100 | Steven      | AD_PRES    |          90 |
|         101 | Neena       | AD_VP      |          90 |
|         102 | Lex         | AD_VP      |          90 |
|         108 | Nancy       | FI_MGR     |         100 |
|         109 | Daniel      | FI_ACCOUNT |         100 |
|         110 | John        | FI_ACCOUNT |         100 |
|         111 | Ismael      | FI_ACCOUNT |         100 |
|         112 | Jose Manuel | FI_ACCOUNT |         100 |
```

```
|    113 | Luis      | FI_ACCOUNT |      100 |
|    114 | Den       | PU_MAN     |       30 |
|    115 | Alexander | PU_CLERK   |       30 |
|    116 | Shelli    | PU_CLERK   |       30 |
|    117 | Sigal     | PU_CLERK   |       30 |
|    118 | Guy       | PU_CLERK   |       30 |
|    119 | Karen     | PU_CLERK   |       30 |
|    120 | Matthew   | ST_MAN     |       50 |
|    121 | Adam      | ST_MAN     |       50 |
|    122 | Payam     | ST_MAN     |       50 |
|    123 | Shanta    | ST_MAN     |       50 |
|    124 | Kevin     | ST_MAN     |       50 |
|    125 | Julia     | ST_CLERK   |       50 |
|    126 | Irene     | ST_CLERK   |       50 |
|    127 | James     | ST_CLERK   |       50 |
|    128 | Steven    | ST_CLERK   |       50 |
|    129 | Laura     | ST_CLERK   |       50 |
|    130 | Mozhe     | ST_CLERK   |       50 |
|    131 | James     | ST_CLERK   |       50 |
|    132 | TJ        | ST_CLERK   |       50 |
|    133 | Jason     | ST_CLERK   |       50 |
|    134 | Michael   | ST_CLERK   |       50 |
|    135 | Ki        | ST_CLERK   |       50 |
|    136 | Hazel     | ST_CLERK   |       50 |
|    137 | Renske    | ST_CLERK   |       50 |
```

138	Stephen	ST_CLERK	50
139	John	ST_CLERK	50
140	Joshua	ST_CLERK	50
141	Trenna	ST_CLERK	50
142	Curtis	ST_CLERK	50
143	Randall	ST_CLERK	50
144	Peter	ST_CLERK	50
180	Winston	SH_CLERK	50
181	Jean	SH_CLERK	50
182	Martha	SH_CLERK	50
183	Girard	SH_CLERK	50
184	Nandita	SH_CLERK	50
185	Alexis	SH_CLERK	50
186	Julia	SH_CLERK	50
187	Anthony	SH_CLERK	50
188	Kelly	SH_CLERK	50
189	Jennifer	SH_CLERK	50
190	Timothy	SH_CLERK	50
191	Randall	SH_CLERK	50
192	Sarah	SH_CLERK	50
193	Britney	SH_CLERK	50
194	Samuel	SH_CLERK	50
195	Vance	SH_CLERK	50
196	Alana	SH_CLERK	50
197	Kevin	SH_CLERK	50

```
|         198 | Donald      | SH_CLERK   |          50 |
|         199 | Douglas     | SH_CLERK   |          50 |
|         200 | Jennifer    | AD_ASST    |          10 |
|         203 | Susan       | HR_REP     |          40 |
|         204 | Hermann     | PR_REP     |          70 |
|         205 | Shelley     | AC_MGR     |         110 |
|         206 | William     | AC_ACCOUNT |         110 |
+-------------+-------------+------------+---------------+
65 rows in set (0.001 sec)
```

MariaDB [hr]> select last_name,phone_number,salary,manager_id from employees where manager_id in(100,102,103);

```
+-----------+--------------------+----------+------------+
| last_name | phone_number       | salary   | manager_id |
+-----------+--------------------+----------+------------+
| Kochhar   | 515.123.4568       | 17000.00 |        100 |
| De Haan   | 515.123.4569       | 17000.00 |        100 |
| Hunold    | 590.423.4567       |  9000.00 |        102 |
| Ernst     | 590.423.4568       |  6000.00 |        103 |
| Austin    | 590.423.4569       |  4800.00 |        103 |
| Pataballa | 590.423.4560       |  4800.00 |        103 |
| Lorentz   | 590.423.5567       |  4200.00 |        103 |
| Raphaely  | 515.127.4561       | 11000.00 |        100 |
| Weiss     | 650.123.1234       |  8000.00 |        100 |
| Fripp     | 650.123.2234       |  8200.00 |        100 |
| Kaufling  | 650.123.3234       |  7900.00 |        100 |
```

```
| Vollman   | 650.123.4234     | 6500.00 |      100 |

| Mourgos   | 650.123.5234     | 5800.00 |      100 |

| Russell   | 011.44.1344.429268 | 14000.00 |      100 |

| Partners  | 011.44.1344.467268 | 13500.00 |      100 |

| Errazuriz | 011.44.1344.429278 | 12000.00 |      100 |

| Cambrault | 011.44.1344.619268 | 11000.00 |      100 |

| Zlotkey   | 011.44.1344.429018 | 10500.00 |      100 |

| Hartstein | 515.123.5555     | 13000.00 |      100 |

+-----------+-------------------+----------+------------+
```

19 rows in set (0.001 sec)

MariaDB [hr]> select first_name,salary from employees where first_name like '%e';

```
+------------+----------+

| first_name | salary   |

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

| Bruce      | 6000.00 |

| Irene      | 2700.00 |

| Mozhe      | 2800.00 |

| Renske     | 3600.00 |

| Nanette    | 7500.00 |

| Janette    | 10000.00 |

| Louise     | 7500.00 |

| Danielle   | 9500.00 |

| Vance      | 2800.00 |

+------------+----------+
```

9 rows in set (0.001 sec)

MariaDB [hr]> select last_name,department_id from employees where last_name like '_i%';

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

| last_name | department_id |

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

| King | 90 |

| Himuro | 30 |

| Mikkilineni | 50 |

| Bissot | 50 |

| King | 80 |

| Vishney | 80 |

| Livingston | 80 |

| Dilly | 50 |

| Higgins | 110 |

| Gietz | 110 |

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

10 rows in set (0.001 sec)

MariaDB [hr]> select * from employees where last_name like'%L%' or last_name like '%J%' or last_name like '%H%' order by salary desc;

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

| employee_id | first_name | last_name | email | phone_number | hire_date | job_id | salary | commission_pct | manager_id | department_id |

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

101	Neena	Kochhar	NKOCHHAR	515.123.4568	1989-09-21	AD_VP	17000.00	NULL	100	90
102	Lex	De Haan	LDEHAAN	515.123.4569	1993-01-13	AD_VP	17000.00	NULL	100	90
145	John	Russell	JRUSSEL	011.44.1344.429268	1996-10-01	SA_MAN	14000.00	0.40	100	80
201	Michael	Hartstein	MHARTSTE	515.123.5555	1996-02-17	MK_MAN	13000.00	NULL	100	20
205	Shelley	Higgins	SHIGGINS	515.123.8080	1994-06-07	AC_MGR	12000.00	NULL	101	110
174	Ellen	Abel	EABEL	011.44.1644.429267	1996-05-11	SA_REP	11000.00	0.30	149	80
148	Gerald	Cambrault	GCAMBRAU	011.44.1344.619268	1999-10-15	SA_MAN	11000.00	0.30	100	80
114	Den	Raphaely	DRAPHEAL	515.127.4561	1994-12-07	PU_MAN	11000.00	NULL	100	30
162	Clara	Vishney	CVISHNEY	011.44.1346.129268	1997-11-11	SA_REP	10500.00	0.25	147	80
149	Eleni	Zlotkey	EZLOTKEY	011.44.1344.429018	2000-01-29	SA_MAN	10500.00	0.20	100	80

80 |

| 169 | Harrison | Bloom | HBLOOM | 011.44.1343.829268 | 1998-03-23 | SA_REP | 10000.00 | 0.20 | 148 |

80 |

| 157 | Patrick | Sully | PSULLY | 011.44.1345.929268 | 1996-03-04 | SA_REP | 9500.00 | 0.35 | 146 |

80 |

| 103 | Alexander | Hunold | AHUNOLD | 590.423.4567 | 1990-01-03 | IT_PROG | 9000.00 | NULL | 102 |

60 |

| 152 | Peter | Hall | PHALL | 011.44.1344.478968 | 1997-08-20 | SA_REP | 9000.00 | 0.25 | 145 |

80 |

| 175 | Alyssa | Hutton | AHUTTON | 011.44.1644.429266 | 1997-03-19 | SA_REP | 8800.00 | 0.25 | 149 |

80 |

| 176 | Jonathon | Taylor | JTAYLOR | 011.44.1644.429265 | 1998-03-24 | SA_REP | 8600.00 | 0.20 | 149 |

80 |

| 177 | Jack | Livingston | JLIVINGS | 011.44.1644.429264 | 1998-04-23 | SA_REP | 8400.00 | 0.20 | 149 |

80 |

| 110 | John | Chen | JCHEN | 515.124.4269 | 1997-09-28 | FI_ACCOUNT | 8200.00 | NULL | 108 |

100 |

| 153 | Christopher | Olsen | COLSEN | 011.44.1344.498718 | 1998-03-30 | SA_REP | 8000.00 | 0.20 | 145 |

80 |

| 159 | Lindsey | Smith | LSMITH | 011.44.1345.729268 | 1997-03-10 | SA_REP | 8000.00 | 0.30 | 146 |
| 80 |

| 122 | Payam | Kaufling | PKAUFLIN | 650.123.3234 | 1995-05-01 | ST_MAN | 7900.00 | NULL | 100 |
| 50 |

| 154 | Nanette | Cambrault | NCAMBRAU | 011.44.1344.987668 | 1998-12-09 | SA_REP | 7500.00 | 0.20 | 145 |
| 80 |

| 171 | William | Smith | WSMITH | 011.44.1343.629268 | 1999-02-23 | SA_REP | 7400.00 | 0.15 | 148 |
| 80 |

| 161 | Sarath | Sewall | SSEWALL | 011.44.1345.529268 | 1998-11-03 | SA_REP | 7000.00 | 0.25 | 146 |
| 80 |

| 155 | Oliver | Tuvault | OTUVAULT | 011.44.1344.486508 | 1999-11-23 | SA_REP | 7000.00 | 0.15 | 145 |
| 80 |

| 165 | David | Lee | DLEE | 011.44.1346.529268 | 2000-02-23 | SA_REP | 6800.00 | 0.10 | 147 |
| 80 |

| 123 | Shanta | Vollman | SVOLLMAN | 650.123.4234 | 1997-10-10 | ST_MAN | 6500.00 | NULL | 100 |
| 50 |

| 179 | Charles | Johnson | CJOHNSON | 011.44.1644.429262 | 2000-01-04 | SA_REP | 6200.00 | 0.10 | 149 |
| 80 |

| 106 | Valli | Pataballa | VPATABAL | 590.423.4560 | 1998-02-05 | IT_PROG | 4800.00 | NULL | 103 |

										60
200	Jennifer	Whalen	JWHALEN	515.123.4444	1987-09-17	AD_ASST	4400.00	NULL	101	10
184	Nandita	Sarchand	NSARCHAN	650.509.1876	1996-01-27	SH_CLERK	4200.00	NULL	121	50
107	Diana	Lorentz	DLORENTZ	590.423.5567	1999-02-07	IT_PROG	4200.00	NULL	103	60
185	Alexis	Bull	ABULL	650.509.2876	1997-02-20	SH_CLERK	4100.00	NULL	121	50
192	Sarah	Bell	SBELL	650.501.1876	1996-02-04	SH_CLERK	4000.00	NULL	123	50
188	Kelly	Chung	KCHUNG	650.505.1876	1997-06-14	SH_CLERK	3800.00	NULL	122	50
189	Jennifer	Dilly	JDILLY	650.505.2876	1997-08-13	SH_CLERK	3600.00	NULL	122	50
137	Renske	Ladwig	RLADWIG	650.121.1234	1995-07-14	ST_CLERK	3600.00	NULL	123	50
141	Trenna	Rajs	TRAJS	650.121.8009	1995-10-17	ST_CLERK	3500.00	NULL	124	50

186	Julia	Dellinger	JDELLING	650.509.3876	1998-06-24	SH_CLERK	3400.00	NULL	121	50
133	Jason	Mallin	JMALLIN	650.127.1934	1996-06-14	ST_CLERK	3300.00	NULL	122	50
180	Winston	Taylor	WTAYLOR	650.507.9876	1998-01-24	SH_CLERK	3200.00	NULL	120	50
138	Stephen	Stiles	SSTILES	650.121.2034	1997-10-26	ST_CLERK	3200.00	NULL	123	50
196	Alana	Walsh	AWALSH	650.507.9811	1998-04-24	SH_CLERK	3100.00	NULL	124	50
181	Jean	Fleaur	JFLEAUR	650.507.9877	1998-02-23	SH_CLERK	3100.00	NULL	120	50
115	Alexander	Khoo	AKHOO	515.127.4562	1995-05-18	PU_CLERK	3100.00	NULL	114	30
195	Vance	Jones	VJONES	650.501.4876	1999-03-17	SH_CLERK	2800.00	NULL	123	50
126	Irene	Mikkilineni	IMIKKILI	650.124.1224	1998-09-28	ST_CLERK	2700.00	NULL	120	50
198	Donald	OConnell	DOCONNEL	650.507.9833	1999-06-21	SH_CLERK	2600.00	NULL	124

50 |

| | 118 | Guy | Himuro | GHIMURO | 515.127.4565 | 1998-11-15 | PU_CLERK | 2600.00 | NULL | 114 |
| 30 |

| | 119 | Karen | Colmenares | KCOLMENA | 515.127.4566 | 1999-08-10 | PU_CLERK | 2500.00 | NULL | 114 |
| 30 |

| | 140 | Joshua | Patel | JPATEL | 650.121.1834 | 1998-04-06 | ST_CLERK | 2500.00 | NULL | 123 |
| 50 |

| | 131 | James | Marlow | JAMRLOW | 650.124.7234 | 1997-02-16 | ST_CLERK | 2500.00 | NULL | 121 |
| 50 |

| | 182 | Martha | Sullivan | MSULLIVA | 650.507.9878 | 1999-06-21 | SH_CLERK | 2500.00 | NULL | 120 |
| 50 |

| | 127 | James | Landry | JLANDRY | 650.124.1334 | 1999-01-14 | ST_CLERK | 2400.00 | NULL | 120 |
| 50 |

| | 136 | Hazel | Philtanker | HPHILTAN | 650.127.1634 | 2000-02-06 | ST_CLERK | 2200.00 | NULL | 122 |
| 50 |

| | 128 | Steven | Markle | SMARKLE | 650.124.1434 | 2000-03-08 | ST_CLERK | 2200.00 | NULL | 120 |
| 50 |

| | 132 | TJ | Olson | TJOLSON | 650.124.8234 | 1999-04-10 | ST_CLERK | 2100.00 | NULL | 121 |
| 50 |

```
+-------------+------------+-------------+----------+-------------------+------------+------------+----------+----------------+-------------+---------------+
```

57 rows in set (0.001 sec)

MariaDB [hr]> select first_name,hire_date,salary,department_id from employees where first_name not like'A%' order by department_id;

```
+-------------+------------+----------+---------------+
| first_name  | hire_date  | salary   | department_id |
+-------------+------------+----------+---------------+
| Kimberely   | 1999-05-24 |  7000.00 |          NULL |
| Jennifer    | 1987-09-17 |  4400.00 |            10 |
| Pat         | 1997-08-17 |  6000.00 |            20 |
| Michael     | 1996-02-17 | 13000.00 |            20 |
| Karen       | 1999-08-10 |  2500.00 |            30 |
| Guy         | 1998-11-15 |  2600.00 |            30 |
| Sigal       | 1997-07-24 |  2800.00 |            30 |
| Den         | 1994-12-07 | 11000.00 |            30 |
| Shelli      | 1997-12-24 |  2900.00 |            30 |
| Susan       | 1994-06-07 |  6500.00 |            40 |
| Samuel      | 1998-07-01 |  3200.00 |            50 |
| Peter       | 1998-07-09 |  2500.00 |            50 |
| Randall     | 1998-03-15 |  2600.00 |            50 |
| Curtis      | 1997-01-29 |  3100.00 |            50 |
| Trenna      | 1995-10-17 |  3500.00 |            50 |
| Joshua      | 1998-04-06 |  2500.00 |            50 |
| John        | 1998-02-12 |  2700.00 |            50 |
```

Stephen	1997-10-26	3200.00	50
Renske	1995-07-14	3600.00	50
Sarah	1996-02-04	4000.00	50
Randall	1999-12-19	2500.00	50
Timothy	1998-07-11	2900.00	50
Martha	1999-06-21	2500.00	50
Girard	2000-02-03	2800.00	50
Nandita	1996-01-27	4200.00	50
Jean	1998-02-23	3100.00	50
Winston	1998-01-24	3200.00	50
Kelly	1997-06-14	3800.00	50
Britney	1997-03-03	3900.00	50
Julia	1998-06-24	3400.00	50
Jennifer	1997-08-13	3600.00	50
Hazel	2000-02-06	2200.00	50
Ki	1999-12-12	2400.00	50
Michael	1998-08-26	2900.00	50
Douglas	2000-01-13	2600.00	50
Donald	1999-06-21	2600.00	50
Kevin	1998-05-23	3000.00	50
James	1999-01-14	2400.00	50
Matthew	1996-07-18	8000.00	50
Payam	1995-05-01	7900.00	50
Shanta	1997-10-10	6500.00	50
Kevin	1999-11-16	5800.00	50

Julia	1997-07-16	3200.00	50
Irene	1998-09-28	2700.00	50
Jason	1996-06-14	3300.00	50
TJ	1999-04-10	2100.00	50
James	1997-02-16	2500.00	50
Mozhe	1997-10-30	2800.00	50
Laura	1997-08-20	3300.00	50
Steven	2000-03-08	2200.00	50
Vance	1999-03-17	2800.00	50
Bruce	1991-05-21	6000.00	60
David	1997-06-25	4800.00	60
Valli	1998-02-05	4800.00	60
Diana	1999-02-07	4200.00	60
Hermann	1994-06-07	10000.00	70
William	1999-02-23	7400.00	80
Elizabeth	1999-03-24	7300.00	80
Sundita	2000-04-21	6100.00	80
Ellen	1996-05-11	11000.00	80
Jonathon	1998-03-24	8600.00	80
Jack	1998-04-23	8400.00	80
Tayler	1998-01-24	9600.00	80
Harrison	1998-03-23	10000.00	80
Lisa	1997-03-11	11500.00	80
Christopher	1998-03-30	8000.00	80
Peter	1997-08-20	9000.00	80

David	1997-03-24	9500.00	80
Peter	1997-01-30	10000.00	80
Eleni	2000-01-29	10500.00	80
Gerald	1999-10-15	11000.00	80
Karen	1997-01-05	13500.00	80
John	1996-10-01	14000.00	80
Charles	2000-01-04	6200.00	80
Nanette	1998-12-09	7500.00	80
Oliver	1999-11-23	7000.00	80
Janette	1996-01-30	10000.00	80
Sundar	2000-03-24	6400.00	80
David	2000-02-23	6800.00	80
Mattea	2000-01-24	7200.00	80
Danielle	1999-03-19	9500.00	80
Clara	1997-11-11	10500.00	80
Sarath	1998-11-03	7000.00	80
Louise	1997-12-15	7500.00	80
Lindsey	1997-03-10	8000.00	80
Patrick	1996-03-04	9500.00	80
Steven	1987-06-17	24000.00	90
Neena	1989-09-21	17000.00	90
Lex	1993-01-13	17000.00	90
Nancy	1994-08-17	12000.00	100
Daniel	1994-08-16	9000.00	100
John	1997-09-28	8200.00	100

```
| Ismael      | 1997-09-30 |  7700.00 |         100 |

| Jose Manuel | 1998-03-07 |  7800.00 |         100 |

| Luis        | 1999-12-07 |  6900.00 |         100 |

| Shelley     | 1994-06-07 | 12000.00 |         110 |

| William     | 1994-06-07 |  8300.00 |         110 |

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

97 rows in set (0.001 sec)
```

MariaDB [hr]> select * from employees where department_id is null;

```
+-------------+------------+-----------+--------+------------------+------------+-------+---------+----------------+------------+---------------+

| employee_id | first_name | last_name | email  | phone_number     | hire_date  | job_id | salary | commission_pct | manager_id | department_id |

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

|         178 | Kimberely  | Grant     | KGRANT | 011.44.1644.429263 | 1999-05-24 | SA_REP | 7000.00 | 0.15 |        149 |          NULL |

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

1 row in set (0.001 sec)
```

MariaDB [hr]> select concat(first_name,' ',last_name) as full_name,salary from employees where salary not between 7000 and 15000 order by full_name;

```
+-----------------+----------+

| full_name       | salary   |

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

| Alana Walsh     | 3100.00 |

| Alexander Khoo  | 3100.00 |
```

| Alexis Bull | 4100.00 |

| Amit Banda | 6200.00 |

| Anthony Cabrio | 3000.00 |

| Britney Everett | 3900.00 |

| Bruce Ernst | 6000.00 |

| Charles Johnson | 6200.00 |

| Curtis Davies | 3100.00 |

| David Austin | 4800.00 |

| David Lee | 6800.00 |

| Diana Lorentz | 4200.00 |

| Donald OConnell | 2600.00 |

| Douglas Grant | 2600.00 |

| Girard Geoni | 2800.00 |

| Guy Himuro | 2600.00 |

| Hazel Philtanker | 2200.00 |

| Irene Mikkilineni | 2700.00 |

| James Landry | 2400.00 |

| James Marlow | 2500.00 |

| Jason Mallin | 3300.00 |

| Jean Fleaur | 3100.00 |

| Jennifer Dilly | 3600.00 |

| Jennifer Whalen | 4400.00 |

| John Seo | 2700.00 |

| Joshua Patel | 2500.00 |

| Julia Dellinger | 3400.00 |

Julia Nayer	3200.00
Karen Colmenares	2500.00
Kelly Chung	3800.00
Kevin Feeney	3000.00
Kevin Mourgos	5800.00
Ki Gee	2400.00
Laura Bissot	3300.00
Lex De Haan	17000.00
Luis Popp	6900.00
Martha Sullivan	2500.00
Michael Rogers	2900.00
Mozhe Atkinson	2800.00
Nandita Sarchand	4200.00
Neena Kochhar	17000.00
Pat Fay	6000.00
Peter Vargas	2500.00
Randall Matos	2600.00
Randall Perkins	2500.00
Renske Ladwig	3600.00
Samuel McCain	3200.00
Sarah Bell	4000.00
Shanta Vollman	6500.00
Shelli Baida	2900.00
Sigal Tobias	2800.00
Stephen Stiles	3200.00

| Steven King | 24000.00 |

| Steven Markle | 2200.00 |

| Sundar Ande | 6400.00 |

| Sundita Kumar | 6100.00 |

| Susan Mavris | 6500.00 |

| Timothy Gates | 2900.00 |

| TJ Olson | 2100.00 |

| Trenna Rajs | 3500.00 |

| Valli Pataballa | 4800.00 |

| Vance Jones | 2800.00 |

| Winston Taylor | 3200.00 |

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

63 rows in set (0.001 sec)

MariaDB [hr]> select concat (concat(first_name,',',last_name) as full_name,concat (concat(phone_number,'-',email) as CONTACTS,salary as SAL from employees where salary between 5000 and 10000;

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 between 5000 and 10000' at line 1

MariaDB [hr]> select concat(first_name,',',last_name) as full_name,concat(phone_number,'-',email) as CONTACTS,salary as SAL from employees where salary between 5000 and 10000;

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

| full_name | CONTACTS | SAL |

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

| Alexander,Hunold | 590.423.4567-AHUNOLD | 9000.00 |

| Bruce,Ernst | 590.423.4568-BERNST | 6000.00 |

Daniel,Faviet	515.124.4169-DFAVIET	9000.00
John,Chen	515.124.4269-JCHEN	8200.00
Ismael,Sciarra	515.124.4369-ISCIARRA	7700.00
Jose Manuel,Urman	515.124.4469-JMURMAN	7800.00
Luis,Popp	515.124.4567-LPOPP	6900.00
Matthew,Weiss	650.123.1234-MWEISS	8000.00
Adam,Fripp	650.123.2234-AFRIPP	8200.00
Payam,Kaufling	650.123.3234-PKAUFLIN	7900.00
Shanta,Vollman	650.123.4234-SVOLLMAN	6500.00
Kevin,Mourgos	650.123.5234-KMOURGOS	5800.00
Peter,Tucker	011.44.1344.129268-PTUCKER	10000.00
David,Bernstein	011.44.1344.345268-DBERNSTE	9500.00
Peter,Hall	011.44.1344.478968-PHALL	9000.00
Christopher,Olsen	011.44.1344.498718-COLSEN	8000.00
Nanette,Cambrault	011.44.1344.987668-NCAMBRAU	7500.00
Oliver,Tuvault	011.44.1344.486508-OTUVAULT	7000.00
Janette,King	011.44.1345.429268-JKING	10000.00
Patrick,Sully	011.44.1345.929268-PSULLY	9500.00
Allan,McEwen	011.44.1345.829268-AMCEWEN	9000.00
Lindsey,Smith	011.44.1345.729268-LSMITH	8000.00
Louise,Doran	011.44.1345.629268-LDORAN	7500.00
Sarath,Sewall	011.44.1345.529268-SSEWALL	7000.00
Danielle,Greene	011.44.1346.229268-DGREENE	9500.00
Mattea,Marvins	011.44.1346.329268-MMARVINS	7200.00
David,Lee	011.44.1346.529268-DLEE	6800.00

| Sundar,Ande | 011.44.1346.629268-SANDE | 6400.00 |

| Amit,Banda | 011.44.1346.729268-ABANDA | 6200.00 |

| Harrison,Bloom | 011.44.1343.829268-HBLOOM | 10000.00 |

| Tayler,Fox | 011.44.1343.729268-TFOX | 9600.00 |

| William,Smith | 011.44.1343.629268-WSMITH | 7400.00 |

| Elizabeth,Bates | 011.44.1343.529268-EBATES | 7300.00 |

| Sundita,Kumar | 011.44.1343.329268-SKUMAR | 6100.00 |

| Alyssa,Hutton | 011.44.1644.429266-AHUTTON | 8800.00 |

| Jonathon,Taylor | 011.44.1644.429265-JTAYLOR | 8600.00 |

| Jack,Livingston | 011.44.1644.429264-JLIVINGS | 8400.00 |

| Kimberely,Grant | 011.44.1644.429263-KGRANT | 7000.00 |

| Charles,Johnson | 011.44.1644.429262-CJOHNSON | 6200.00 |

| Pat,Fay | 603.123.6666-PFAY | 6000.00 |

| Susan,Mavris | 515.123.7777-SMAVRIS | 6500.00 |

| Hermann,Baer | 515.123.8888-HBAER | 10000.00 |

| William,Gietz | 51hr5.123.8181-WGIETZ | 8300.00 |

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

43 rows in set (0.001 sec)

MariaDB [hr]> select * from employees where salary between 6000 and 800 and commission_pct is not null or department_id not in(80,90,100) and hire_date < '1990-01-01';

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

| employee_id | first_name | last_name | email | phone_number | hire_date | job_id | salary | commission_pct | manager_id | department_id |

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

| 200 | Jennifer | Whalen | JWHALEN | 515.123.4444 | 1987-09-17 | AD_ASST | 4400.00 | NULL | 101 | 10 |

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

1 row in set (0.001 sec)

MariaDB [hr]> select last_name,job_id,hire_date from employees where hire_date between '1995-12-12' and '1998-04-17';

+-----------+------------+------------+
| last_name | job_id | hire_date |
+-----------+------------+------------+
Austin	IT_PROG	1997-06-25
Pataballa	IT_PROG	1998-02-05
Chen	FI_ACCOUNT	1997-09-28
Sciarra	FI_ACCOUNT	1997-09-30
Urman	FI_ACCOUNT	1998-03-07
Baida	PU_CLERK	1997-12-24
Tobias	PU_CLERK	1997-07-24
Weiss	ST_MAN	1996-07-18
Fripp	ST_MAN	1997-04-10
Vollman	ST_MAN	1997-10-10
Nayer	ST_CLERK	1997-07-16
Bissot	ST_CLERK	1997-08-20
Atkinson	ST_CLERK	1997-10-30
Marlow	ST_CLERK	1997-02-16
Mallin	ST_CLERK	1996-06-14
Stiles	ST_CLERK	1997-10-26

Seo	ST_CLERK	1998-02-12
Patel	ST_CLERK	1998-04-06
Davies	ST_CLERK	1997-01-29
Matos	ST_CLERK	1998-03-15
Russell	SA_MAN	1996-10-01
Partners	SA_MAN	1997-01-05
Errazuriz	SA_MAN	1997-03-10
Tucker	SA_REP	1997-01-30
Bernstein	SA_REP	1997-03-24
Hall	SA_REP	1997-08-20
Olsen	SA_REP	1998-03-30
King	SA_REP	1996-01-30
Sully	SA_REP	1996-03-04
McEwen	SA_REP	1996-08-01
Smith	SA_REP	1997-03-10
Doran	SA_REP	1997-12-15
Vishney	SA_REP	1997-11-11
Ozer	SA_REP	1997-03-11
Bloom	SA_REP	1998-03-23
Fox	SA_REP	1998-01-24
Abel	SA_REP	1996-05-11
Hutton	SA_REP	1997-03-19
Taylor	SA_REP	1998-03-24
Taylor	SH_CLERK	1998-01-24
Fleaur	SH_CLERK	1998-02-23

```
| Sarchand  | SH_CLERK  | 1996-01-27 |

| Bull      | SH_CLERK  | 1997-02-20 |

| Chung     | SH_CLERK  | 1997-06-14 |

| Dilly     | SH_CLERK  | 1997-08-13 |

| Bell      | SH_CLERK  | 1996-02-04 |

| Everett   | SH_CLERK  | 1997-03-03 |

| Hartstein | MK_MAN    | 1996-02-17 |

| Fay       | MK_REP    | 1997-08-17 |

+----------+-----------+------------+
```

49 rows in set (0.001 sec)

MariaDB [hr]> select concat(first_name,'-',last_name)as full_name,hire_date,commission_pct,phone_number,salary from employees where salary > 10000 or phone_number like '%__5' order by first_name desc;

```
+-------------------+------------+----------------+-------------------+----------+
| full_name         | hire_date  | commission_pct | phone_number      | salary   |
+-------------------+------------+----------------+-------------------+----------+
| Steven-King       | 1987-06-17 |           NULL | 515.123.4567      | 24000.00 |
| Shelley-Higgins   | 1994-06-07 |           NULL | 515.123.8080      | 12000.00 |
| Neena-Kochhar     | 1989-09-21 |           NULL | 515.123.4568      | 17000.00 |
| Nancy-Greenberg   | 1994-08-17 |           NULL | 515.124.4569      | 12000.00 |
| Michael-Hartstein | 1996-02-17 |           NULL | 515.123.5555      | 13000.00 |
| Lisa-Ozer         | 1997-03-11 |           0.25 | 011.44.1343.929268| 11500.00 |
| Lex-De Haan       | 1993-01-13 |           NULL | 515.123.4569      | 17000.00 |
| Karen-Partners    | 1997-01-05 |           0.30 | 011.44.1344.467268| 13500.00 |
| Jonathon-Taylor   | 1998-03-24 |           0.20 | 011.44.1644.429265|  8600.00 |
```

```
| John-Russell     | 1996-10-01 |        0.40 | 011.44.1344.429268 | 14000.00 |

| Guy-Himuro       | 1998-11-15 |        NULL | 515.127.4565       | 2600.00 |

| Gerald-Cambrault | 1999-10-15 |        0.30 | 011.44.1344.619268 | 11000.00 |

| Ellen-Abel       | 1996-05-11 |        0.30 | 011.44.1644.429267 | 11000.00 |

| Eleni-Zlotkey    | 2000-01-29 |        0.20 | 011.44.1344.429018 | 10500.00 |

| Den-Raphaely     | 1994-12-07 |        NULL | 515.127.4561       | 11000.00 |

| Clara-Vishney    | 1997-11-11 |        0.25 | 011.44.1346.129268 | 10500.00 |

| Alberto-Errazuriz | 1997-03-10 |        0.30 | 011.44.1344.429278 | 12000.00 |

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

17 rows in set (0.001 sec)
```

MariaDB [hr]> select last_name,salary from employees where salary > 12000;

```
+-----------+----------+

| last_name | salary   |

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

| King      | 24000.00 |

| Kochhar   | 17000.00 |

| De Haan   | 17000.00 |

| Russell   | 14000.00 |

| Partners  | 13500.00 |

| Hartstein | 13000.00 |

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

6 rows in set (0.001 sec)
```

MariaDB [hr]> select last_name,department_id from employees where department_id IN (50,80);

```
+------------+--------------+
| last_name   | department_id |
+------------+--------------+
| Weiss       |          50 |
| Fripp       |          50 |
| Kaufling    |          50 |
| Vollman     |          50 |
| Mourgos     |          50 |
| Nayer       |          50 |
| Mikkilineni |          50 |
| Landry      |          50 |
| Markle      |          50 |
| Bissot      |          50 |
| Atkinson    |          50 |
| Marlow      |          50 |
| Olson       |          50 |
| Mallin      |          50 |
| Rogers      |          50 |
| Gee         |          50 |
| Philtanker  |          50 |
| Ladwig      |          50 |
| Stiles      |          50 |
| Seo         |          50 |
| Patel       |          50 |
| Rajs        |          50 |
```

Davies	50
Matos	50
Vargas	50
Russell	80
Partners	80
Errazuriz	80
Cambrault	80
Zlotkey	80
Tucker	80
Bernstein	80
Hall	80
Olsen	80
Cambrault	80
Tuvault	80
King	80
Sully	80
McEwen	80
Smith	80
Doran	80
Sewall	80
Vishney	80
Greene	80
Marvins	80
Lee	80
Ande	80

Banda	80
Ozer	80
Bloom	80
Fox	80
Smith	80
Bates	80
Kumar	80
Abel	80
Hutton	80
Taylor	80
Livingston	80
Johnson	80
Taylor	50
Fleaur	50
Sullivan	50
Geoni	50
Sarchand	50
Bull	50
Dellinger	50
Cabrio	50
Chung	50
Dilly	50
Gates	50
Perkins	50
Bell	50

```
| Everett    |        50 |

| McCain     |        50 |

| Jones      |        50 |

| Walsh      |        50 |

| Feeney     |        50 |

| OConnell   |        50 |

| Grant      |        50 |

+------------+--------------+
```

79 rows in set (0.001 sec)

MariaDB [hr]> select last_name,department_id from employees where department_id =50 or department_id=80;

```
+------------+--------------+

| last_name  | department_id |

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

| Weiss      |        50 |

| Fripp      |        50 |

| Kaufling   |        50 |

| Vollman    |        50 |

| Mourgos    |        50 |

| Nayer      |        50 |

| Mikkilineni |        50 |

| Landry     |        50 |

| Markle     |        50 |

| Bissot     |        50 |

| Atkinson   |        50 |
```

Marlow	50
Olson	50
Mallin	50
Rogers	50
Gee	50
Philtanker	50
Ladwig	50
Stiles	50
Seo	50
Patel	50
Rajs	50
Davies	50
Matos	50
Vargas	50
Russell	80
Partners	80
Errazuriz	80
Cambrault	80
Zlotkey	80
Tucker	80
Bernstein	80
Hall	80
Olsen	80
Cambrault	80
Tuvault	80

King	80
Sully	80
McEwen	80
Smith	80
Doran	80
Sewall	80
Vishney	80
Greene	80
Marvins	80
Lee	80
Ande	80
Banda	80
Ozer	80
Bloom	80
Fox	80
Smith	80
Bates	80
Kumar	80
Abel	80
Hutton	80
Taylor	80
Livingston	80
Johnson	80
Taylor	50
Fleaur	50

```
| Sullivan   |        50 |
| Geoni      |        50 |
| Sarchand   |        50 |
| Bull       |        50 |
| Dellinger  |        50 |
| Cabrio     |        50 |
| Chung      |        50 |
| Dilly      |        50 |
| Gates      |        50 |
| Perkins    |        50 |
| Bell       |        50 |
| Everett    |        50 |
| McCain     |        50 |
| Jones      |        50 |
| Walsh      |        50 |
| Feeney     |        50 |
| OConnell   |        50 |
| Grant      |        50 |
+------------+--------------+
79 rows in set (0.001 sec)


MariaDB [hr]> select first_name,salary from employees where commission_pct is null;

+-------------+----------+
| first_name  | salary   |
+-------------+----------+
```

Steven	24000.00
Neena	17000.00
Lex	17000.00
Alexander	9000.00
Bruce	6000.00
David	4800.00
Valli	4800.00
Diana	4200.00
Nancy	12000.00
Daniel	9000.00
John	8200.00
Ismael	7700.00
Jose Manuel	7800.00
Luis	6900.00
Den	11000.00
Alexander	3100.00
Shelli	2900.00
Sigal	2800.00
Guy	2600.00
Karen	2500.00
Matthew	8000.00
Adam	8200.00
Payam	7900.00
Shanta	6500.00
Kevin	5800.00

Julia	3200.00
Irene	2700.00
James	2400.00
Steven	2200.00
Laura	3300.00
Mozhe	2800.00
James	2500.00
TJ	2100.00
Jason	3300.00
Michael	2900.00
Ki	2400.00
Hazel	2200.00
Renske	3600.00
Stephen	3200.00
John	2700.00
Joshua	2500.00
Trenna	3500.00
Curtis	3100.00
Randall	2600.00
Peter	2500.00
Winston	3200.00
Jean	3100.00
Martha	2500.00
Girard	2800.00
Nandita	4200.00

```
| Alexis     |  4100.00 |
| Julia      |  3400.00 |
| Anthony    |  3000.00 |
| Kelly      |  3800.00 |
| Jennifer   |  3600.00 |
| Timothy    |  2900.00 |
| Randall    |  2500.00 |
| Sarah      |  4000.00 |
| Britney    |  3900.00 |
| Samuel     |  3200.00 |
| Vance      |  2800.00 |
| Alana      |  3100.00 |
| Kevin      |  3000.00 |
| Donald     |  2600.00 |
| Douglas    |  2600.00 |
| Jennifer   |  4400.00 |
| Michael    | 13000.00 |
| Pat        |  6000.00 |
| Susan      |  6500.00 |
| Hermann    | 10000.00 |
| Shelley    | 12000.00 |
| William    |  8300.00 |
+------------+----------+
72 rows in set (0.001 sec)
```

MariaDB [hr]> select first_name,salary,manager_id from employees where manager_id is not null;

```
+-------------+----------+------------+
| first_name  | salary   | manager_id |
+-------------+----------+------------+
| Neena       | 17000.00 |        100 |
| Lex         | 17000.00 |        100 |
| Alexander   |  9000.00 |        102 |
| Bruce       |  6000.00 |        103 |
| David       |  4800.00 |        103 |
| Valli       |  4800.00 |        103 |
| Diana       |  4200.00 |        103 |
| Nancy       | 12000.00 |        101 |
| Daniel      |  9000.00 |        108 |
| John        |  8200.00 |        108 |
| Ismael      |  7700.00 |        108 |
| Jose Manuel |  7800.00 |        108 |
| Luis        |  6900.00 |        108 |
| Den         | 11000.00 |        100 |
| Alexander   |  3100.00 |        114 |
| Shelli      |  2900.00 |        114 |
| Sigal       |  2800.00 |        114 |
| Guy         |  2600.00 |        114 |
| Karen       |  2500.00 |        114 |
| Matthew     |  8000.00 |        100 |
| Adam        |  8200.00 |        100 |
```

Payam	7900.00	100
Shanta	6500.00	100
Kevin	5800.00	100
Julia	3200.00	120
Irene	2700.00	120
James	2400.00	120
Steven	2200.00	120
Laura	3300.00	121
Mozhe	2800.00	121
James	2500.00	121
TJ	2100.00	121
Jason	3300.00	122
Michael	2900.00	122
Ki	2400.00	122
Hazel	2200.00	122
Renske	3600.00	123
Stephen	3200.00	123
John	2700.00	123
Joshua	2500.00	123
Trenna	3500.00	124
Curtis	3100.00	124
Randall	2600.00	124
Peter	2500.00	124
John	14000.00	100
Karen	13500.00	100

Alberto	12000.00	100
Gerald	11000.00	100
Eleni	10500.00	100
Peter	10000.00	145
David	9500.00	145
Peter	9000.00	145
Christopher	8000.00	145
Nanette	7500.00	145
Oliver	7000.00	145
Janette	10000.00	146
Patrick	9500.00	146
Allan	9000.00	146
Lindsey	8000.00	146
Louise	7500.00	146
Sarath	7000.00	146
Clara	10500.00	147
Danielle	9500.00	147
Mattea	7200.00	147
David	6800.00	147
Sundar	6400.00	147
Amit	6200.00	147
Lisa	11500.00	148
Harrison	10000.00	148
Tayler	9600.00	148
William	7400.00	148

Elizabeth	7300.00	148
Sundita	6100.00	148
Ellen	11000.00	149
Alyssa	8800.00	149
Jonathon	8600.00	149
Jack	8400.00	149
Kimberely	7000.00	149
Charles	6200.00	149
Winston	3200.00	120
Jean	3100.00	120
Martha	2500.00	120
Girard	2800.00	120
Nandita	4200.00	121
Alexis	4100.00	121
Julia	3400.00	121
Anthony	3000.00	121
Kelly	3800.00	122
Jennifer	3600.00	122
Timothy	2900.00	122
Randall	2500.00	122
Sarah	4000.00	123
Britney	3900.00	123
Samuel	3200.00	123
Vance	2800.00	123
Alana	3100.00	124

| Kevin | 3000.00 | 124 |

| Donald | 2600.00 | 124 |

| Douglas | 2600.00 | 124 |

| Jennifer | 4400.00 | 101 |

| Michael | 13000.00 | 100 |

| Pat | 6000.00 | 201 |

| Susan | 6500.00 | 101 |

| Hermann | 10000.00 | 101 |

| Shelley | 12000.00 | 101 |

| William | 8300.00 | 205 |

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

106 rows in set (0.001 sec)

MariaDB [hr]> select lower(first_name),upper(last_name) from employees where employee_id between 80 and 150;

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

| lower(first_name) | upper(last_name) |

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

| steven | KING |

| 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 |

| peter | TUCKER |

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

51 rows in set (0.064 sec)

MariaDB [hr]> select first_name, last_name from employees where lower(last_name)='king';

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

| first_name | last_name |

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

| Steven | King |

```
| Janette   | King     |

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

2 rows in set (0.001 sec)


MariaDB [hr]> select concat(concat (first_name,','),last_name) as full_name from employees;

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

| full_name        |

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

| Steven,King      |

| 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 |

| 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   |

| Michael,Hartstein |

| Pat,Fay           |

| Susan,Mavris      |

| Hermann,Baer      |

| Shelley,Higgins   |

| William,Gietz     |

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

107 rows in set (0.001 sec)
```

MariaDB [hr]> select first_name, last_name, concat(left(first_name, 1), right(last_name, 3), '@oracal.com') as email from employees;

```
+------------+------------+-----------------+
| first_name | last_name  | email           |
+------------+------------+-----------------+
| Steven     | King       | Sing@oracal.com |
| Neena      | Kochhar    | Nhar@oracal.com |
| Lex        | De Haan    | Laan@oracal.com |
```

| Alexander | Hunold | Aold@oracal.com |

| Bruce | Ernst | Bnst@oracal.com |

| David | Austin | Dtin@oracal.com |

| Valli | Pataballa | Vlla@oracal.com |

| Diana | Lorentz | Dntz@oracal.com |

| Nancy | Greenberg | Nerg@oracal.com |

| Daniel | Faviet | Diet@oracal.com |

| John | Chen | Jhen@oracal.com |

| Ismael | Sciarra | Irra@oracal.com |

| Jose Manuel | Urman | Jman@oracal.com |

| Luis | Popp | Lopp@oracal.com |

| Den | Raphaely | Dely@oracal.com |

| Alexander | Khoo | Ahoo@oracal.com |

| Shelli | Baida | Sida@oracal.com |

| Sigal | Tobias | Sias@oracal.com |

| Guy | Himuro | Guro@oracal.com |

| Karen | Colmenares | Kres@oracal.com |

| Matthew | Weiss | Miss@oracal.com |

| Adam | Fripp | Aipp@oracal.com |

| Payam | Kaufling | Ping@oracal.com |

| Shanta | Vollman | Sman@oracal.com |

| Kevin | Mourgos | Kgos@oracal.com |

| Julia | Nayer | Jyer@oracal.com |

| Irene | Mikkilineni | Ieni@oracal.com |

| James | Landry | Jdry@oracal.com |

| Steven | Markle | Skle@oracal.com |

| Laura | Bissot | Lsot@oracal.com |

| Mozhe | Atkinson | Mson@oracal.com |

| James | Marlow | Jlow@oracal.com |

| TJ | Olson | Tson@oracal.com |

| Jason | Mallin | Jlin@oracal.com |

| Michael | Rogers | Mers@oracal.com |

| Ki | Gee | KGee@oracal.com |

| Hazel | Philtanker | Hker@oracal.com |

| Renske | Ladwig | Rwig@oracal.com |

| Stephen | Stiles | Sles@oracal.com |

| John | Seo | JSeo@oracal.com |

| Joshua | Patel | Jtel@oracal.com |

| Trenna | Rajs | Tajs@oracal.com |

| Curtis | Davies | Cies@oracal.com |

| Randall | Matos | Rtos@oracal.com |

| Peter | Vargas | Pgas@oracal.com |

| John | Russell | Jell@oracal.com |

| Karen | Partners | Kers@oracal.com |

| Alberto | Errazuriz | Ariz@oracal.com |

| Gerald | Cambrault | Gult@oracal.com |

| Eleni | Zlotkey | Ekey@oracal.com |

| Peter | Tucker | Pker@oracal.com |

| David | Bernstein | Dein@oracal.com |

| Peter | Hall | Pall@oracal.com |

Christopher	Olsen	Csen@oracal.com
Nanette	Cambrault	Nult@oracal.com
Oliver	Tuvault	Oult@oracal.com
Janette	King	Jing@oracal.com
Patrick	Sully	Plly@oracal.com
Allan	McEwen	Awen@oracal.com
Lindsey	Smith	Lith@oracal.com
Louise	Doran	Lran@oracal.com
Sarath	Sewall	Sall@oracal.com
Clara	Vishney	Cney@oracal.com
Danielle	Greene	Dene@oracal.com
Mattea	Marvins	Mins@oracal.com
David	Lee	DLee@oracal.com
Sundar	Ande	Snde@oracal.com
Amit	Banda	Anda@oracal.com
Lisa	Ozer	Lzer@oracal.com
Harrison	Bloom	Hoom@oracal.com
Tayler	Fox	TFox@oracal.com
William	Smith	With@oracal.com
Elizabeth	Bates	Etes@oracal.com
Sundita	Kumar	Smar@oracal.com
Ellen	Abel	Ebel@oracal.com
Alyssa	Hutton	Aton@oracal.com
Jonathon	Taylor	Jlor@oracal.com
Jack	Livingston	Jton@oracal.com

Kimberely	Grant	Kant@oracal.com
Charles	Johnson	Cson@oracal.com
Winston	Taylor	Wlor@oracal.com
Jean	Fleaur	Jaur@oracal.com
Martha	Sullivan	Mvan@oracal.com
Girard	Geoni	Goni@oracal.com
Nandita	Sarchand	Nand@oracal.com
Alexis	Bull	Aull@oracal.com
Julia	Dellinger	Jger@oracal.com
Anthony	Cabrio	Ario@oracal.com
Kelly	Chung	Kung@oracal.com
Jennifer	Dilly	Jlly@oracal.com
Timothy	Gates	Ttes@oracal.com
Randall	Perkins	Rins@oracal.com
Sarah	Bell	Sell@oracal.com
Britney	Everett	Bett@oracal.com
Samuel	McCain	Sain@oracal.com
Vance	Jones	Vnes@oracal.com
Alana	Walsh	Alsh@oracal.com
Kevin	Feeney	Kney@oracal.com
Donald	OConnell	Dell@oracal.com
Douglas	Grant	Dant@oracal.com
Jennifer	Whalen	Jlen@oracal.com
Michael	Hartstein	Mein@oracal.com
Pat	Fay	PFay@oracal.com

| Susan | Mavris | Sris@oracal.com |

| Hermann | Baer | Haer@oracal.com |

| Shelley | Higgins | Sins@oracal.com |

| William | Gietz | Wetz@oracal.com |

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

107 rows in set (0.002 sec)

MariaDB [hr]> select concat(concat(first_name, ','), last_name) from employees;

+--+

| concat(concat(first_name, ','), last_name) |

+--+

| Steven,King |

| 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 |
| 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 |

| Michael,Hartstein |

| Pat,Fay |

| Susan,Mavris |

| Hermann,Baer |

| Shelley,Higgins |

| William,Gietz |

+--+

107 rows in set (0.001 sec)

MariaDB [hr]> select concat(concat(first_name, ','), last_name), hire_date, commission_pct, phone_number, salary from employees where salary>10000 or substr(phone_number, 3, 1)='5' order by first_name desc;

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

| concat(concat(first_name, ','), last_name) | hire_date | commission_pct | phone_number | salary |

Susan,Mavris	1994-06-07	NULL	515.123.7777	6500.00
Steven,King	1987-06-17	NULL	515.123.4567	24000.00
Sigal,Tobias	1997-07-24	NULL	515.127.4564	2800.00
Shelli,Baida	1997-12-24	NULL	515.127.4563	2900.00
Shelley,Higgins	1994-06-07	NULL	515.123.8080	12000.00
Neena,Kochhar	1989-09-21	NULL	515.123.4568	17000.00
Nancy,Greenberg	1994-08-17	NULL	515.124.4569	12000.00
Michael,Hartstein	1996-02-17	NULL	515.123.5555	13000.00
Luis,Popp	1999-12-07	NULL	515.124.4567	6900.00
Lisa,Ozer	1997-03-11	0.25	011.44.1343.929268	11500.00
Lex,De Haan	1993-01-13	NULL	515.123.4569	17000.00
Karen,Colmenares	1999-08-10	NULL	515.127.4566	2500.00
Karen,Partners	1997-01-05	0.30	011.44.1344.467268	13500.00
Jose Manuel,Urman	1998-03-07	NULL	515.124.4469	7800.00
John,Chen	1997-09-28	NULL	515.124.4269	8200.00
John,Russell	1996-10-01	0.40	011.44.1344.429268	14000.00
Jennifer,Whalen	1987-09-17	NULL	515.123.4444	4400.00
Ismael,Sciarra	1997-09-30	NULL	515.124.4369	7700.00
Hermann,Baer	1994-06-07	NULL	515.123.8888	10000.00
Guy,Himuro	1998-11-15	NULL	515.127.4565	2600.00
Gerald,Cambrault	1999-10-15	0.30	011.44.1344.619268	11000.00
Ellen,Abel	1996-05-11	0.30	011.44.1644.429267	11000.00
Eleni,Zlotkey	2000-01-29	0.20	011.44.1344.429018	10500.00
Den,Raphaely	1994-12-07	NULL	515.127.4561	11000.00

| Daniel,Faviet | 1994-08-16 | NULL | 515.124.4169 | 9000.00 |

| Clara,Vishney | 1997-11-11 | 0.25 | 011.44.1346.129268 | 10500.00 |

| Alexander,Khoo | 1995-05-18 | NULL | 515.127.4562 | 3100.00 |

| Alberto,Errazuriz | 1997-03-10 | 0.30 | 011.44.1344.429278 | 12000.00 |

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

28 rows in set (0.001 sec)

MariaDB [hr]> select last_name, salary from employees where salary>12000;

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

| last_name | salary |

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

| King | 24000.00 |

| Kochhar | 17000.00 |

| De Haan | 17000.00 |

| Russell | 14000.00 |

| Partners | 13500.00 |

| Hartstein | 13000.00 |

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

6 rows in set (0.001 sec)

MariaDB [hr]> select last_name, department_id from employees where department_id=50 or department_id=80;

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

| last_name | department_id |

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

| Weiss | 50 |

Fripp	50
Kaufling	50
Vollman	50
Mourgos	50
Nayer	50
Mikkilineni	50
Landry	50
Markle	50
Bissot	50
Atkinson	50
Marlow	50
Olson	50
Mallin	50
Rogers	50
Gee	50
Philtanker	50
Ladwig	50
Stiles	50
Seo	50
Patel	50
Rajs	50
Davies	50
Matos	50
Vargas	50
Russell	80

Partners	80
Errazuriz	80
Cambrault	80
Zlotkey	80
Tucker	80
Bernstein	80
Hall	80
Olsen	80
Cambrault	80
Tuvault	80
King	80
Sully	80
McEwen	80
Smith	80
Doran	80
Sewall	80
Vishney	80
Greene	80
Marvins	80
Lee	80
Ande	80
Banda	80
Ozer	80
Bloom	80
Fox	80

Smith	80
Bates	80
Kumar	80
Abel	80
Hutton	80
Taylor	80
Livingston	80
Johnson	80
Taylor	50
Fleaur	50
Sullivan	50
Geoni	50
Sarchand	50
Bull	50
Dellinger	50
Cabrio	50
Chung	50
Dilly	50
Gates	50
Perkins	50
Bell	50
Everett	50
McCain	50
Jones	50
Walsh	50

| Feeney | 50 |

| OConnell | 50 |

| Grant | 50 |

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

79 rows in set (0.003 sec)

MariaDB [hr]> select last_name, salary from employees where commission_pct is not null;

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

| last_name | salary |

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

| Russell | 14000.00 |

| Partners | 13500.00 |

| Errazuriz | 12000.00 |

| Cambrault | 11000.00 |

| Zlotkey | 10500.00 |

| Tucker | 10000.00 |

| Bernstein | 9500.00 |

| Hall | 9000.00 |

| Olsen | 8000.00 |

| Cambrault | 7500.00 |

| Tuvault | 7000.00 |

| King | 10000.00 |

| Sully | 9500.00 |

| McEwen | 9000.00 |

| Smith | 8000.00 |

| Doran | 7500.00 |

| Sewall | 7000.00 |

| Vishney | 10500.00 |

| Greene | 9500.00 |

| Marvins | 7200.00 |

| Lee | 6800.00 |

| Ande | 6400.00 |

| Banda | 6200.00 |

| Ozer | 11500.00 |

| Bloom | 10000.00 |

| Fox | 9600.00 |

| Smith | 7400.00 |

| Bates | 7300.00 |

| Kumar | 6100.00 |

| Abel | 11000.00 |

| Hutton | 8800.00 |

| Taylor | 8600.00 |

| Livingston | 8400.00 |

| Grant | 7000.00 |

| Johnson | 6200.00 |

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

35 rows in set (0.001 sec)

MariaDB [hr]> select last_name, salary, manager_id from employees where manager_id is not null;

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

| last_name | salary | manager_id |
+-------------+----------+------------+
Kochhar	17000.00	100
De Haan	17000.00	100
Hunold	9000.00	102
Ernst	6000.00	103
Austin	4800.00	103
Pataballa	4800.00	103
Lorentz	4200.00	103
Greenberg	12000.00	101
Faviet	9000.00	108
Chen	8200.00	108
Sciarra	7700.00	108
Urman	7800.00	108
Popp	6900.00	108
Raphaely	11000.00	100
Khoo	3100.00	114
Baida	2900.00	114
Tobias	2800.00	114
Himuro	2600.00	114
Colmenares	2500.00	114
Weiss	8000.00	100
Fripp	8200.00	100
Kaufling	7900.00	100
Vollman	6500.00	100

Mourgos	5800.00	100
Nayer	3200.00	120
Mikkilineni	2700.00	120
Landry	2400.00	120
Markle	2200.00	120
Bissot	3300.00	121
Atkinson	2800.00	121
Marlow	2500.00	121
Olson	2100.00	121
Mallin	3300.00	122
Rogers	2900.00	122
Gee	2400.00	122
Philtanker	2200.00	122
Ladwig	3600.00	123
Stiles	3200.00	123
Seo	2700.00	123
Patel	2500.00	123
Rajs	3500.00	124
Davies	3100.00	124
Matos	2600.00	124
Vargas	2500.00	124
Russell	14000.00	100
Partners	13500.00	100
Errazuriz	12000.00	100
Cambrault	11000.00	100

Zlotkey	10500.00	100
Tucker	10000.00	145
Bernstein	9500.00	145
Hall	9000.00	145
Olsen	8000.00	145
Cambrault	7500.00	145
Tuvault	7000.00	145
King	10000.00	146
Sully	9500.00	146
McEwen	9000.00	146
Smith	8000.00	146
Doran	7500.00	146
Sewall	7000.00	146
Vishney	10500.00	147
Greene	9500.00	147
Marvins	7200.00	147
Lee	6800.00	147
Ande	6400.00	147
Banda	6200.00	147
Ozer	11500.00	148
Bloom	10000.00	148
Fox	9600.00	148
Smith	7400.00	148
Bates	7300.00	148
Kumar	6100.00	148

Abel	11000.00	149
Hutton	8800.00	149
Taylor	8600.00	149
Livingston	8400.00	149
Grant	7000.00	149
Johnson	6200.00	149
Taylor	3200.00	120
Fleaur	3100.00	120
Sullivan	2500.00	120
Geoni	2800.00	120
Sarchand	4200.00	121
Bull	4100.00	121
Dellinger	3400.00	121
Cabrio	3000.00	121
Chung	3800.00	122
Dilly	3600.00	122
Gates	2900.00	122
Perkins	2500.00	122
Bell	4000.00	123
Everett	3900.00	123
McCain	3200.00	123
Jones	2800.00	123
Walsh	3100.00	124
Feeney	3000.00	124
OConnell	2600.00	124

```
| Grant      |  2600.00 |        124 |

| Whalen     |  4400.00 |        101 |

| Hartstein  | 13000.00 |        100 |

| Fay        |  6000.00 |        201 |

| Mavris     |  6500.00 |        101 |

| Baer       | 10000.00 |        101 |

| Higgins    | 12000.00 |        101 |

| Gietz      |  8300.00 |        205 |

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

106 rows in set (0.003 sec)
```

MariaDB [hr]> select lower(first_name), upper(last_name) from employees where employee_id between 50 and 100;

```
+------------------+-----------------+

| lower(first_name) | upper(last_name) |

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

| steven           | KING            |

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

1 row in set (0.001 sec)
```

MariaDB [hr]> select lower(first_name), upper(last_name) from employees where employee_id between 50 and 180;

```
+------------------+-----------------+

| lower(first_name) | upper(last_name) |

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

| steven           | KING            |
```

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
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 |

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

81 rows in set (0.001 sec)

MariaDB [hr]> select first_name, last_name from employees where lower(last_name)='king';

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

| first_name | last_name |

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

| Steven | King |

| Janette | King |

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

2 rows in set (0.001 sec)

MariaDB [hr]> select first_name, last_name, concat(left(first_name, 1), right(last_name, 3), '@oracal.com') as email from employees;

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

| first_name | last_name | email |

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

| Steven | King | Sing@oracal.com |

| Neena | Kochhar | Nhar@oracal.com |

| Lex | De Haan | Laan@oracal.com |

| Alexander | Hunold | Aold@oracal.com |

Bruce	Ernst	Bnst@oracal.com
David	Austin	Dtin@oracal.com
Valli	Pataballa	Vlla@oracal.com
Diana	Lorentz	Dntz@oracal.com
Nancy	Greenberg	Nerg@oracal.com
Daniel	Faviet	Diet@oracal.com
John	Chen	Jhen@oracal.com
Ismael	Sciarra	Irra@oracal.com
Jose Manuel	Urman	Jman@oracal.com
Luis	Popp	Lopp@oracal.com
Den	Raphaely	Dely@oracal.com
Alexander	Khoo	Ahoo@oracal.com
Shelli	Baida	Sida@oracal.com
Sigal	Tobias	Sias@oracal.com
Guy	Himuro	Guro@oracal.com
Karen	Colmenares	Kres@oracal.com
Matthew	Weiss	Miss@oracal.com
Adam	Fripp	Aipp@oracal.com
Payam	Kaufling	Ping@oracal.com
Shanta	Vollman	Sman@oracal.com
Kevin	Mourgos	Kgos@oracal.com
Julia	Nayer	Jyer@oracal.com
Irene	Mikkilineni	Ieni@oracal.com
James	Landry	Jdry@oracal.com
Steven	Markle	Skle@oracal.com

| Laura | Bissot | Lsot@oracal.com |

| Mozhe | Atkinson | Mson@oracal.com |

| James | Marlow | Jlow@oracal.com |

| TJ | Olson | Tson@oracal.com |

| Jason | Mallin | Jlin@oracal.com |

| Michael | Rogers | Mers@oracal.com |

| Ki | Gee | KGee@oracal.com |

| Hazel | Philtanker | Hker@oracal.com |

| Renske | Ladwig | Rwig@oracal.com |

| Stephen | Stiles | Sles@oracal.com |

| John | Seo | JSeo@oracal.com |

| Joshua | Patel | Jtel@oracal.com |

| Trenna | Rajs | Tajs@oracal.com |

| Curtis | Davies | Cies@oracal.com |

| Randall | Matos | Rtos@oracal.com |

| Peter | Vargas | Pgas@oracal.com |

| John | Russell | Jell@oracal.com |

| Karen | Partners | Kers@oracal.com |

| Alberto | Errazuriz | Ariz@oracal.com |

| Gerald | Cambrault | Gult@oracal.com |

| Eleni | Zlotkey | Ekey@oracal.com |

| Peter | Tucker | Pker@oracal.com |

| David | Bernstein | Dein@oracal.com |

| Peter | Hall | Pall@oracal.com |

| Christopher | Olsen | Csen@oracal.com |

Nanette	Cambrault	Nult@oracal.com
Oliver	Tuvault	Oult@oracal.com
Janette	King	Jing@oracal.com
Patrick	Sully	Plly@oracal.com
Allan	McEwen	Awen@oracal.com
Lindsey	Smith	Lith@oracal.com
Louise	Doran	Lran@oracal.com
Sarath	Sewall	Sall@oracal.com
Clara	Vishney	Cney@oracal.com
Danielle	Greene	Dene@oracal.com
Mattea	Marvins	Mins@oracal.com
David	Lee	DLee@oracal.com
Sundar	Ande	Snde@oracal.com
Amit	Banda	Anda@oracal.com
Lisa	Ozer	Lzer@oracal.com
Harrison	Bloom	Hoom@oracal.com
Tayler	Fox	TFox@oracal.com
William	Smith	With@oracal.com
Elizabeth	Bates	Etes@oracal.com
Sundita	Kumar	Smar@oracal.com
Ellen	Abel	Ebel@oracal.com
Alyssa	Hutton	Aton@oracal.com
Jonathon	Taylor	Jlor@oracal.com
Jack	Livingston	Jton@oracal.com
Kimberely	Grant	Kant@oracal.com

Charles	Johnson	Cson@oracal.com
Winston	Taylor	Wlor@oracal.com
Jean	Fleaur	Jaur@oracal.com
Martha	Sullivan	Mvan@oracal.com
Girard	Geoni	Goni@oracal.com
Nandita	Sarchand	Nand@oracal.com
Alexis	Bull	Aull@oracal.com
Julia	Dellinger	Jger@oracal.com
Anthony	Cabrio	Ario@oracal.com
Kelly	Chung	Kung@oracal.com
Jennifer	Dilly	Jlly@oracal.com
Timothy	Gates	Ttes@oracal.com
Randall	Perkins	Rins@oracal.com
Sarah	Bell	Sell@oracal.com
Britney	Everett	Bett@oracal.com
Samuel	McCain	Sain@oracal.com
Vance	Jones	Vnes@oracal.com
Alana	Walsh	Alsh@oracal.com
Kevin	Feeney	Kney@oracal.com
Donald	OConnell	Dell@oracal.com
Douglas	Grant	Dant@oracal.com
Jennifer	Whalen	Jlen@oracal.com
Michael	Hartstein	Mein@oracal.com
Pat	Fay	PFay@oracal.com
Susan	Mavris	Sris@oracal.com

| Hermann | Baer | Haer@oracal.com |

| Shelley | Higgins | Sins@oracal.com |

| William | Gietz | Wetz@oracal.com |

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

107 rows in set (0.001 sec)

MariaDB [hr]> select concat(first_name, ',', last_name) from employees;

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

| concat(first_name, ',', last_name) |

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

| Steven,King |

| 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 |
| 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             |

| Michael,Hartstein           |

| Pat,Fay                     |

| Susan,Mavris                |

| Hermann,Baer                |

| Shelley,Higgins             |

| William,Gietz               |

+----------------------------------+
```

107 rows in set (0.001 sec)

MariaDB [hr]> select concat(concat(first_name, ',', last_name), hire_date) from employees;

```
+-------------------------------------------------------+

| concat(concat(first_name, ',', last_name), hire_date) |

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

| Steven,King1987-06-17                                 |
```

| Neena,Kochhar1989-09-21 |

| Lex,De Haan1993-01-13 |

| Alexander,Hunold1990-01-03 |

| Bruce,Ernst1991-05-21 |

| David,Austin1997-06-25 |

| Valli,Pataballa1998-02-05 |

| Diana,Lorentz1999-02-07 |

| Nancy,Greenberg1994-08-17 |

| Daniel,Faviet1994-08-16 |

| John,Chen1997-09-28 |

| Ismael,Sciarra1997-09-30 |

| Jose Manuel,Urman1998-03-07 |

| Luis,Popp1999-12-07 |

| Den,Raphaely1994-12-07 |

| Alexander,Khoo1995-05-18 |

| Shelli,Baida1997-12-24 |

| Sigal,Tobias1997-07-24 |

| Guy,Himuro1998-11-15 |

| Karen,Colmenares1999-08-10 |

| Matthew,Weiss1996-07-18 |

| Adam,Fripp1997-04-10 |

| Payam,Kaufling1995-05-01 |

| Shanta,Vollman1997-10-10 |

| Kevin,Mourgos1999-11-16 |

| Julia,Nayer1997-07-16 |

| Irene,Mikkilineni1998-09-28 |
| James,Landry1999-01-14 |
| Steven,Markle2000-03-08 |
| Laura,Bissot1997-08-20 |
| Mozhe,Atkinson1997-10-30 |
| James,Marlow1997-02-16 |
| TJ,Olson1999-04-10 |
| Jason,Mallin1996-06-14 |
| Michael,Rogers1998-08-26 |
| Ki,Gee1999-12-12 |
| Hazel,Philtanker2000-02-06 |
| Renske,Ladwig1995-07-14 |
| Stephen,Stiles1997-10-26 |
| John,Seo1998-02-12 |
| Joshua,Patel1998-04-06 |
| Trenna,Rajs1995-10-17 |
| Curtis,Davies1997-01-29 |
| Randall,Matos1998-03-15 |
| Peter,Vargas1998-07-09 |
| John,Russell1996-10-01 |
| Karen,Partners1997-01-05 |
| Alberto,Errazuriz1997-03-10 |
| Gerald,Cambrault1999-10-15 |
| Eleni,Zlotkey2000-01-29 |
| Peter,Tucker1997-01-30 |

| David,Bernstein1997-03-24 |
| Peter,Hall1997-08-20 |
| Christopher,Olsen1998-03-30 |
| Nanette,Cambrault1998-12-09 |
| Oliver,Tuvault1999-11-23 |
| Janette,King1996-01-30 |
| Patrick,Sully1996-03-04 |
| Allan,McEwen1996-08-01 |
| Lindsey,Smith1997-03-10 |
| Louise,Doran1997-12-15 |
| Sarath,Sewall1998-11-03 |
| Clara,Vishney1997-11-11 |
| Danielle,Greene1999-03-19 |
| Mattea,Marvins2000-01-24 |
| David,Lee2000-02-23 |
| Sundar,Ande2000-03-24 |
| Amit,Banda2000-04-21 |
| Lisa,Ozer1997-03-11 |
| Harrison,Bloom1998-03-23 |
| Tayler,Fox1998-01-24 |
| William,Smith1999-02-23 |
| Elizabeth,Bates1999-03-24 |
| Sundita,Kumar2000-04-21 |
| Ellen,Abel1996-05-11 |
| Alyssa,Hutton1997-03-19 |

| Jonathon,Taylor1998-03-24 |
| Jack,Livingston1998-04-23 |
| Kimberely,Grant1999-05-24 |
| Charles,Johnson2000-01-04 |
| Winston,Taylor1998-01-24 |
| Jean,Fleaur1998-02-23 |
| Martha,Sullivan1999-06-21 |
| Girard,Geoni2000-02-03 |
| Nandita,Sarchand1996-01-27 |
| Alexis,Bull1997-02-20 |
| Julia,Dellinger1998-06-24 |
| Anthony,Cabrio1999-02-07 |
| Kelly,Chung1997-06-14 |
| Jennifer,Dilly1997-08-13 |
| Timothy,Gates1998-07-11 |
| Randall,Perkins1999-12-19 |
| Sarah,Bell1996-02-04 |
| Britney,Everett1997-03-03 |
| Samuel,McCain1998-07-01 |
| Vance,Jones1999-03-17 |
| Alana,Walsh1998-04-24 |
| Kevin,Feeney1998-05-23 |
| Donald,OConnell1999-06-21 |
| Douglas,Grant2000-01-13 |
| Jennifer,Whalen1987-09-17 |

| Michael,Hartstein1996-02-17 |

| Pat,Fay1997-08-17 |

| Susan,Mavris1994-06-07 |

| Hermann,Baer1994-06-07 |

| Shelley,Higgins1994-06-07 |

| William,Gietz1994-06-07 |

+---+

107 rows in set (0.001 sec)

MariaDB [hr]> select last_name from employees where length(last_name)>8;

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

| last_name |

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

| Pataballa |

| Greenberg |

| Colmenares |

| Mikkilineni |

| Philtanker |

| Errazuriz |

| Cambrault |

| Bernstein |

| Cambrault |

| Livingston |

| Dellinger |

| Hartstein |

```
+-------------+

12 rows in set (0.001 sec)


MariaDB [hr]> select first_name, last_name, phone_number, replace(phone_number, '515', '815') as new_phone_number from employees;

+-------------+-------------+--------------------+--------------------+
| first_name  | last_name   | phone_number       | new_phone_number   |
+-------------+-------------+--------------------+--------------------+
| Steven      | King        | 515.123.4567       | 815.123.4567       |
| Neena       | Kochhar     | 515.123.4568       | 815.123.4568       |
| Lex         | De Haan     | 515.123.4569       | 815.123.4569       |
| Alexander   | Hunold      | 590.423.4567       | 590.423.4567       |
| Bruce       | Ernst       | 590.423.4568       | 590.423.4568       |
| David       | Austin      | 590.423.4569       | 590.423.4569       |
| Valli       | Pataballa   | 590.423.4560       | 590.423.4560       |
| Diana       | Lorentz     | 590.423.5567       | 590.423.5567       |
| Nancy       | Greenberg   | 515.124.4569       | 815.124.4569       |
| Daniel      | Faviet      | 515.124.4169       | 815.124.4169       |
| John        | Chen        | 515.124.4269       | 815.124.4269       |
| Ismael      | Sciarra     | 515.124.4369       | 815.124.4369       |
| Jose Manuel | Urman       | 515.124.4469       | 815.124.4469       |
| Luis        | Popp        | 515.124.4567       | 815.124.4567       |
| Den         | Raphaely    | 515.127.4561       | 815.127.4561       |
| Alexander   | Khoo        | 515.127.4562       | 815.127.4562       |
| Shelli      | Baida       | 515.127.4563       | 815.127.4563       |
| Sigal       | Tobias      | 515.127.4564       | 815.127.4564       |
```

Guy	Himuro	515.127.4565	815.127.4565
Karen	Colmenares	515.127.4566	815.127.4566
Matthew	Weiss	650.123.1234	650.123.1234
Adam	Fripp	650.123.2234	650.123.2234
Payam	Kaufling	650.123.3234	650.123.3234
Shanta	Vollman	650.123.4234	650.123.4234
Kevin	Mourgos	650.123.5234	650.123.5234
Julia	Nayer	650.124.1214	650.124.1214
Irene	Mikkilineni	650.124.1224	650.124.1224
James	Landry	650.124.1334	650.124.1334
Steven	Markle	650.124.1434	650.124.1434
Laura	Bissot	650.124.5234	650.124.5234
Mozhe	Atkinson	650.124.6234	650.124.6234
James	Marlow	650.124.7234	650.124.7234
TJ	Olson	650.124.8234	650.124.8234
Jason	Mallin	650.127.1934	650.127.1934
Michael	Rogers	650.127.1834	650.127.1834
Ki	Gee	650.127.1734	650.127.1734
Hazel	Philtanker	650.127.1634	650.127.1634
Renske	Ladwig	650.121.1234	650.121.1234
Stephen	Stiles	650.121.2034	650.121.2034
John	Seo	650.121.2019	650.121.2019
Joshua	Patel	650.121.1834	650.121.1834
Trenna	Rajs	650.121.8009	650.121.8009
Curtis	Davies	650.121.2994	650.121.2994

Randall	Matos	650.121.2874	650.121.2874	
Peter	Vargas	650.121.2004	650.121.2004	
John	Russell	011.44.1344.429268	011.44.1344.429268
Karen	Partners	011.44.1344.467268	011.44.1344.467268
Alberto	Errazuriz	011.44.1344.429278	011.44.1344.429278
Gerald	Cambrault	011.44.1344.619268	011.44.1344.619268
Eleni	Zlotkey	011.44.1344.429018	011.44.1344.429018
Peter	Tucker	011.44.1344.129268	011.44.1344.129268
David	Bernstein	011.44.1344.345268	011.44.1344.345268
Peter	Hall	011.44.1344.478968	011.44.1344.478968
Christopher	Olsen	011.44.1344.498718	011.44.1344.498718
Nanette	Cambrault	011.44.1344.987668	011.44.1344.987668
Oliver	Tuvault	011.44.1344.486508	011.44.1344.486508
Janette	King	011.44.1345.429268	011.44.1345.429268
Patrick	Sully	011.44.1345.929268	011.44.1345.929268
Allan	McEwen	011.44.1345.829268	011.44.1345.829268
Lindsey	Smith	011.44.1345.729268	011.44.1345.729268
Louise	Doran	011.44.1345.629268	011.44.1345.629268
Sarath	Sewall	011.44.1345.529268	011.44.1345.529268
Clara	Vishney	011.44.1346.129268	011.44.1346.129268
Danielle	Greene	011.44.1346.229268	011.44.1346.229268
Mattea	Marvins	011.44.1346.329268	011.44.1346.329268
David	Lee	011.44.1346.529268	011.44.1346.529268
Sundar	Ande	011.44.1346.629268	011.44.1346.629268
Amit	Banda	011.44.1346.729268	011.44.1346.729268

Lisa	Ozer	011.44.1343.929268	011.44.1343.929268
Harrison	Bloom	011.44.1343.829268	011.44.1343.829268
Tayler	Fox	011.44.1343.729268	011.44.1343.729268
William	Smith	011.44.1343.629268	011.44.1343.629268
Elizabeth	Bates	011.44.1343.529268	011.44.1343.529268
Sundita	Kumar	011.44.1343.329268	011.44.1343.329268
Ellen	Abel	011.44.1644.429267	011.44.1644.429267
Alyssa	Hutton	011.44.1644.429266	011.44.1644.429266
Jonathon	Taylor	011.44.1644.429265	011.44.1644.429265
Jack	Livingston	011.44.1644.429264	011.44.1644.429264
Kimberely	Grant	011.44.1644.429263	011.44.1644.429263
Charles	Johnson	011.44.1644.429262	011.44.1644.429262
Winston	Taylor	650.507.9876	650.507.9876
Jean	Fleaur	650.507.9877	650.507.9877
Martha	Sullivan	650.507.9878	650.507.9878
Girard	Geoni	650.507.9879	650.507.9879
Nandita	Sarchand	650.509.1876	650.509.1876
Alexis	Bull	650.509.2876	650.509.2876
Julia	Dellinger	650.509.3876	650.509.3876
Anthony	Cabrio	650.509.4876	650.509.4876
Kelly	Chung	650.505.1876	650.505.1876
Jennifer	Dilly	650.505.2876	650.505.2876
Timothy	Gates	650.505.3876	650.505.3876
Randall	Perkins	650.505.4876	650.505.4876
Sarah	Bell	650.501.1876	650.501.1876

Britney	Everett	650.501.2876	650.501.2876	
Samuel	McCain	650.501.3876	650.501.3876	
Vance	Jones	650.501.4876	650.501.4876	
Alana	Walsh	650.507.9811	650.507.9811	
Kevin	Feeney	650.507.9822	650.507.9822	
Donald	OConnell	650.507.9833	650.507.9833	
Douglas	Grant	650.507.9844	650.507.9844	
Jennifer	Whalen	515.123.4444	815.123.4444	
Michael	Hartstein	515.123.5555	815.123.5555	
Pat	Fay	603.123.6666	603.123.6666	
Susan	Mavris	515.123.7777	815.123.7777	
Hermann	Baer	515.123.8888	815.123.8888	
Shelley	Higgins	515.123.8080	815.123.8080	
William	Gietz	51hr5.123.8181	51hr5.123.8181	

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

107 rows in set (0.001 sec)

MariaDB [hr]> select first_name, last_name, salary, salary *1.12 as new_salary, round(salary *1.12) as rounded_salary, floor(salary *1.2) as floor_salary from employees;

+-------------+-------------+----------+------------+----------------+--------------+
| first_name | last_name | salary | new_salary | rounded_salary | floor_salary |
+-------------+-------------+----------+------------+----------------+--------------+
Steven	King	24000.00	26880.0000	26880	28800
Neena	Kochhar	17000.00	19040.0000	19040	20400
Lex	De Haan	17000.00	19040.0000	19040	20400
Alexander	Hunold	9000.00	10080.0000	10080	10800

Bruce	Ernst	6000.00	6720.0000	6720	7200
David	Austin	4800.00	5376.0000	5376	5760
Valli	Pataballa	4800.00	5376.0000	5376	5760
Diana	Lorentz	4200.00	4704.0000	4704	5040
Nancy	Greenberg	12000.00	13440.0000	13440	14400
Daniel	Faviet	9000.00	10080.0000	10080	10800
John	Chen	8200.00	9184.0000	9184	9840
Ismael	Sciarra	7700.00	8624.0000	8624	9240
Jose Manuel	Urman	7800.00	8736.0000	8736	9360
Luis	Popp	6900.00	7728.0000	7728	8280
Den	Raphaely	11000.00	12320.0000	12320	13200
Alexander	Khoo	3100.00	3472.0000	3472	3720
Shelli	Baida	2900.00	3248.0000	3248	3480
Sigal	Tobias	2800.00	3136.0000	3136	3360
Guy	Himuro	2600.00	2912.0000	2912	3120
Karen	Colmenares	2500.00	2800.0000	2800	3000
Matthew	Weiss	8000.00	8960.0000	8960	9600
Adam	Fripp	8200.00	9184.0000	9184	9840
Payam	Kaufling	7900.00	8848.0000	8848	9480
Shanta	Vollman	6500.00	7280.0000	7280	7800
Kevin	Mourgos	5800.00	6496.0000	6496	6960
Julia	Nayer	3200.00	3584.0000	3584	3840
Irene	Mikkilineni	2700.00	3024.0000	3024	3240
James	Landry	2400.00	2688.0000	2688	2880
Steven	Markle	2200.00	2464.0000	2464	2640

Laura	Bissot	3300.00	3696.0000	3696	3960
Mozhe	Atkinson	2800.00	3136.0000	3136	3360
James	Marlow	2500.00	2800.0000	2800	3000
TJ	Olson	2100.00	2352.0000	2352	2520
Jason	Mallin	3300.00	3696.0000	3696	3960
Michael	Rogers	2900.00	3248.0000	3248	3480
Ki	Gee	2400.00	2688.0000	2688	2880
Hazel	Philtanker	2200.00	2464.0000	2464	2640
Renske	Ladwig	3600.00	4032.0000	4032	4320
Stephen	Stiles	3200.00	3584.0000	3584	3840
John	Seo	2700.00	3024.0000	3024	3240
Joshua	Patel	2500.00	2800.0000	2800	3000
Trenna	Rajs	3500.00	3920.0000	3920	4200
Curtis	Davies	3100.00	3472.0000	3472	3720
Randall	Matos	2600.00	2912.0000	2912	3120
Peter	Vargas	2500.00	2800.0000	2800	3000
John	Russell	14000.00	15680.0000	15680	16800
Karen	Partners	13500.00	15120.0000	15120	16200
Alberto	Errazuriz	12000.00	13440.0000	13440	14400
Gerald	Cambrault	11000.00	12320.0000	12320	13200
Eleni	Zlotkey	10500.00	11760.0000	11760	12600
Peter	Tucker	10000.00	11200.0000	11200	12000
David	Bernstein	9500.00	10640.0000	10640	11400
Peter	Hall	9000.00	10080.0000	10080	10800
Christopher	Olsen	8000.00	8960.0000	8960	9600

Nanette	Cambrault	7500.00	8400.0000	8400	9000
Oliver	Tuvault	7000.00	7840.0000	7840	8400
Janette	King	10000.00	11200.0000	11200	12000
Patrick	Sully	9500.00	10640.0000	10640	11400
Allan	McEwen	9000.00	10080.0000	10080	10800
Lindsey	Smith	8000.00	8960.0000	8960	9600
Louise	Doran	7500.00	8400.0000	8400	9000
Sarath	Sewall	7000.00	7840.0000	7840	8400
Clara	Vishney	10500.00	11760.0000	11760	12600
Danielle	Greene	9500.00	10640.0000	10640	11400
Mattea	Marvins	7200.00	8064.0000	8064	8640
David	Lee	6800.00	7616.0000	7616	8160
Sundar	Ande	6400.00	7168.0000	7168	7680
Amit	Banda	6200.00	6944.0000	6944	7440
Lisa	Ozer	11500.00	12880.0000	12880	13800
Harrison	Bloom	10000.00	11200.0000	11200	12000
Tayler	Fox	9600.00	10752.0000	10752	11520
William	Smith	7400.00	8288.0000	8288	8880
Elizabeth	Bates	7300.00	8176.0000	8176	8760
Sundita	Kumar	6100.00	6832.0000	6832	7320
Ellen	Abel	11000.00	12320.0000	12320	13200
Alyssa	Hutton	8800.00	9856.0000	9856	10560
Jonathon	Taylor	8600.00	9632.0000	9632	10320
Jack	Livingston	8400.00	9408.0000	9408	10080
Kimberely	Grant	7000.00	7840.0000	7840	8400

Charles	Johnson	6200.00	6944.0000	6944	7440
Winston	Taylor	3200.00	3584.0000	3584	3840
Jean	Fleaur	3100.00	3472.0000	3472	3720
Martha	Sullivan	2500.00	2800.0000	2800	3000
Girard	Geoni	2800.00	3136.0000	3136	3360
Nandita	Sarchand	4200.00	4704.0000	4704	5040
Alexis	Bull	4100.00	4592.0000	4592	4920
Julia	Dellinger	3400.00	3808.0000	3808	4080
Anthony	Cabrio	3000.00	3360.0000	3360	3600
Kelly	Chung	3800.00	4256.0000	4256	4560
Jennifer	Dilly	3600.00	4032.0000	4032	4320
Timothy	Gates	2900.00	3248.0000	3248	3480
Randall	Perkins	2500.00	2800.0000	2800	3000
Sarah	Bell	4000.00	4480.0000	4480	4800
Britney	Everett	3900.00	4368.0000	4368	4680
Samuel	McCain	3200.00	3584.0000	3584	3840
Vance	Jones	2800.00	3136.0000	3136	3360
Alana	Walsh	3100.00	3472.0000	3472	3720
Kevin	Feeney	3000.00	3360.0000	3360	3600
Donald	OConnell	2600.00	2912.0000	2912	3120
Douglas	Grant	2600.00	2912.0000	2912	3120
Jennifer	Whalen	4400.00	4928.0000	4928	5280
Michael	Hartstein	13000.00	14560.0000	14560	15600
Pat	Fay	6000.00	6720.0000	6720	7200
Susan	Mavris	6500.00	7280.0000	7280	7800

| Hermann | Baer | 10000.00 | 11200.0000 | 11200 | 12000 |

| Shelley | Higgins | 12000.00 | 13440.0000 | 13440 | 14400 |

| William | Gietz | 8300.00 | 9296.0000 | 9296 | 9960 |

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

107 rows in set (0.001 sec)

MariaDB [hr]> select first_name, hire_date, date_sub(hire_date, interval 10 day) as hire_date_minus_10_days, date_add(hire_date, interval 1 month) as hire_date_plus_1_month, datediff(curdate(), hire_date) as day_difference from employees;

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

| first_name | hire_date | hire_date_minus_10_days | hire_date_plus_1_month | day_difference |

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

| Steven | 1987-06-17 | 1987-06-07 | 1987-07-17

| 13244 |

| Neena | 1989-09-21 | 1989-09-11 | 1989-10-21

| 12417 |

| Lex | 1993-01-13 | 1993-01-03 | 1993-02-13

| 11207 |

| Alexander | 1990-01-03 | 1989-12-24 | 1990-02-03

| 12313 |

| Bruce | 1991-05-21 | 1991-05-11 | 1991-06-21

| 11810 |

| David | 1997-06-25 | 1997-06-15 | 1997-07-25

| 9583 |

| Valli | 1998-02-05 | 1998-01-26 | 1998-03-05

| 9358 |

Diana	1999-02-07	1999-01-28	1999-03-07	8991
Nancy	1994-08-17	1994-08-07	1994-09-17	10626
Daniel	1994-08-16	1994-08-06	1994-09-16	10627
John	1997-09-28	1997-09-18	1997-10-28	9488
Ismael	1997-09-30	1997-09-20	1997-10-30	9486
Jose Manuel	1998-03-07	1998-02-25	1998-04-07	9328
Luis	1999-12-07	1999-11-27	2000-01-07	8688
Den	1994-12-07	1994-11-27	1995-01-07	10514
Alexander	1995-05-18	1995-05-08	1995-06-18	10352
Shelli	1997-12-24	1997-12-14	1998-01-24	9401
Sigal	1997-07-24	1997-07-14	1997-08-24	9554
Guy	1998-11-15	1998-11-05	1998-12-15	9075
Karen	1999-08-10	1999-07-31	1999-09-10	

| 8807 |
| Matthew | 1996-07-18 | 1996-07-08 | 1996-08-18
| 9925 |
| Adam | 1997-04-10 | 1997-03-31 | 1997-05-10
| 9659 |
| Payam | 1995-05-01 | 1995-04-21 | 1995-06-01
| 10369 |
| Shanta | 1997-10-10 | 1997-09-30 | 1997-11-10
| 9476 |
| Kevin | 1999-11-16 | 1999-11-06 | 1999-12-16
| 8709 |
| Julia | 1997-07-16 | 1997-07-06 | 1997-08-16
| 9562 |
| Irene | 1998-09-28 | 1998-09-18 | 1998-10-28
| 9123 |
| James | 1999-01-14 | 1999-01-04 | 1999-02-14
| 9015 |
| Steven | 2000-03-08 | 2000-02-27 | 2000-04-08
| 8596 |
| Laura | 1997-08-20 | 1997-08-10 | 1997-09-20
| 9527 |
| Mozhe | 1997-10-30 | 1997-10-20 | 1997-11-30
| 9456 |
| James | 1997-02-16 | 1997-02-06 | 1997-03-16
| 9712 |

TJ	1999-04-10	1999-03-31	1999-05-10	8929
Jason	1996-06-14	1996-06-04	1996-07-14	9959
Michael	1998-08-26	1998-08-16	1998-09-26	9156
Ki	1999-12-12	1999-12-02	2000-01-12	8683
Hazel	2000-02-06	2000-01-27	2000-03-06	8627
Renske	1995-07-14	1995-07-04	1995-08-14	10295
Stephen	1997-10-26	1997-10-16	1997-11-26	9460
John	1998-02-12	1998-02-02	1998-03-12	9351
Joshua	1998-04-06	1998-03-27	1998-05-06	9298
Trenna	1995-10-17	1995-10-07	1995-11-17	10200
Curtis	1997-01-29	1997-01-19	1997-02-28	9730
Randall	1998-03-15	1998-03-05	1998-04-15	9320
Peter	1998-07-09	1998-06-29	1998-08-09

	9204
John	1996-10-01	1996-09-21	1996-11-01
	9850
Karen	1997-01-05	1996-12-26	1997-02-05
	9754
Alberto	1997-03-10	1997-02-28	1997-04-10
	9690
Gerald	1999-10-15	1999-10-05	1999-11-15
	8741
Eleni	2000-01-29	2000-01-19	2000-02-29
	8635
Peter	1997-01-30	1997-01-20	1997-02-28
	9729
David	1997-03-24	1997-03-14	1997-04-24
	9676
Peter	1997-08-20	1997-08-10	1997-09-20
	9527
Christopher	1998-03-30	1998-03-20	1998-04-30
	9305
Nanette	1998-12-09	1998-11-29	1999-01-09
	9051
Oliver	1999-11-23	1999-11-13	1999-12-23
	8702
Janette	1996-01-30	1996-01-20	1996-02-29
	10095

Patrick	1996-03-04	1996-02-23	1996-04-04	10061
Allan	1996-08-01	1996-07-22	1996-09-01	9911
Lindsey	1997-03-10	1997-02-28	1997-04-10	9690
Louise	1997-12-15	1997-12-05	1998-01-15	9410
Sarath	1998-11-03	1998-10-24	1998-12-03	9087
Clara	1997-11-11	1997-11-01	1997-12-11	9444
Danielle	1999-03-19	1999-03-09	1999-04-19	8951
Mattea	2000-01-24	2000-01-14	2000-02-24	8640
David	2000-02-23	2000-02-13	2000-03-23	8610
Sundar	2000-03-24	2000-03-14	2000-04-24	8580
Amit	2000-04-21	2000-04-11	2000-05-21	8552
Lisa	1997-03-11	1997-03-01	1997-04-11	9689
Harrison	1998-03-23	1998-03-13	1998-04-23

	9312
Tayler	1998-01-24	1998-01-14	1998-02-24	9370
William	1999-02-23	1999-02-13	1999-03-23	8975
Elizabeth	1999-03-24	1999-03-14	1999-04-24	8946
Sundita	2000-04-21	2000-04-11	2000-05-21	8552
Ellen	1996-05-11	1996-05-01	1996-06-11	9993
Alyssa	1997-03-19	1997-03-09	1997-04-19	9681
Jonathon	1998-03-24	1998-03-14	1998-04-24	9311
Jack	1998-04-23	1998-04-13	1998-05-23	9281
Kimberely	1999-05-24	1999-05-14	1999-06-24	8885
Charles	2000-01-04	1999-12-25	2000-02-04	8660
Winston	1998-01-24	1998-01-14	1998-02-24	9370
Jean	1998-02-23	1998-02-13	1998-03-23	9340

Martha	1999-06-21	1999-06-11	1999-07-21	8857
Girard	2000-02-03	2000-01-24	2000-03-03	8630
Nandita	1996-01-27	1996-01-17	1996-02-27	10098
Alexis	1997-02-20	1997-02-10	1997-03-20	9708
Julia	1998-06-24	1998-06-14	1998-07-24	9219
Anthony	1999-02-07	1999-01-28	1999-03-07	8991
Kelly	1997-06-14	1997-06-04	1997-07-14	9594
Jennifer	1997-08-13	1997-08-03	1997-09-13	9534
Timothy	1998-07-11	1998-07-01	1998-08-11	9202
Randall	1999-12-19	1999-12-09	2000-01-19	8676
Sarah	1996-02-04	1996-01-25	1996-03-04	10090
Britney	1997-03-03	1997-02-21	1997-04-03	9697
Samuel	1998-07-01	1998-06-21	1998-08-01	

				9212
Vance	1999-03-17	1999-03-07	1999-04-17	
				8953
Alana	1998-04-24	1998-04-14	1998-05-24	
				9280
Kevin	1998-05-23	1998-05-13	1998-06-23	
				9251
Donald	1999-06-21	1999-06-11	1999-07-21	
				8857
Douglas	2000-01-13	2000-01-03	2000-02-13	
				8651
Jennifer	1987-09-17	1987-09-07	1987-10-17	
				13152
Michael	1996-02-17	1996-02-07	1996-03-17	
				10077
Pat	1997-08-17	1997-08-07	1997-09-17	
				9530
Susan	1994-06-07	1994-05-28	1994-07-07	
				10697
Hermann	1994-06-07	1994-05-28	1994-07-07	
				10697
Shelley	1994-06-07	1994-05-28	1994-07-07	
				10697
William	1994-06-07	1994-05-28	1994-07-07	
				10697

```
+-------------+-----------+-----------------------+-----------------------+----------------+
```

107 rows in set (0.001 sec)

MariaDB [hr]> select first_name, hire_date, timestampdiff(month, hire_date, curdate()) as months_worked, timestampdiff(year, hire_date, curdate()) as years_works from employees;

```
+-------------+-----------+---------------+-------------+
| first_name  | hire_date | months_worked | years_works |
+-------------+-----------+---------------+-------------+
| Steven      | 1987-06-17 |          435 |          36 |
| Neena       | 1989-09-21 |          407 |          33 |
| Lex         | 1993-01-13 |          368 |          30 |
| Alexander   | 1990-01-03 |          404 |          33 |
| Bruce       | 1991-05-21 |          387 |          32 |
| David       | 1997-06-25 |          314 |          26 |
| Valli       | 1998-02-05 |          307 |          25 |
| Diana       | 1999-02-07 |          295 |          24 |
| Nancy       | 1994-08-17 |          349 |          29 |
| Daniel      | 1994-08-16 |          349 |          29 |
| John        | 1997-09-28 |          311 |          25 |
| Ismael      | 1997-09-30 |          311 |          25 |
| Jose Manuel | 1998-03-07 |          306 |          25 |
| Luis        | 1999-12-07 |          285 |          23 |
| Den         | 1994-12-07 |          345 |          28 |
| Alexander   | 1995-05-18 |          340 |          28 |
| Shelli      | 1997-12-24 |          308 |          25 |
| Sigal       | 1997-07-24 |          313 |          26 |
```

Guy	1998-11-15	298	24
Karen	1999-08-10	289	24
Matthew	1996-07-18	326	27
Adam	1997-04-10	317	26
Payam	1995-05-01	340	28
Shanta	1997-10-10	311	25
Kevin	1999-11-16	286	23
Julia	1997-07-16	314	26
Irene	1998-09-28	299	24
James	1999-01-14	296	24
Steven	2000-03-08	282	23
Laura	1997-08-20	313	26
Mozhe	1997-10-30	310	25
James	1997-02-16	319	26
TJ	1999-04-10	293	24
Jason	1996-06-14	327	27
Michael	1998-08-26	300	25
Ki	1999-12-12	285	23
Hazel	2000-02-06	283	23
Renske	1995-07-14	338	28
Stephen	1997-10-26	310	25
John	1998-02-12	307	25
Joshua	1998-04-06	305	25
Trenna	1995-10-17	335	27
Curtis	1997-01-29	319	26

Randall	1998-03-15	306	25
Peter	1998-07-09	302	25
John	1996-10-01	323	26
Karen	1997-01-05	320	26
Alberto	1997-03-10	318	26
Gerald	1999-10-15	287	23
Eleni	2000-01-29	283	23
Peter	1997-01-30	319	26
David	1997-03-24	317	26
Peter	1997-08-20	313	26
Christopher	1998-03-30	305	25
Nanette	1998-12-09	297	24
Oliver	1999-11-23	285	23
Janette	1996-01-30	331	27
Patrick	1996-03-04	330	27
Allan	1996-08-01	325	27
Lindsey	1997-03-10	318	26
Louise	1997-12-15	309	25
Sarath	1998-11-03	298	24
Clara	1997-11-11	310	25
Danielle	1999-03-19	294	24
Mattea	2000-01-24	283	23
David	2000-02-23	282	23
Sundar	2000-03-24	281	23
Amit	2000-04-21	280	23

Lisa	1997-03-11	318	26
Harrison	1998-03-23	305	25
Tayler	1998-01-24	307	25
William	1999-02-23	294	24
Elizabeth	1999-03-24	293	24
Sundita	2000-04-21	280	23
Ellen	1996-05-11	328	27
Alyssa	1997-03-19	318	26
Jonathon	1998-03-24	305	25
Jack	1998-04-23	304	25
Kimberely	1999-05-24	291	24
Charles	2000-01-04	284	23
Winston	1998-01-24	307	25
Jean	1998-02-23	306	25
Martha	1999-06-21	290	24
Girard	2000-02-03	283	23
Nandita	1996-01-27	331	27
Alexis	1997-02-20	319	26
Julia	1998-06-24	302	25
Anthony	1999-02-07	295	24
Kelly	1997-06-14	315	26
Jennifer	1997-08-13	313	26
Timothy	1998-07-11	302	25
Randall	1999-12-19	285	23
Sarah	1996-02-04	331	27

| Britney | 1997-03-03 | 318 | 26 |

| Samuel | 1998-07-01 | 302 | 25 |

| Vance | 1999-03-17 | 294 | 24 |

| Alana | 1998-04-24 | 304 | 25 |

| Kevin | 1998-05-23 | 303 | 25 |

| Donald | 1999-06-21 | 290 | 24 |

| Douglas | 2000-01-13 | 284 | 23 |

| Jennifer | 1987-09-17 | 432 | 36 |

| Michael | 1996-02-17 | 331 | 27 |

| Pat | 1997-08-17 | 313 | 26 |

| Susan | 1994-06-07 | 351 | 29 |

| Hermann | 1994-06-07 | 351 | 29 |

| Shelley | 1994-06-07 | 351 | 29 |

| William | 1994-06-07 | 351 | 29 |

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

107 rows in set (0.001 sec)

MariaDB [hr]> select first_name, hire_date, date_add(hire_date, interval 1 year) as hire_date_1_year from employees;

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

| first_name | hire_date | hire_date_1_year |

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

| Steven | 1987-06-17 | 1988-06-17 |

| Neena | 1989-09-21 | 1990-09-21 |

| Lex | 1993-01-13 | 1994-01-13 |

| Alexander | 1990-01-03 | 1991-01-03 |

Bruce	1991-05-21	1992-05-21
David	1997-06-25	1998-06-25
Valli	1998-02-05	1999-02-05
Diana	1999-02-07	2000-02-07
Nancy	1994-08-17	1995-08-17
Daniel	1994-08-16	1995-08-16
John	1997-09-28	1998-09-28
Ismael	1997-09-30	1998-09-30
Jose Manuel	1998-03-07	1999-03-07
Luis	1999-12-07	2000-12-07
Den	1994-12-07	1995-12-07
Alexander	1995-05-18	1996-05-18
Shelli	1997-12-24	1998-12-24
Sigal	1997-07-24	1998-07-24
Guy	1998-11-15	1999-11-15
Karen	1999-08-10	2000-08-10
Matthew	1996-07-18	1997-07-18
Adam	1997-04-10	1998-04-10
Payam	1995-05-01	1996-05-01
Shanta	1997-10-10	1998-10-10
Kevin	1999-11-16	2000-11-16
Julia	1997-07-16	1998-07-16
Irene	1998-09-28	1999-09-28
James	1999-01-14	2000-01-14
Steven	2000-03-08	2001-03-08

Laura	1997-08-20	1998-08-20
Mozhe	1997-10-30	1998-10-30
James	1997-02-16	1998-02-16
TJ	1999-04-10	2000-04-10
Jason	1996-06-14	1997-06-14
Michael	1998-08-26	1999-08-26
Ki	1999-12-12	2000-12-12
Hazel	2000-02-06	2001-02-06
Renske	1995-07-14	1996-07-14
Stephen	1997-10-26	1998-10-26
John	1998-02-12	1999-02-12
Joshua	1998-04-06	1999-04-06
Trenna	1995-10-17	1996-10-17
Curtis	1997-01-29	1998-01-29
Randall	1998-03-15	1999-03-15
Peter	1998-07-09	1999-07-09
John	1996-10-01	1997-10-01
Karen	1997-01-05	1998-01-05
Alberto	1997-03-10	1998-03-10
Gerald	1999-10-15	2000-10-15
Eleni	2000-01-29	2001-01-29
Peter	1997-01-30	1998-01-30
David	1997-03-24	1998-03-24
Peter	1997-08-20	1998-08-20
Christopher	1998-03-30	1999-03-30

Nanette	1998-12-09	1999-12-09	
Oliver	1999-11-23	2000-11-23	
Janette	1996-01-30	1997-01-30	
Patrick	1996-03-04	1997-03-04	
Allan	1996-08-01	1997-08-01	
Lindsey	1997-03-10	1998-03-10	
Louise	1997-12-15	1998-12-15	
Sarath	1998-11-03	1999-11-03	
Clara	1997-11-11	1998-11-11	
Danielle	1999-03-19	2000-03-19	
Mattea	2000-01-24	2001-01-24	
David	2000-02-23	2001-02-23	
Sundar	2000-03-24	2001-03-24	
Amit	2000-04-21	2001-04-21	
Lisa	1997-03-11	1998-03-11	
Harrison	1998-03-23	1999-03-23	
Tayler	1998-01-24	1999-01-24	
William	1999-02-23	2000-02-23	
Elizabeth	1999-03-24	2000-03-24	
Sundita	2000-04-21	2001-04-21	
Ellen	1996-05-11	1997-05-11	
Alyssa	1997-03-19	1998-03-19	
Jonathon	1998-03-24	1999-03-24	
Jack	1998-04-23	1999-04-23	
Kimberely	1999-05-24	2000-05-24	

Charles	2000-01-04	2001-01-04	
Winston	1998-01-24	1999-01-24	
Jean	1998-02-23	1999-02-23	
Martha	1999-06-21	2000-06-21	
Girard	2000-02-03	2001-02-03	
Nandita	1996-01-27	1997-01-27	
Alexis	1997-02-20	1998-02-20	
Julia	1998-06-24	1999-06-24	
Anthony	1999-02-07	2000-02-07	
Kelly	1997-06-14	1998-06-14	
Jennifer	1997-08-13	1998-08-13	
Timothy	1998-07-11	1999-07-11	
Randall	1999-12-19	2000-12-19	
Sarah	1996-02-04	1997-02-04	
Britney	1997-03-03	1998-03-03	
Samuel	1998-07-01	1999-07-01	
Vance	1999-03-17	2000-03-17	
Alana	1998-04-24	1999-04-24	
Kevin	1998-05-23	1999-05-23	
Donald	1999-06-21	2000-06-21	
Douglas	2000-01-13	2001-01-13	
Jennifer	1987-09-17	1988-09-17	
Michael	1996-02-17	1997-02-17	
Pat	1997-08-17	1998-08-17	
Susan	1994-06-07	1995-06-07	

| Hermann | 1994-06-07 | 1995-06-07 |

| Shelley | 1994-06-07 | 1995-06-07 |

| William | 1994-06-07 | 1995-06-07 |

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

107 rows in set (0.001 sec)

MariaDB [hr]> select first_name, day(hire_date) as hire_day, year(hire_date) as hire_year from employees;

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

| first_name | hire_day | hire_year |

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

| Steven | 17 | 1987 |

| Neena | 21 | 1989 |

| Lex | 13 | 1993 |

| Alexander | 3 | 1990 |

| Bruce | 21 | 1991 |

| David | 25 | 1997 |

| Valli | 5 | 1998 |

| Diana | 7 | 1999 |

| Nancy | 17 | 1994 |

| Daniel | 16 | 1994 |

| John | 28 | 1997 |

| Ismael | 30 | 1997 |

| Jose Manuel | 7 | 1998 |

| Luis | 7 | 1999 |

| Den | 7 | 1994 |

Alexander	18	1995
Shelli	24	1997
Sigal	24	1997
Guy	15	1998
Karen	10	1999
Matthew	18	1996
Adam	10	1997
Payam	1	1995
Shanta	10	1997
Kevin	16	1999
Julia	16	1997
Irene	28	1998
James	14	1999
Steven	8	2000
Laura	20	1997
Mozhe	30	1997
James	16	1997
TJ	10	1999
Jason	14	1996
Michael	26	1998
Ki	12	1999
Hazel	6	2000
Renske	14	1995
Stephen	26	1997
John	12	1998

Joshua	6	1998
Trenna	17	1995
Curtis	29	1997
Randall	15	1998
Peter	9	1998
John	1	1996
Karen	5	1997
Alberto	10	1997
Gerald	15	1999
Eleni	29	2000
Peter	30	1997
David	24	1997
Peter	20	1997
Christopher	30	1998
Nanette	9	1998
Oliver	23	1999
Janette	30	1996
Patrick	4	1996
Allan	1	1996
Lindsey	10	1997
Louise	15	1997
Sarath	3	1998
Clara	11	1997
Danielle	19	1999
Mattea	24	2000

David	23	2000
Sundar	24	2000
Amit	21	2000
Lisa	11	1997
Harrison	23	1998
Tayler	24	1998
William	23	1999
Elizabeth	24	1999
Sundita	21	2000
Ellen	11	1996
Alyssa	19	1997
Jonathon	24	1998
Jack	23	1998
Kimberely	24	1999
Charles	4	2000
Winston	24	1998
Jean	23	1998
Martha	21	1999
Girard	3	2000
Nandita	27	1996
Alexis	20	1997
Julia	24	1998
Anthony	7	1999
Kelly	14	1997
Jennifer	13	1997

| Timothy | 11 | 1998 |

| Randall | 19 | 1999 |

| Sarah | 4 | 1996 |

| Britney | 3 | 1997 |

| Samuel | 1 | 1998 |

| Vance | 17 | 1999 |

| Alana | 24 | 1998 |

| Kevin | 23 | 1998 |

| Donald | 21 | 1999 |

| Douglas | 13 | 2000 |

| Jennifer | 17 | 1987 |

| Michael | 17 | 1996 |

| Pat | 17 | 1997 |

| Susan | 7 | 1994 |

| Hermann | 7 | 1994 |

| Shelley | 7 | 1994 |

| William | 7 | 1994 |

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

107 rows in set (0.001 sec)

MariaDB [hr]> select first_name, last_name, salary, nvl(commission_pct, 0) as commission from employees;

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

| first_name | last_name | salary | commission |

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

| Steven | King | 24000.00 | 0.00 |

| Neena | Kochhar | 17000.00 | 0.00 |

| Lex | De Haan | 17000.00 | 0.00 |

| Alexander | Hunold | 9000.00 | 0.00 |

| Bruce | Ernst | 6000.00 | 0.00 |

| David | Austin | 4800.00 | 0.00 |

| Valli | Pataballa | 4800.00 | 0.00 |

| Diana | Lorentz | 4200.00 | 0.00 |

| Nancy | Greenberg | 12000.00 | 0.00 |

| Daniel | Faviet | 9000.00 | 0.00 |

| John | Chen | 8200.00 | 0.00 |

| Ismael | Sciarra | 7700.00 | 0.00 |

| Jose Manuel | Urman | 7800.00 | 0.00 |

| Luis | Popp | 6900.00 | 0.00 |

| Den | Raphaely | 11000.00 | 0.00 |

| Alexander | Khoo | 3100.00 | 0.00 |

| Shelli | Baida | 2900.00 | 0.00 |

| Sigal | Tobias | 2800.00 | 0.00 |

| Guy | Himuro | 2600.00 | 0.00 |

| Karen | Colmenares | 2500.00 | 0.00 |

| Matthew | Weiss | 8000.00 | 0.00 |

| Adam | Fripp | 8200.00 | 0.00 |

| Payam | Kaufling | 7900.00 | 0.00 |

| Shanta | Vollman | 6500.00 | 0.00 |

| Kevin | Mourgos | 5800.00 | 0.00 |

| Julia | Nayer | 3200.00 | 0.00 |

Irene	Mikkilineni	2700.00	0.00
James	Landry	2400.00	0.00
Steven	Markle	2200.00	0.00
Laura	Bissot	3300.00	0.00
Mozhe	Atkinson	2800.00	0.00
James	Marlow	2500.00	0.00
TJ	Olson	2100.00	0.00
Jason	Mallin	3300.00	0.00
Michael	Rogers	2900.00	0.00
Ki	Gee	2400.00	0.00
Hazel	Philtanker	2200.00	0.00
Renske	Ladwig	3600.00	0.00
Stephen	Stiles	3200.00	0.00
John	Seo	2700.00	0.00
Joshua	Patel	2500.00	0.00
Trenna	Rajs	3500.00	0.00
Curtis	Davies	3100.00	0.00
Randall	Matos	2600.00	0.00
Peter	Vargas	2500.00	0.00
John	Russell	14000.00	0.40
Karen	Partners	13500.00	0.30
Alberto	Errazuriz	12000.00	0.30
Gerald	Cambrault	11000.00	0.30
Eleni	Zlotkey	10500.00	0.20
Peter	Tucker	10000.00	0.30

David	Bernstein	9500.00	0.25
Peter	Hall	9000.00	0.25
Christopher	Olsen	8000.00	0.20
Nanette	Cambrault	7500.00	0.20
Oliver	Tuvault	7000.00	0.15
Janette	King	10000.00	0.35
Patrick	Sully	9500.00	0.35
Allan	McEwen	9000.00	0.35
Lindsey	Smith	8000.00	0.30
Louise	Doran	7500.00	0.30
Sarath	Sewall	7000.00	0.25
Clara	Vishney	10500.00	0.25
Danielle	Greene	9500.00	0.15
Mattea	Marvins	7200.00	0.10
David	Lee	6800.00	0.10
Sundar	Ande	6400.00	0.10
Amit	Banda	6200.00	0.10
Lisa	Ozer	11500.00	0.25
Harrison	Bloom	10000.00	0.20
Tayler	Fox	9600.00	0.20
William	Smith	7400.00	0.15
Elizabeth	Bates	7300.00	0.15
Sundita	Kumar	6100.00	0.10
Ellen	Abel	11000.00	0.30
Alyssa	Hutton	8800.00	0.25

Jonathon	Taylor	8600.00	0.20
Jack	Livingston	8400.00	0.20
Kimberely	Grant	7000.00	0.15
Charles	Johnson	6200.00	0.10
Winston	Taylor	3200.00	0.00
Jean	Fleaur	3100.00	0.00
Martha	Sullivan	2500.00	0.00
Girard	Geoni	2800.00	0.00
Nandita	Sarchand	4200.00	0.00
Alexis	Bull	4100.00	0.00
Julia	Dellinger	3400.00	0.00
Anthony	Cabrio	3000.00	0.00
Kelly	Chung	3800.00	0.00
Jennifer	Dilly	3600.00	0.00
Timothy	Gates	2900.00	0.00
Randall	Perkins	2500.00	0.00
Sarah	Bell	4000.00	0.00
Britney	Everett	3900.00	0.00
Samuel	McCain	3200.00	0.00
Vance	Jones	2800.00	0.00
Alana	Walsh	3100.00	0.00
Kevin	Feeney	3000.00	0.00
Donald	OConnell	2600.00	0.00
Douglas	Grant	2600.00	0.00
Jennifer	Whalen	4400.00	0.00

| Michael | Hartstein | 13000.00 | 0.00 |

| Pat | Fay | 6000.00 | 0.00 |

| Susan | Mavris | 6500.00 | 0.00 |

| Hermann | Baer | 10000.00 | 0.00 |

| Shelley | Higgins | 12000.00 | 0.00 |

| William | Gietz | 8300.00 | 0.00 |

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

107 rows in set (0.001 sec)

MariaDB [hr]> select first_name, last_name, salary,

    ->   case

    ->   when salary between 0 and 5000 then 'A'

    ->   when salary between 5001 and 15001 then 'B'

    ->   when salary between 15001 and 20000 then 'C'

    ->   else 'D'

    ->   end as salary_grade

    ->   from employees;

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

| first_name | last_name | salary | salary_grade |

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

| Steven | King | 24000.00 | D |

| Neena | Kochhar | 17000.00 | C |

| Lex | De Haan | 17000.00 | C |

| Alexander | Hunold | 9000.00 | B |

| Bruce | Ernst | 6000.00 | B |

David	Austin	4800.00	A	
Valli	Pataballa	4800.00	A	
Diana	Lorentz	4200.00	A	
Nancy	Greenberg	12000.00	B	
Daniel	Faviet	9000.00	B	
John	Chen	8200.00	B	
Ismael	Sciarra	7700.00	B	
Jose Manuel	Urman	7800.00	B	
Luis	Popp	6900.00	B	
Den	Raphaely	11000.00	B	
Alexander	Khoo	3100.00	A	
Shelli	Baida	2900.00	A	
Sigal	Tobias	2800.00	A	
Guy	Himuro	2600.00	A	
Karen	Colmenares	2500.00	A	
Matthew	Weiss	8000.00	B	
Adam	Fripp	8200.00	B	
Payam	Kaufling	7900.00	B	
Shanta	Vollman	6500.00	B	
Kevin	Mourgos	5800.00	B	
Julia	Nayer	3200.00	A	
Irene	Mikkilineni	2700.00	A	
James	Landry	2400.00	A	
Steven	Markle	2200.00	A	
Laura	Bissot	3300.00	A	

Mozhe	Atkinson	2800.00	A
James	Marlow	2500.00	A
TJ	Olson	2100.00	A
Jason	Mallin	3300.00	A
Michael	Rogers	2900.00	A
Ki	Gee	2400.00	A
Hazel	Philtanker	2200.00	A
Renske	Ladwig	3600.00	A
Stephen	Stiles	3200.00	A
John	Seo	2700.00	A
Joshua	Patel	2500.00	A
Trenna	Rajs	3500.00	A
Curtis	Davies	3100.00	A
Randall	Matos	2600.00	A
Peter	Vargas	2500.00	A
John	Russell	14000.00	B
Karen	Partners	13500.00	B
Alberto	Errazuriz	12000.00	B
Gerald	Cambrault	11000.00	B
Eleni	Zlotkey	10500.00	B
Peter	Tucker	10000.00	B
David	Bernstein	9500.00	B
Peter	Hall	9000.00	B
Christopher	Olsen	8000.00	B
Nanette	Cambrault	7500.00	B

Oliver	Tuvault	7000.00	B	
Janette	King	10000.00	B	
Patrick	Sully	9500.00	B	
Allan	McEwen	9000.00	B	
Lindsey	Smith	8000.00	B	
Louise	Doran	7500.00	B	
Sarath	Sewall	7000.00	B	
Clara	Vishney	10500.00	B	
Danielle	Greene	9500.00	B	
Mattea	Marvins	7200.00	B	
David	Lee	6800.00	B	
Sundar	Ande	6400.00	B	
Amit	Banda	6200.00	B	
Lisa	Ozer	11500.00	B	
Harrison	Bloom	10000.00	B	
Tayler	Fox	9600.00	B	
William	Smith	7400.00	B	
Elizabeth	Bates	7300.00	B	
Sundita	Kumar	6100.00	B	
Ellen	Abel	11000.00	B	
Alyssa	Hutton	8800.00	B	
Jonathon	Taylor	8600.00	B	
Jack	Livingston	8400.00	B	
Kimberely	Grant	7000.00	B	
Charles	Johnson	6200.00	B	

Winston	Taylor	3200.00	A
Jean	Fleaur	3100.00	A
Martha	Sullivan	2500.00	A
Girard	Geoni	2800.00	A
Nandita	Sarchand	4200.00	A
Alexis	Bull	4100.00	A
Julia	Dellinger	3400.00	A
Anthony	Cabrio	3000.00	A
Kelly	Chung	3800.00	A
Jennifer	Dilly	3600.00	A
Timothy	Gates	2900.00	A
Randall	Perkins	2500.00	A
Sarah	Bell	4000.00	A
Britney	Everett	3900.00	A
Samuel	McCain	3200.00	A
Vance	Jones	2800.00	A
Alana	Walsh	3100.00	A
Kevin	Feeney	3000.00	A
Donald	OConnell	2600.00	A
Douglas	Grant	2600.00	A
Jennifer	Whalen	4400.00	A
Michael	Hartstein	13000.00	B
Pat	Fay	6000.00	B
Susan	Mavris	6500.00	B
Hermann	Baer	10000.00	B

| Shelley | Higgins | 12000.00 | B |

| William | Gietz | 8300.00 | B |

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

107 rows in set (0.001 sec)

MariaDB [hr]> select employee_id, first_name, last_name, phone_number, department_id from employees;

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

| employee_id | first_name | last_name | phone_number | department_id |

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

| 100 | Steven | King | 515.123.4567 |
90 |

| 101 | Neena | Kochhar | 515.123.4568 |
90 |

| 102 | Lex | De Haan | 515.123.4569 |
90 |

| 103 | Alexander | Hunold | 590.423.4567 |
60 |

| 104 | Bruce | Ernst | 590.423.4568 |
60 |

| 105 | David | Austin | 590.423.4569 |
60 |

| 106 | Valli | Pataballa | 590.423.4560 |
60 |

| 107 | Diana | Lorentz | 590.423.5567 |
60 |

	108	Nancy	Greenberg	515.124.4569	100
	109	Daniel	Faviet	515.124.4169	100
	110	John	Chen	515.124.4269	100
	111	Ismael	Sciarra	515.124.4369	100
	112	Jose Manuel	Urman	515.124.4469	100
	113	Luis	Popp	515.124.4567	100
	114	Den	Raphaely	515.127.4561	30
	115	Alexander	Khoo	515.127.4562	30
	116	Shelli	Baida	515.127.4563	30
	117	Sigal	Tobias	515.127.4564	30
	118	Guy	Himuro	515.127.4565	30
	119	Karen	Colmenares	515.127.4566	30
	120	Matthew	Weiss	650.123.1234	50
	121	Adam	Fripp	650.123.2234	50
	122	Payam	Kaufling	650.123.3234	50
	123	Shanta	Vollman	650.123.4234	

50 |

124	Kevin	Mourgos	650.123.5234	50
125	Julia	Nayer	650.124.1214	50
126	Irene	Mikkilineni	650.124.1224	50
127	James	Landry	650.124.1334	50
128	Steven	Markle	650.124.1434	50
129	Laura	Bissot	650.124.5234	50
130	Mozhe	Atkinson	650.124.6234	50
131	James	Marlow	650.124.7234	50
132	TJ	Olson	650.124.8234	50
133	Jason	Mallin	650.127.1934	50
134	Michael	Rogers	650.127.1834	50
135	Ki	Gee	650.127.1734	50
136	Hazel	Philtanker	650.127.1634	

50 |

| 137 | Renske | Ladwig | 650.121.1234 |
50 |

| 138 | Stephen | Stiles | 650.121.2034 |
50 |

| 139 | John | Seo | 650.121.2019 |
50 |

| 140 | Joshua | Patel | 650.121.1834 |
50 |

| 141 | Trenna | Rajs | 650.121.8009 |
50 |

| 142 | Curtis | Davies | 650.121.2994 |
50 |

| 143 | Randall | Matos | 650.121.2874 |
50 |

| 144 | Peter | Vargas | 650.121.2004 |
50 |

| 145 | John | Russell | 011.44.1344.429268 |
80 |

| 146 | Karen | Partners | 011.44.1344.467268 |
80 |

| 147 | Alberto | Errazuriz | 011.44.1344.429278 |
80 |

| 148 | Gerald | Cambrault | 011.44.1344.619268 |
80 |

149	Eleni	Zlotkey	011.44.1344.429018	80
150	Peter	Tucker	011.44.1344.129268	80
151	David	Bernstein	011.44.1344.345268	80
152	Peter	Hall	011.44.1344.478968	80
153	Christopher	Olsen	011.44.1344.498718	80
154	Nanette	Cambrault	011.44.1344.987668	80
155	Oliver	Tuvault	011.44.1344.486508	80
156	Janette	King	011.44.1345.429268	80
157	Patrick	Sully	011.44.1345.929268	80
158	Allan	McEwen	011.44.1345.829268	80
159	Lindsey	Smith	011.44.1345.729268	80
160	Louise	Doran	011.44.1345.629268	80
161	Sarath	Sewall	011.44.1345.529268

80 |

| 162 | Clara | Vishney | 011.44.1346.129268 |

80 |

| 163 | Danielle | Greene | 011.44.1346.229268 |

80 |

| 164 | Mattea | Marvins | 011.44.1346.329268 |

80 |

| 165 | David | Lee | 011.44.1346.529268 |

80 |

| 166 | Sundar | Ande | 011.44.1346.629268 |

80 |

| 167 | Amit | Banda | 011.44.1346.729268 |

80 |

| 168 | Lisa | Ozer | 011.44.1343.929268 |

80 |

| 169 | Harrison | Bloom | 011.44.1343.829268 |

80 |

| 170 | Tayler | Fox | 011.44.1343.729268 |

80 |

| 171 | William | Smith | 011.44.1343.629268 |

80 |

| 172 | Elizabeth | Bates | 011.44.1343.529268 |

80 |

| 173 | Sundita | Kumar | 011.44.1343.329268 |

80 |

174	Ellen	Abel	011.44.1644.429267	80
175	Alyssa	Hutton	011.44.1644.429266	80
176	Jonathon	Taylor	011.44.1644.429265	80
177	Jack	Livingston	011.44.1644.429264	80
178	Kimberely	Grant	011.44.1644.429263	NULL
179	Charles	Johnson	011.44.1644.429262	80
180	Winston	Taylor	650.507.9876	50
181	Jean	Fleaur	650.507.9877	50
182	Martha	Sullivan	650.507.9878	50
183	Girard	Geoni	650.507.9879	50
184	Nandita	Sarchand	650.509.1876	50
185	Alexis	Bull	650.509.2876	50
186	Julia	Dellinger	650.509.3876	50

187	Anthony	Cabrio	650.509.4876	50
188	Kelly	Chung	650.505.1876	50
189	Jennifer	Dilly	650.505.2876	50
190	Timothy	Gates	650.505.3876	50
191	Randall	Perkins	650.505.4876	50
192	Sarah	Bell	650.501.1876	50
193	Britney	Everett	650.501.2876	50
194	Samuel	McCain	650.501.3876	50
195	Vance	Jones	650.501.4876	50
196	Alana	Walsh	650.507.9811	50
197	Kevin	Feeney	650.507.9822	50
198	Donald	OConnell	650.507.9833	50
199	Douglas	Grant	650.507.9844	

```
   50 |

|      200 | Jennifer   | Whalen     | 515.123.4444     |

   10 |

|      201 | Michael    | Hartstein  | 515.123.5555     |

   20 |

|      202 | Pat        | Fay        | 603.123.6666     |

   20 |

|      203 | Susan      | Mavris     | 515.123.7777     |

   40 |

|      204 | Hermann    | Baer       | 515.123.8888     |

   70 |

|      205 | Shelley    | Higgins    | 515.123.8080     |        110 |
|      206 | William    | Gietz      | 51hr5.123.8181   |        110 |

+------------+------------+------------+------------------+--------------+
```

107 rows in set (0.001 sec)

MariaDB [hr]> select first_name, last_name, hire_date, salary, salary *1.20 as ANNUAL_SAL from employees;

```
+------------+------------+------------+----------+------------+
| first_name | last_name  | hire_date  | salary   | ANNUAL_SAL |
+------------+------------+------------+----------+------------+
| Steven     | King       | 1987-06-17 | 24000.00 | 28800.0000 |
| Neena      | Kochhar    | 1989-09-21 | 17000.00 | 20400.0000 |
| Lex        | De Haan    | 1993-01-13 | 17000.00 | 20400.0000 |
| Alexander  | Hunold     | 1990-01-03 |  9000.00 | 10800.0000 |
| Bruce      | Ernst      | 1991-05-21 |  6000.00 |  7200.0000 |
```

David	Austin	1997-06-25	4800.00	5760.0000
Valli	Pataballa	1998-02-05	4800.00	5760.0000
Diana	Lorentz	1999-02-07	4200.00	5040.0000
Nancy	Greenberg	1994-08-17	12000.00	14400.0000
Daniel	Faviet	1994-08-16	9000.00	10800.0000
John	Chen	1997-09-28	8200.00	9840.0000
Ismael	Sciarra	1997-09-30	7700.00	9240.0000
Jose Manuel	Urman	1998-03-07	7800.00	9360.0000
Luis	Popp	1999-12-07	6900.00	8280.0000
Den	Raphaely	1994-12-07	11000.00	13200.0000
Alexander	Khoo	1995-05-18	3100.00	3720.0000
Shelli	Baida	1997-12-24	2900.00	3480.0000
Sigal	Tobias	1997-07-24	2800.00	3360.0000
Guy	Himuro	1998-11-15	2600.00	3120.0000
Karen	Colmenares	1999-08-10	2500.00	3000.0000
Matthew	Weiss	1996-07-18	8000.00	9600.0000
Adam	Fripp	1997-04-10	8200.00	9840.0000
Payam	Kaufling	1995-05-01	7900.00	9480.0000
Shanta	Vollman	1997-10-10	6500.00	7800.0000
Kevin	Mourgos	1999-11-16	5800.00	6960.0000
Julia	Nayer	1997-07-16	3200.00	3840.0000
Irene	Mikkilineni	1998-09-28	2700.00	3240.0000
James	Landry	1999-01-14	2400.00	2880.0000
Steven	Markle	2000-03-08	2200.00	2640.0000
Laura	Bissot	1997-08-20	3300.00	3960.0000

Mozhe	Atkinson	1997-10-30	2800.00	3360.0000
James	Marlow	1997-02-16	2500.00	3000.0000
TJ	Olson	1999-04-10	2100.00	2520.0000
Jason	Mallin	1996-06-14	3300.00	3960.0000
Michael	Rogers	1998-08-26	2900.00	3480.0000
Ki	Gee	1999-12-12	2400.00	2880.0000
Hazel	Philtanker	2000-02-06	2200.00	2640.0000
Renske	Ladwig	1995-07-14	3600.00	4320.0000
Stephen	Stiles	1997-10-26	3200.00	3840.0000
John	Seo	1998-02-12	2700.00	3240.0000
Joshua	Patel	1998-04-06	2500.00	3000.0000
Trenna	Rajs	1995-10-17	3500.00	4200.0000
Curtis	Davies	1997-01-29	3100.00	3720.0000
Randall	Matos	1998-03-15	2600.00	3120.0000
Peter	Vargas	1998-07-09	2500.00	3000.0000
John	Russell	1996-10-01	14000.00	16800.0000
Karen	Partners	1997-01-05	13500.00	16200.0000
Alberto	Errazuriz	1997-03-10	12000.00	14400.0000
Gerald	Cambrault	1999-10-15	11000.00	13200.0000
Eleni	Zlotkey	2000-01-29	10500.00	12600.0000
Peter	Tucker	1997-01-30	10000.00	12000.0000
David	Bernstein	1997-03-24	9500.00	11400.0000
Peter	Hall	1997-08-20	9000.00	10800.0000
Christopher	Olsen	1998-03-30	8000.00	9600.0000
Nanette	Cambrault	1998-12-09	7500.00	9000.0000

Oliver	Tuvault	1999-11-23	7000.00	8400.0000
Janette	King	1996-01-30	10000.00	12000.0000
Patrick	Sully	1996-03-04	9500.00	11400.0000
Allan	McEwen	1996-08-01	9000.00	10800.0000
Lindsey	Smith	1997-03-10	8000.00	9600.0000
Louise	Doran	1997-12-15	7500.00	9000.0000
Sarath	Sewall	1998-11-03	7000.00	8400.0000
Clara	Vishney	1997-11-11	10500.00	12600.0000
Danielle	Greene	1999-03-19	9500.00	11400.0000
Mattea	Marvins	2000-01-24	7200.00	8640.0000
David	Lee	2000-02-23	6800.00	8160.0000
Sundar	Ande	2000-03-24	6400.00	7680.0000
Amit	Banda	2000-04-21	6200.00	7440.0000
Lisa	Ozer	1997-03-11	11500.00	13800.0000
Harrison	Bloom	1998-03-23	10000.00	12000.0000
Tayler	Fox	1998-01-24	9600.00	11520.0000
William	Smith	1999-02-23	7400.00	8880.0000
Elizabeth	Bates	1999-03-24	7300.00	8760.0000
Sundita	Kumar	2000-04-21	6100.00	7320.0000
Ellen	Abel	1996-05-11	11000.00	13200.0000
Alyssa	Hutton	1997-03-19	8800.00	10560.0000
Jonathon	Taylor	1998-03-24	8600.00	10320.0000
Jack	Livingston	1998-04-23	8400.00	10080.0000
Kimberely	Grant	1999-05-24	7000.00	8400.0000
Charles	Johnson	2000-01-04	6200.00	7440.0000

Winston	Taylor	1998-01-24	3200.00	3840.0000
Jean	Fleaur	1998-02-23	3100.00	3720.0000
Martha	Sullivan	1999-06-21	2500.00	3000.0000
Girard	Geoni	2000-02-03	2800.00	3360.0000
Nandita	Sarchand	1996-01-27	4200.00	5040.0000
Alexis	Bull	1997-02-20	4100.00	4920.0000
Julia	Dellinger	1998-06-24	3400.00	4080.0000
Anthony	Cabrio	1999-02-07	3000.00	3600.0000
Kelly	Chung	1997-06-14	3800.00	4560.0000
Jennifer	Dilly	1997-08-13	3600.00	4320.0000
Timothy	Gates	1998-07-11	2900.00	3480.0000
Randall	Perkins	1999-12-19	2500.00	3000.0000
Sarah	Bell	1996-02-04	4000.00	4800.0000
Britney	Everett	1997-03-03	3900.00	4680.0000
Samuel	McCain	1998-07-01	3200.00	3840.0000
Vance	Jones	1999-03-17	2800.00	3360.0000
Alana	Walsh	1998-04-24	3100.00	3720.0000
Kevin	Feeney	1998-05-23	3000.00	3600.0000
Donald	OConnell	1999-06-21	2600.00	3120.0000
Douglas	Grant	2000-01-13	2600.00	3120.0000
Jennifer	Whalen	1987-09-17	4400.00	5280.0000
Michael	Hartstein	1996-02-17	13000.00	15600.0000
Pat	Fay	1997-08-17	6000.00	7200.0000
Susan	Mavris	1994-06-07	6500.00	7800.0000
Hermann	Baer	1994-06-07	10000.00	12000.0000

| Shelley | Higgins | 1994-06-07 | 12000.00 | 14400.0000 |

| William | Gietz | 1994-06-07 | 8300.00 | 9960.0000 |

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

107 rows in set (0.001 sec)

MariaDB [hr]> select concat(concat(last_name, ' '), first_name) as FULL_NAME, concat(concat(phone_number, '-'), email) as CONTACT from employees;

+------------------+---------------------------+
| FULL_NAME | CONTACT |
+------------------+---------------------------+
King Steven	515.123.4567-SKING
Kochhar Neena	515.123.4568-NKOCHHAR
De Haan Lex	515.123.4569-LDEHAAN
Hunold Alexander	590.423.4567-AHUNOLD
Ernst Bruce	590.423.4568-BERNST
Austin David	590.423.4569-DAUSTIN
Pataballa Valli	590.423.4560-VPATABAL
Lorentz Diana	590.423.5567-DLORENTZ
Greenberg Nancy	515.124.4569-NGREENBE
Faviet Daniel	515.124.4169-DFAVIET
Chen John	515.124.4269-JCHEN
Sciarra Ismael	515.124.4369-ISCIARRA
Urman Jose Manuel	515.124.4469-JMURMAN
Popp Luis	515.124.4567-LPOPP
Raphaely Den	515.127.4561-DRAPHEAL
Khoo Alexander	515.127.4562-AKHOO

Baida Shelli	515.127.4563-SBAIDA
Tobias Sigal	515.127.4564-STOBIAS
Himuro Guy	515.127.4565-GHIMURO
Colmenares Karen	515.127.4566-KCOLMENA
Weiss Matthew	650.123.1234-MWEISS
Fripp Adam	650.123.2234-AFRIPP
Kaufling Payam	650.123.3234-PKAUFLIN
Vollman Shanta	650.123.4234-SVOLLMAN
Mourgos Kevin	650.123.5234-KMOURGOS
Nayer Julia	650.124.1214-JNAYER
Mikkilineni Irene	650.124.1224-IMIKKILI
Landry James	650.124.1334-JLANDRY
Markle Steven	650.124.1434-SMARKLE
Bissot Laura	650.124.5234-LBISSOT
Atkinson Mozhe	650.124.6234-MATKINSO
Marlow James	650.124.7234-JAMRLOW
Olson TJ	650.124.8234-TJOLSON
Mallin Jason	650.127.1934-JMALLIN
Rogers Michael	650.127.1834-MROGERS
Gee Ki	650.127.1734-KGEE
Philtanker Hazel	650.127.1634-HPHILTAN
Ladwig Renske	650.121.1234-RLADWIG
Stiles Stephen	650.121.2034-SSTILES
Seo John	650.121.2019-JSEO
Patel Joshua	650.121.1834-JPATEL

Rajs Trenna	650.121.8009-TRAJS
Davies Curtis	650.121.2994-CDAVIES
Matos Randall	650.121.2874-RMATOS
Vargas Peter	650.121.2004-PVARGAS
Russell John	011.44.1344.429268-JRUSSEL
Partners Karen	011.44.1344.467268-KPARTNER
Errazuriz Alberto	011.44.1344.429278-AERRAZUR
Cambrault Gerald	011.44.1344.619268-GCAMBRAU
Zlotkey Eleni	011.44.1344.429018-EZLOTKEY
Tucker Peter	011.44.1344.129268-PTUCKER
Bernstein David	011.44.1344.345268-DBERNSTE
Hall Peter	011.44.1344.478968-PHALL
Olsen Christopher	011.44.1344.498718-COLSEN
Cambrault Nanette	011.44.1344.987668-NCAMBRAU
Tuvault Oliver	011.44.1344.486508-OTUVAULT
King Janette	011.44.1345.429268-JKING
Sully Patrick	011.44.1345.929268-PSULLY
McEwen Allan	011.44.1345.829268-AMCEWEN
Smith Lindsey	011.44.1345.729268-LSMITH
Doran Louise	011.44.1345.629268-LDORAN
Sewall Sarath	011.44.1345.529268-SSEWALL
Vishney Clara	011.44.1346.129268-CVISHNEY
Greene Danielle	011.44.1346.229268-DGREENE
Marvins Mattea	011.44.1346.329268-MMARVINS
Lee David	011.44.1346.529268-DLEE

Ande Sundar	011.44.1346.629268-SANDE
Banda Amit	011.44.1346.729268-ABANDA
Ozer Lisa	011.44.1343.929268-LOZER
Bloom Harrison	011.44.1343.829268-HBLOOM
Fox Tayler	011.44.1343.729268-TFOX
Smith William	011.44.1343.629268-WSMITH
Bates Elizabeth	011.44.1343.529268-EBATES
Kumar Sundita	011.44.1343.329268-SKUMAR
Abel Ellen	011.44.1644.429267-EABEL
Hutton Alyssa	011.44.1644.429266-AHUTTON
Taylor Jonathon	011.44.1644.429265-JTAYLOR
Livingston Jack	011.44.1644.429264-JLIVINGS
Grant Kimberely	011.44.1644.429263-KGRANT
Johnson Charles	011.44.1644.429262-CJOHNSON
Taylor Winston	650.507.9876-WTAYLOR
Fleaur Jean	650.507.9877-JFLEAUR
Sullivan Martha	650.507.9878-MSULLIVA
Geoni Girard	650.507.9879-GGEONI
Sarchand Nandita	650.509.1876-NSARCHAN
Bull Alexis	650.509.2876-ABULL
Dellinger Julia	650.509.3876-JDELLING
Cabrio Anthony	650.509.4876-ACABRIO
Chung Kelly	650.505.1876-KCHUNG
Dilly Jennifer	650.505.2876-JDILLY
Gates Timothy	650.505.3876-TGATES

| Perkins Randall | 650.505.4876-RPERKINS |

| Bell Sarah | 650.501.1876-SBELL |

| Everett Britney | 650.501.2876-BEVERETT |

| McCain Samuel | 650.501.3876-SMCCAIN |

| Jones Vance | 650.501.4876-VJONES |

| Walsh Alana | 650.507.9811-AWALSH |

| Feeney Kevin | 650.507.9822-KFEENEY |

| OConnell Donald | 650.507.9833-DOCONNEL |

| Grant Douglas | 650.507.9844-DGRANT |

| Whalen Jennifer | 515.123.4444-JWHALEN |

| Hartstein Michael | 515.123.5555-MHARTSTE |

| Fay Pat | 603.123.6666-PFAY |

| Mavris Susan | 515.123.7777-SMAVRIS |

| Baer Hermann | 515.123.8888-HBAER |

| Higgins Shelley | 515.123.8080-SHIGGINS |

| Gietz William | 51hr5.123.8181-WGIETZ |

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

107 rows in set (0.001 sec)

MariaDB [hr]> select distinct manager_id from employees;

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

| manager_id |

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

| NULL |

| 100 |

```
|        101 |

|        102 |

|        103 |

|        108 |

|        114 |

|        120 |

|        121 |

|        122 |

|        123 |

|        124 |

|        145 |

|        146 |

|        147 |

|        148 |

|        149 |

|        201 |

|        205 |

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

19 rows in set (0.001 sec)
```

MariaDB [hr]> select concat(concat(first_name, ' '), job_id) as EMPLOYEE_AND_TITLE from employees;

```
+-----------------------+

| EMPLOYEE_AND_TITLE    |

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

| Steven AD_PRES        |
```

| Neena AD_VP |

| Lex AD_VP |

| Alexander IT_PROG |

| Bruce IT_PROG |

| David IT_PROG |

| Valli IT_PROG |

| Diana IT_PROG |

| Nancy FI_MGR |

| Daniel FI_ACCOUNT |

| John FI_ACCOUNT |

| Ismael FI_ACCOUNT |

| Jose Manuel FI_ACCOUNT |

| Luis FI_ACCOUNT |

| Den PU_MAN |

| Alexander PU_CLERK |

| Shelli PU_CLERK |

| Sigal PU_CLERK |

| Guy PU_CLERK |

| Karen PU_CLERK |

| Matthew ST_MAN |

| Adam ST_MAN |

| Payam ST_MAN |

| Shanta ST_MAN |

| Kevin ST_MAN |

| Julia ST_CLERK |

| Irene ST_CLERK |

| James ST_CLERK |

| Steven ST_CLERK |

| Laura ST_CLERK |

| Mozhe ST_CLERK |

| James ST_CLERK |

| TJ ST_CLERK |

| Jason ST_CLERK |

| Michael ST_CLERK |

| Ki ST_CLERK |

| Hazel ST_CLERK |

| Renske ST_CLERK |

| Stephen ST_CLERK |

| John ST_CLERK |

| Joshua ST_CLERK |

| Trenna ST_CLERK |

| Curtis ST_CLERK |

| Randall ST_CLERK |

| Peter ST_CLERK |

| John SA_MAN |

| Karen SA_MAN |

| Alberto SA_MAN |

| Gerald SA_MAN |

| Eleni SA_MAN |

| Peter SA_REP |

| David SA_REP |

| Peter SA_REP |

| Christopher SA_REP |

| Nanette SA_REP |

| Oliver SA_REP |

| Janette SA_REP |

| Patrick SA_REP |

| Allan SA_REP |

| Lindsey SA_REP |

| Louise SA_REP |

| Sarath SA_REP |

| Clara SA_REP |

| Danielle SA_REP |

| Mattea SA_REP |

| David SA_REP |

| Sundar SA_REP |

| Amit SA_REP |

| Lisa SA_REP |

| Harrison SA_REP |

| Tayler SA_REP |

| William SA_REP |

| Elizabeth SA_REP |

| Sundita SA_REP |

| Ellen SA_REP |

| Alyssa SA_REP |

| Jonathon SA_REP |

| Jack SA_REP |

| Kimberely SA_REP |

| Charles SA_REP |

| Winston SH_CLERK |

| Jean SH_CLERK |

| Martha SH_CLERK |

| Girard SH_CLERK |

| Nandita SH_CLERK |

| Alexis SH_CLERK |

| Julia SH_CLERK |

| Anthony SH_CLERK |

| Kelly SH_CLERK |

| Jennifer SH_CLERK |

| Timothy SH_CLERK |

| Randall SH_CLERK |

| Sarah SH_CLERK |

| Britney SH_CLERK |

| Samuel SH_CLERK |

| Vance SH_CLERK |

| Alana SH_CLERK |

| Kevin SH_CLERK |

| Donald SH_CLERK |

| Douglas SH_CLERK |

| Jennifer AD_ASST |

| Michael MK_MAN |

| Pat MK_REP |

| Susan HR_REP |

| Hermann PR_REP |

| Shelley AC_MGR |

| William AC_ACCOUNT |

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

107 rows in set (0.001 sec)

MariaDB [hr]> select first_name as FN, last_name as LN, salary as SAL, hire_date as HD from employees;

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

| FN | LN | SAL | HD |

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

| Steven | King | 24000.00 | 1987-06-17 |

| Neena | Kochhar | 17000.00 | 1989-09-21 |

| Lex | De Haan | 17000.00 | 1993-01-13 |

| Alexander | Hunold | 9000.00 | 1990-01-03 |

| Bruce | Ernst | 6000.00 | 1991-05-21 |

| David | Austin | 4800.00 | 1997-06-25 |

| Valli | Pataballa | 4800.00 | 1998-02-05 |

| Diana | Lorentz | 4200.00 | 1999-02-07 |

| Nancy | Greenberg | 12000.00 | 1994-08-17 |

| Daniel | Faviet | 9000.00 | 1994-08-16 |

| John | Chen | 8200.00 | 1997-09-28 |

| Ismael | Sciarra | 7700.00 | 1997-09-30 |

Jose Manuel	Urman	7800.00	1998-03-07
Luis	Popp	6900.00	1999-12-07
Den	Raphaely	11000.00	1994-12-07
Alexander	Khoo	3100.00	1995-05-18
Shelli	Baida	2900.00	1997-12-24
Sigal	Tobias	2800.00	1997-07-24
Guy	Himuro	2600.00	1998-11-15
Karen	Colmenares	2500.00	1999-08-10
Matthew	Weiss	8000.00	1996-07-18
Adam	Fripp	8200.00	1997-04-10
Payam	Kaufling	7900.00	1995-05-01
Shanta	Vollman	6500.00	1997-10-10
Kevin	Mourgos	5800.00	1999-11-16
Julia	Nayer	3200.00	1997-07-16
Irene	Mikkilineni	2700.00	1998-09-28
James	Landry	2400.00	1999-01-14
Steven	Markle	2200.00	2000-03-08
Laura	Bissot	3300.00	1997-08-20
Mozhe	Atkinson	2800.00	1997-10-30
James	Marlow	2500.00	1997-02-16
TJ	Olson	2100.00	1999-04-10
Jason	Mallin	3300.00	1996-06-14
Michael	Rogers	2900.00	1998-08-26
Ki	Gee	2400.00	1999-12-12
Hazel	Philtanker	2200.00	2000-02-06

Renske	Ladwig	3600.00	1995-07-14
Stephen	Stiles	3200.00	1997-10-26
John	Seo	2700.00	1998-02-12
Joshua	Patel	2500.00	1998-04-06
Trenna	Rajs	3500.00	1995-10-17
Curtis	Davies	3100.00	1997-01-29
Randall	Matos	2600.00	1998-03-15
Peter	Vargas	2500.00	1998-07-09
John	Russell	14000.00	1996-10-01
Karen	Partners	13500.00	1997-01-05
Alberto	Errazuriz	12000.00	1997-03-10
Gerald	Cambrault	11000.00	1999-10-15
Eleni	Zlotkey	10500.00	2000-01-29
Peter	Tucker	10000.00	1997-01-30
David	Bernstein	9500.00	1997-03-24
Peter	Hall	9000.00	1997-08-20
Christopher	Olsen	8000.00	1998-03-30
Nanette	Cambrault	7500.00	1998-12-09
Oliver	Tuvault	7000.00	1999-11-23
Janette	King	10000.00	1996-01-30
Patrick	Sully	9500.00	1996-03-04
Allan	McEwen	9000.00	1996-08-01
Lindsey	Smith	8000.00	1997-03-10
Louise	Doran	7500.00	1997-12-15
Sarath	Sewall	7000.00	1998-11-03

Clara	Vishney	10500.00	1997-11-11
Danielle	Greene	9500.00	1999-03-19
Mattea	Marvins	7200.00	2000-01-24
David	Lee	6800.00	2000-02-23
Sundar	Ande	6400.00	2000-03-24
Amit	Banda	6200.00	2000-04-21
Lisa	Ozer	11500.00	1997-03-11
Harrison	Bloom	10000.00	1998-03-23
Tayler	Fox	9600.00	1998-01-24
William	Smith	7400.00	1999-02-23
Elizabeth	Bates	7300.00	1999-03-24
Sundita	Kumar	6100.00	2000-04-21
Ellen	Abel	11000.00	1996-05-11
Alyssa	Hutton	8800.00	1997-03-19
Jonathon	Taylor	8600.00	1998-03-24
Jack	Livingston	8400.00	1998-04-23
Kimberely	Grant	7000.00	1999-05-24
Charles	Johnson	6200.00	2000-01-04
Winston	Taylor	3200.00	1998-01-24
Jean	Fleaur	3100.00	1998-02-23
Martha	Sullivan	2500.00	1999-06-21
Girard	Geoni	2800.00	2000-02-03
Nandita	Sarchand	4200.00	1996-01-27
Alexis	Bull	4100.00	1997-02-20
Julia	Dellinger	3400.00	1998-06-24

| Anthony | Cabrio | 3000.00 | 1999-02-07 |

| Kelly | Chung | 3800.00 | 1997-06-14 |

| Jennifer | Dilly | 3600.00 | 1997-08-13 |

| Timothy | Gates | 2900.00 | 1998-07-11 |

| Randall | Perkins | 2500.00 | 1999-12-19 |

| Sarah | Bell | 4000.00 | 1996-02-04 |

| Britney | Everett | 3900.00 | 1997-03-03 |

| Samuel | McCain | 3200.00 | 1998-07-01 |

| Vance | Jones | 2800.00 | 1999-03-17 |

| Alana | Walsh | 3100.00 | 1998-04-24 |

| Kevin | Feeney | 3000.00 | 1998-05-23 |

| Donald | OConnell | 2600.00 | 1999-06-21 |

| Douglas | Grant | 2600.00 | 2000-01-13 |

| Jennifer | Whalen | 4400.00 | 1987-09-17 |

| Michael | Hartstein | 13000.00 | 1996-02-17 |

| Pat | Fay | 6000.00 | 1997-08-17 |

| Susan | Mavris | 6500.00 | 1994-06-07 |

| Hermann | Baer | 10000.00 | 1994-06-07 |

| Shelley | Higgins | 12000.00 | 1994-06-07 |

| William | Gietz | 8300.00 | 1994-06-07 |

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

107 rows in set (0.001 sec)

MariaDB [hr]> select distinct salary from employees;

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

```
| salary   |
+----------+
| 24000.00 |
| 17000.00 |
|  9000.00 |
|  6000.00 |
|  4800.00 |
|  4200.00 |
| 12000.00 |
|  8200.00 |
|  7700.00 |
|  7800.00 |
|  6900.00 |
| 11000.00 |
|  3100.00 |
|  2900.00 |
|  2800.00 |
|  2600.00 |
|  2500.00 |
|  8000.00 |
|  7900.00 |
|  6500.00 |
|  5800.00 |
|  3200.00 |
|  2700.00 |
```

| 2400.00 |

| 2200.00 |

| 3300.00 |

| 2100.00 |

| 3600.00 |

| 3500.00 |

| 14000.00 |

| 13500.00 |

| 10500.00 |

| 10000.00 |

| 9500.00 |

| 7500.00 |

| 7000.00 |

| 7200.00 |

| 6800.00 |

| 6400.00 |

| 6200.00 |

| 11500.00 |

| 9600.00 |

| 7400.00 |

| 7300.00 |

| 6100.00 |

| 8800.00 |

| 8600.00 |

| 8400.00 |

| 4100.00 |

| 3400.00 |

| 3000.00 |

| 3800.00 |

| 4000.00 |

| 3900.00 |

| 4400.00 |

| 13000.00 |

| 8300.00 |

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

57 rows in set (0.001 sec)

MariaDB [hr]> select distinct department_id, job_id from employees;

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

| department_id | job_id |

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

| 90 | AD_PRES |

| 90 | AD_VP |

| 60 | IT_PROG |

| 100 | FI_MGR |

| 100 | FI_ACCOUNT |

| 30 | PU_MAN |

| 30 | PU_CLERK |

| 50 | ST_MAN |

| 50 | ST_CLERK |

| 80 | SA_MAN |

| 80 | SA_REP |

| NULL | SA_REP |

| 50 | SH_CLERK |

| 10 | AD_ASST |

| 20 | MK_MAN |

| 20 | MK_REP |

| 40 | HR_REP |

| 70 | PR_REP |

| 110 | AC_MGR |

| 110 | AC_ACCOUNT |

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

20 rows in set (0.001 sec)

MariaDB [hr]> select min(last_name) from employees;

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

| min(last_name) |

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

| Abel |

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

1 row in set (0.001 sec)

MariaDB [hr]> select max(last_name) from employees;

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

| max(last_name) |

```
+----------------+
| Zlotkey        |
+----------------+
1 row in set (0.001 sec)


MariaDB [hr]> select count(*) as row_count from employees;

+-----------+
| row_count |
+-----------+
|       107 |
+-----------+
1 row in set (0.001 sec)


MariaDB [hr]> select count(commission_pct) from employees;

+-----------------------+
| count(commission_pct) |
+-----------------------+
|                    35 |
+-----------------------+
1 row in set (0.001 sec)


MariaDB [hr]> select count(commission_pct) from employees where commission_pct is not null;

+-----------------------+
| count(commission_pct) |
+-----------------------+
```

```
|                  35 |

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

1 row in set (0.001 sec)
```

MariaDB [hr]> select count(null) from employees where commission_pct is not null;

```
+-------------+

| count(null) |

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

|           0 |

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

1 row in set (0.001 sec)
```

MariaDB [hr]> select min(salary) as min_sal, avg(salary) as avg_sal, max(salary) as max_sal from employees;

```
+---------+-------------+----------+

| min_sal | avg_sal     | max_sal  |

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

| 2100.00 | 6461.682243 | 24000.00 |

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

1 row in set (0.001 sec)
```

MariaDB [hr]> select department_id, avg(salary) as avg_sal from employees;

```
+---------------+-------------+

| department_id | avg_sal     |

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

|            90 | 6461.682243 |
```

```
+---------------+-------------+
```

1 row in set (0.001 sec)

MariaDB [hr]> select department_id, avg(salary) as avg_sal from employees group by department_id;

```
+---------------+--------------+
| department_id | avg_sal      |
+---------------+--------------+
|          NULL |  7000.000000 |
|            10 |  4400.000000 |
|            20 |  9500.000000 |
|            30 |  4150.000000 |
|            40 |  6500.000000 |
|            50 |  3475.555556 |
|            60 |  5760.000000 |
|            70 | 10000.000000 |
|            80 |  8955.882353 |
|            90 | 19333.333333 |
|           100 |  8600.000000 |
|           110 | 10150.000000 |
+---------------+--------------+
```

12 rows in set (0.002 sec)

MariaDB [hr]> select department_id, avg(salary) as avg_sal from employees where department_id in (50, 80) group by department_id;

```
+---------------+-------------+
| department_id | avg_sal     |
```

```
+---------------+-------------+
|            50 | 3475.555556 |
|            80 | 8955.882353 |
+---------------+-------------+
2 rows in set (0.002 sec)
```

MariaDB [hr]> select job_id, count(job_id) from employees group by job_id;

```
+------------+---------------+
| job_id     | count(job_id) |
+------------+---------------+
| AC_ACCOUNT |             1 |
| AC_MGR     |             1 |
| AD_ASST    |             1 |
| AD_PRES    |             1 |
| AD_VP      |             2 |
| FI_ACCOUNT |             5 |
| FI_MGR     |             1 |
| HR_REP     |             1 |
| IT_PROG    |             5 |
| MK_MAN     |             1 |
| MK_REP     |             1 |
| PR_REP     |             1 |
| PU_CLERK   |             5 |
| PU_MAN     |             1 |
| SA_MAN     |             5 |
```

| SA_REP | 30 |

| SH_CLERK | 20 |

| ST_CLERK | 20 |

| ST_MAN | 5 |

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

19 rows in set (0.003 sec)

MariaDB [hr]> select job_id, count(job_id) from employees where salary>10000 group by job_id;

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

| job_id | count(job_id) |

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

| AC_MGR | 1 |

| AD_PRES | 1 |

| AD_VP | 2 |

| FI_MGR | 1 |

| MK_MAN | 1 |

| PU_MAN | 1 |

| SA_MAN | 5 |

| SA_REP | 3 |

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

8 rows in set (0.001 sec)

MariaDB [hr]> select job_id, count(job_id) from employees where salary>10000 group by job_id having count(job_id)>2;

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

| job_id | count(job_id) |

```
+--------+--------------+
| SA_MAN |            5 |
| SA_REP |            3 |
+--------+--------------+
```

2 rows in set (0.001 sec)

MariaDB [hr]> select department_id, job_id, avg(salary) from employees group by department_id, job_id;

```
+---------------+-----------+--------------+
| department_id | job_id    | avg(salary)  |
+---------------+-----------+--------------+
|          NULL | SA_REP    |  7000.000000 |
|            10 | AD_ASST   |  4400.000000 |
|            20 | MK_MAN    | 13000.000000 |
|            20 | MK_REP    |  6000.000000 |
|            30 | PU_CLERK  |  2780.000000 |
|            30 | PU_MAN    | 11000.000000 |
|            40 | HR_REP    |  6500.000000 |
|            50 | SH_CLERK  |  3215.000000 |
|            50 | ST_CLERK  |  2785.000000 |
|            50 | ST_MAN    |  7280.000000 |
|            60 | IT_PROG   |  5760.000000 |
|            70 | PR_REP    | 10000.000000 |
|            80 | SA_MAN    | 12200.000000 |
|            80 | SA_REP    |  8396.551724 |
|            90 | AD_PRES   | 24000.000000 |
```

```
|          90 | AD_VP      | 17000.000000 |

|         100 | FI_ACCOUNT |  7920.000000 |

|         100 | FI_MGR    | 12000.000000 |

|         110 | AC_ACCOUNT |  8300.000000 |

|         110 | AC_MGR    | 12000.000000 |

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

20 rows in set (0.001 sec)
```

MariaDB [hr]> select manager_id, max(salary) from employees group by manager_id;

```
+------------+-------------+

| manager_id | max(salary) |

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

|       NULL |    24000.00 |

|        100 |    17000.00 |

|        101 |    12000.00 |

|        102 |     9000.00 |

|        103 |     6000.00 |

|        108 |     9000.00 |

|        114 |     3100.00 |

|        120 |     3200.00 |

|        121 |     4200.00 |

|        122 |     3800.00 |

|        123 |     4000.00 |

|        124 |     3500.00 |

|        145 |    10000.00 |
```

```
|      146 |   10000.00 |

|      147 |   10500.00 |

|      148 |   11500.00 |

|      149 |   11000.00 |

|      201 |    6000.00 |

|      205 |    8300.00 |

+------------+-------------+
```

19 rows in set (0.001 sec)

MariaDB [hr]> select manager_id, max(salary) from employees where salary>10000 group by manager_id;

```
+------------+-------------+

| manager_id | max(salary) |

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

|      NULL |   24000.00 |

|      100 |   17000.00 |

|      101 |   12000.00 |

|      147 |   10500.00 |

|      148 |   11500.00 |

|      149 |   11000.00 |

+------------+-------------+
```

6 rows in set (0.001 sec)

MariaDB [hr]> select job_id, min(salary) from employees group by job_id having min(salary)>7000;

```
+------------+-------------+

| job_id    | min(salary) |
```

```
+------------+-------------+

| AC_ACCOUNT |     8300.00 |

| AC_MGR     |    12000.00 |

| AD_PRES    |    24000.00 |

| AD_VP      |    17000.00 |

| FI_MGR     |    12000.00 |

| MK_MAN     |    13000.00 |

| PR_REP     |    10000.00 |

| PU_MAN     |    11000.00 |

| SA_MAN     |    10500.00 |

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

9 rows in set (0.001 sec)
```

MariaDB [hr]> select department_id, avg(salary) from employees where department_id between 20 and 80 group by department_id having avg(salary)>9000;

```
+---------------+--------------+

| department_id | avg(salary)  |

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

|            20 |  9500.000000 |

|            70 | 10000.000000 |

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

2 rows in set (0.001 sec)
```

MariaDB [hr]> select first_name, salary from employees where salary >(select salary from employees where employee_id=103);

```
+------------+----------+
```

| first_name | salary |
+------------+----------+
Steven	24000.00
Neena	17000.00
Lex	17000.00
Nancy	12000.00
Den	11000.00
John	14000.00
Karen	13500.00
Alberto	12000.00
Gerald	11000.00
Eleni	10500.00
Peter	10000.00
David	9500.00
Janette	10000.00
Patrick	9500.00
Clara	10500.00
Danielle	9500.00
Lisa	11500.00
Harrison	10000.00
Tayler	9600.00
Ellen	11000.00
Michael	13000.00
Hermann	10000.00
Shelley	12000.00

```
+------------+----------+
```

23 rows in set (0.001 sec)

MariaDB [hr]> select last_name, hire_date from employees where hire_date>(select hire_date from employees where employee_id=101);

```
+-------------+------------+
| last_name   | hire_date  |
+-------------+------------+
| De Haan     | 1993-01-13 |
| Hunold      | 1990-01-03 |
| Ernst       | 1991-05-21 |
| Austin      | 1997-06-25 |
| Pataballa   | 1998-02-05 |
| Lorentz     | 1999-02-07 |
| Greenberg   | 1994-08-17 |
| Faviet      | 1994-08-16 |
| Chen        | 1997-09-28 |
| Sciarra     | 1997-09-30 |
| Urman       | 1998-03-07 |
| Popp        | 1999-12-07 |
| Raphaely    | 1994-12-07 |
| Khoo        | 1995-05-18 |
| Baida       | 1997-12-24 |
| Tobias      | 1997-07-24 |
| Himuro      | 1998-11-15 |
| Colmenares  | 1999-08-10 |
```

Weiss	1996-07-18
Fripp	1997-04-10
Kaufling	1995-05-01
Vollman	1997-10-10
Mourgos	1999-11-16
Nayer	1997-07-16
Mikkilineni	1998-09-28
Landry	1999-01-14
Markle	2000-03-08
Bissot	1997-08-20
Atkinson	1997-10-30
Marlow	1997-02-16
Olson	1999-04-10
Mallin	1996-06-14
Rogers	1998-08-26
Gee	1999-12-12
Philtanker	2000-02-06
Ladwig	1995-07-14
Stiles	1997-10-26
Seo	1998-02-12
Patel	1998-04-06
Rajs	1995-10-17
Davies	1997-01-29
Matos	1998-03-15
Vargas	1998-07-09

Russell	1996-10-01
Partners	1997-01-05
Errazuriz	1997-03-10
Cambrault	1999-10-15
Zlotkey	2000-01-29
Tucker	1997-01-30
Bernstein	1997-03-24
Hall	1997-08-20
Olsen	1998-03-30
Cambrault	1998-12-09
Tuvault	1999-11-23
King	1996-01-30
Sully	1996-03-04
McEwen	1996-08-01
Smith	1997-03-10
Doran	1997-12-15
Sewall	1998-11-03
Vishney	1997-11-11
Greene	1999-03-19
Marvins	2000-01-24
Lee	2000-02-23
Ande	2000-03-24
Banda	2000-04-21
Ozer	1997-03-11
Bloom	1998-03-23

Fox	1998-01-24
Smith	1999-02-23
Bates	1999-03-24
Kumar	2000-04-21
Abel	1996-05-11
Hutton	1997-03-19
Taylor	1998-03-24
Livingston	1998-04-23
Grant	1999-05-24
Johnson	2000-01-04
Taylor	1998-01-24
Fleaur	1998-02-23
Sullivan	1999-06-21
Geoni	2000-02-03
Sarchand	1996-01-27
Bull	1997-02-20
Dellinger	1998-06-24
Cabrio	1999-02-07
Chung	1997-06-14
Dilly	1997-08-13
Gates	1998-07-11
Perkins	1999-12-19
Bell	1996-02-04
Everett	1997-03-03
McCain	1998-07-01

| Jones | 1999-03-17 |

| Walsh | 1998-04-24 |

| Feeney | 1998-05-23 |

| OConnell | 1999-06-21 |

| Grant | 2000-01-13 |

| Hartstein | 1996-02-17 |

| Fay | 1997-08-17 |

| Mavris | 1994-06-07 |

| Baer | 1994-06-07 |

| Higgins | 1994-06-07 |

| Gietz | 1994-06-07 |

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

104 rows in set (0.001 sec)

MariaDB [hr]> select e.first_name, e.last_name, e.department_id

    ->   from employees e

    ->   join departments d

    ->   on e.department_id=d.department_id

    ->   where d.department_name='sales';

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

| first_name | last_name | department_id |

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

| John | Russell | 80 |

| Karen | Partners | 80 |

| Alberto | Errazuriz | 80 |

Gerald	Cambrault	80
Eleni	Zlotkey	80
Peter	Tucker	80
David	Bernstein	80
Peter	Hall	80
Christopher	Olsen	80
Nanette	Cambrault	80
Oliver	Tuvault	80
Janette	King	80
Patrick	Sully	80
Allan	McEwen	80
Lindsey	Smith	80
Louise	Doran	80
Sarath	Sewall	80
Clara	Vishney	80
Danielle	Greene	80
Mattea	Marvins	80
David	Lee	80
Sundar	Ande	80
Amit	Banda	80
Lisa	Ozer	80
Harrison	Bloom	80
Tayler	Fox	80
William	Smith	80
Elizabeth	Bates	80

| Sundita | Kumar | 80 |

| Ellen | Abel | 80 |

| Alyssa | Hutton | 80 |

| Jonathon | Taylor | 80 |

| Jack | Livingston | 80 |

| Charles | Johnson | 80 |

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

34 rows in set (0.016 sec)

MariaDB [hr]> select department_id, department_name from departments where location_id=(select location_id from locations where city ='Toronto');

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

| department_id | department_name |

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

| 20 | Marketing |

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

1 row in set (0.031 sec)

MariaDB [hr]> select first_name, salary, department_id from employees where department_id = (select department_id from employees where employee_id=124);

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

| first_name | salary | department_id |

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

| Matthew | 8000.00 | 50 |

| Adam | 8200.00 | 50 |

| Payam | 7900.00 | 50 |

Shanta	6500.00	50
Kevin	5800.00	50
Julia	3200.00	50
Irene	2700.00	50
James	2400.00	50
Steven	2200.00	50
Laura	3300.00	50
Mozhe	2800.00	50
James	2500.00	50
TJ	2100.00	50
Jason	3300.00	50
Michael	2900.00	50
Ki	2400.00	50
Hazel	2200.00	50
Renske	3600.00	50
Stephen	3200.00	50
John	2700.00	50
Joshua	2500.00	50
Trenna	3500.00	50
Curtis	3100.00	50
Randall	2600.00	50
Peter	2500.00	50
Winston	3200.00	50
Jean	3100.00	50
Martha	2500.00	50

| Girard | 2800.00 | 50 |

| Nandita | 4200.00 | 50 |

| Alexis | 4100.00 | 50 |

| Julia | 3400.00 | 50 |

| Anthony | 3000.00 | 50 |

| Kelly | 3800.00 | 50 |

| Jennifer | 3600.00 | 50 |

| Timothy | 2900.00 | 50 |

| Randall | 2500.00 | 50 |

| Sarah | 4000.00 | 50 |

| Britney | 3900.00 | 50 |

| Samuel | 3200.00 | 50 |

| Vance | 2800.00 | 50 |

| Alana | 3100.00 | 50 |

| Kevin | 3000.00 | 50 |

| Donald | 2600.00 | 50 |

| Douglas | 2600.00 | 50 |

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

45 rows in set (0.001 sec)

MariaDB [hr]> select first_name, salary, department_id from employees where salary>(select avg(salary) from employees);

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

| first_name | salary | department_id |

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

| Steven | 24000.00 | 90 |

Neena	17000.00	90
Lex	17000.00	90
Alexander	9000.00	60
Nancy	12000.00	100
Daniel	9000.00	100
John	8200.00	100
Ismael	7700.00	100
Jose Manuel	7800.00	100
Luis	6900.00	100
Den	11000.00	30
Matthew	8000.00	50
Adam	8200.00	50
Payam	7900.00	50
Shanta	6500.00	50
John	14000.00	80
Karen	13500.00	80
Alberto	12000.00	80
Gerald	11000.00	80
Eleni	10500.00	80
Peter	10000.00	80
David	9500.00	80
Peter	9000.00	80
Christopher	8000.00	80
Nanette	7500.00	80
Oliver	7000.00	80

Janette	10000.00	80
Patrick	9500.00	80
Allan	9000.00	80
Lindsey	8000.00	80
Louise	7500.00	80
Sarath	7000.00	80
Clara	10500.00	80
Danielle	9500.00	80
Mattea	7200.00	80
David	6800.00	80
Lisa	11500.00	80
Harrison	10000.00	80
Tayler	9600.00	80
William	7400.00	80
Elizabeth	7300.00	80
Ellen	11000.00	80
Alyssa	8800.00	80
Jonathon	8600.00	80
Jack	8400.00	80
Kimberely	7000.00	NULL
Michael	13000.00	20
Susan	6500.00	40
Hermann	10000.00	70
Shelley	12000.00	110
William	8300.00	110

```
+-------------+----------+---------------+
```

51 rows in set (0.001 sec)

MariaDB [hr]> select first_name, salary, department_id from employees where salary in (select salary from employees where department_id=20);

```
+------------+----------+---------------+
| first_name | salary   | department_id |
+------------+----------+---------------+
| Bruce      | 6000.00  |            60 |
| Michael    | 13000.00 |            20 |
| Pat        | 6000.00  |            20 |
+------------+----------+---------------+
```

3 rows in set (0.001 sec)

MariaDB [hr]> select first_name, salary, department_id from employees where salary >(select max(salary) from employees where department_id=50);

```
+------------+----------+---------------+
| first_name | salary   | department_id |
+------------+----------+---------------+
| Steven     | 24000.00 |            90 |
| Neena      | 17000.00 |            90 |
| Lex        | 17000.00 |            90 |
| Alexander  | 9000.00  |            60 |
| Nancy      | 12000.00 |           100 |
| Daniel     | 9000.00  |           100 |
| Den        | 11000.00 |            30 |
```

John	14000.00	80
Karen	13500.00	80
Alberto	12000.00	80
Gerald	11000.00	80
Eleni	10500.00	80
Peter	10000.00	80
David	9500.00	80
Peter	9000.00	80
Janette	10000.00	80
Patrick	9500.00	80
Allan	9000.00	80
Clara	10500.00	80
Danielle	9500.00	80
Lisa	11500.00	80
Harrison	10000.00	80
Tayler	9600.00	80
Ellen	11000.00	80
Alyssa	8800.00	80
Jonathon	8600.00	80
Jack	8400.00	80
Michael	13000.00	20
Hermann	10000.00	70
Shelley	12000.00	110
William	8300.00	110
+------------+----------+--------------+

31 rows in set (0.001 sec)

MariaDB [hr]> select first_name, salary, department_id from employees where salary >(select min(salary) from employees where department_id=60);

```
+-------------+----------+---------------+
| first_name  | salary   | department_id |
+-------------+----------+---------------+
| Steven      | 24000.00 |            90 |
| Neena       | 17000.00 |            90 |
| Lex         | 17000.00 |            90 |
| Alexander   |  9000.00 |            60 |
| Bruce       |  6000.00 |            60 |
| David       |  4800.00 |            60 |
| Valli       |  4800.00 |            60 |
| Nancy       | 12000.00 |           100 |
| Daniel      |  9000.00 |           100 |
| John        |  8200.00 |           100 |
| Ismael      |  7700.00 |           100 |
| Jose Manuel |  7800.00 |           100 |
| Luis        |  6900.00 |           100 |
| Den         | 11000.00 |            30 |
| Matthew     |  8000.00 |            50 |
| Adam        |  8200.00 |            50 |
| Payam       |  7900.00 |            50 |
| Shanta      |  6500.00 |            50 |
| Kevin       |  5800.00 |            50 |
```

John	14000.00	80
Karen	13500.00	80
Alberto	12000.00	80
Gerald	11000.00	80
Eleni	10500.00	80
Peter	10000.00	80
David	9500.00	80
Peter	9000.00	80
Christopher	8000.00	80
Nanette	7500.00	80
Oliver	7000.00	80
Janette	10000.00	80
Patrick	9500.00	80
Allan	9000.00	80
Lindsey	8000.00	80
Louise	7500.00	80
Sarath	7000.00	80
Clara	10500.00	80
Danielle	9500.00	80
Mattea	7200.00	80
David	6800.00	80
Sundar	6400.00	80
Amit	6200.00	80
Lisa	11500.00	80
Harrison	10000.00	80

| Tayler | 9600.00 | 80 |

| William | 7400.00 | 80 |

| Elizabeth | 7300.00 | 80 |

| Sundita | 6100.00 | 80 |

| Ellen | 11000.00 | 80 |

| Alyssa | 8800.00 | 80 |

| Jonathon | 8600.00 | 80 |

| Jack | 8400.00 | 80 |

| Kimberely | 7000.00 | NULL |

| Charles | 6200.00 | 80 |

| Jennifer | 4400.00 | 10 |

| Michael | 13000.00 | 20 |

| Pat | 6000.00 | 20 |

| Susan | 6500.00 | 40 |

| Hermann | 10000.00 | 70 |

| Shelley | 12000.00 | 110 |

| William | 8300.00 | 110 |

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

61 rows in set (0.001 sec)

MariaDB [hr]> select first_name, salary, department_id from employees where salary >(select min(salary) from employees where department_id=90);

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

| first_name | salary | department_id |

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

| Steven | 24000.00 | 90 |

```
+------------+----------+---------------+
```

1 row in set (0.001 sec)

MariaDB [hr]> select first_name, salary, department_id from employees where salary <(select min(salary) from employees where department_id=90);

```
+-------------+----------+---------------+
| first_name  | salary   | department_id |
+-------------+----------+---------------+
| Alexander   | 9000.00  |            60 |
| Bruce       | 6000.00  |            60 |
| David       | 4800.00  |            60 |
| Valli       | 4800.00  |            60 |
| Diana       | 4200.00  |            60 |
| Nancy       | 12000.00 |           100 |
| Daniel      | 9000.00  |           100 |
| John        | 8200.00  |           100 |
| Ismael      | 7700.00  |           100 |
| Jose Manuel | 7800.00  |           100 |
| Luis        | 6900.00  |           100 |
| Den         | 11000.00 |            30 |
| Alexander   | 3100.00  |            30 |
| Shelli      | 2900.00  |            30 |
| Sigal       | 2800.00  |            30 |
| Guy         | 2600.00  |            30 |
| Karen       | 2500.00  |            30 |
| Matthew     | 8000.00  |            50 |
```

Adam	8200.00	50
Payam	7900.00	50
Shanta	6500.00	50
Kevin	5800.00	50
Julia	3200.00	50
Irene	2700.00	50
James	2400.00	50
Steven	2200.00	50
Laura	3300.00	50
Mozhe	2800.00	50
James	2500.00	50
TJ	2100.00	50
Jason	3300.00	50
Michael	2900.00	50
Ki	2400.00	50
Hazel	2200.00	50
Renske	3600.00	50
Stephen	3200.00	50
John	2700.00	50
Joshua	2500.00	50
Trenna	3500.00	50
Curtis	3100.00	50
Randall	2600.00	50
Peter	2500.00	50
John	14000.00	80

Karen	13500.00	80
Alberto	12000.00	80
Gerald	11000.00	80
Eleni	10500.00	80
Peter	10000.00	80
David	9500.00	80
Peter	9000.00	80
Christopher	8000.00	80
Nanette	7500.00	80
Oliver	7000.00	80
Janette	10000.00	80
Patrick	9500.00	80
Allan	9000.00	80
Lindsey	8000.00	80
Louise	7500.00	80
Sarath	7000.00	80
Clara	10500.00	80
Danielle	9500.00	80
Mattea	7200.00	80
David	6800.00	80
Sundar	6400.00	80
Amit	6200.00	80
Lisa	11500.00	80
Harrison	10000.00	80
Tayler	9600.00	80

William	7400.00	80
Elizabeth	7300.00	80
Sundita	6100.00	80
Ellen	11000.00	80
Alyssa	8800.00	80
Jonathon	8600.00	80
Jack	8400.00	80
Kimberely	7000.00	NULL
Charles	6200.00	80
Winston	3200.00	50
Jean	3100.00	50
Martha	2500.00	50
Girard	2800.00	50
Nandita	4200.00	50
Alexis	4100.00	50
Julia	3400.00	50
Anthony	3000.00	50
Kelly	3800.00	50
Jennifer	3600.00	50
Timothy	2900.00	50
Randall	2500.00	50
Sarah	4000.00	50
Britney	3900.00	50
Samuel	3200.00	50
Vance	2800.00	50

| Alana | 3100.00 | 50 |

| Kevin | 3000.00 | 50 |

| Donald | 2600.00 | 50 |

| Douglas | 2600.00 | 50 |

| Jennifer | 4400.00 | 10 |

| Michael | 13000.00 | 20 |

| Pat | 6000.00 | 20 |

| Susan | 6500.00 | 40 |

| Hermann | 10000.00 | 70 |

| Shelley | 12000.00 | 110 |

| William | 8300.00 | 110 |

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

104 rows in set (0.001 sec)

MariaDB [hr]> select e.first_name, e.salary, e.department_id from employees

e;

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

| first_name | salary | department_id |

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

| Steven | 24000.00 | 90 |

| Neena | 17000.00 | 90 |

| Lex | 17000.00 | 90 |

| Alexander | 9000.00 | 60 |

| Bruce | 6000.00 | 60 |

| David | 4800.00 | 60 |

Valli	4800.00	60
Diana	4200.00	60
Nancy	12000.00	100
Daniel	9000.00	100
John	8200.00	100
Ismael	7700.00	100
Jose Manuel	7800.00	100
Luis	6900.00	100
Den	11000.00	30
Alexander	3100.00	30
Shelli	2900.00	30
Sigal	2800.00	30
Guy	2600.00	30
Karen	2500.00	30
Matthew	8000.00	50
Adam	8200.00	50
Payam	7900.00	50
Shanta	6500.00	50
Kevin	5800.00	50
Julia	3200.00	50
Irene	2700.00	50
James	2400.00	50
Steven	2200.00	50
Laura	3300.00	50
Mozhe	2800.00	50

James	2500.00	50
TJ	2100.00	50
Jason	3300.00	50
Michael	2900.00	50
Ki	2400.00	50
Hazel	2200.00	50
Renske	3600.00	50
Stephen	3200.00	50
John	2700.00	50
Joshua	2500.00	50
Trenna	3500.00	50
Curtis	3100.00	50
Randall	2600.00	50
Peter	2500.00	50
John	14000.00	80
Karen	13500.00	80
Alberto	12000.00	80
Gerald	11000.00	80
Eleni	10500.00	80
Peter	10000.00	80
David	9500.00	80
Peter	9000.00	80
Christopher	8000.00	80
Nanette	7500.00	80
Oliver	7000.00	80

Janette	10000.00	80
Patrick	9500.00	80
Allan	9000.00	80
Lindsey	8000.00	80
Louise	7500.00	80
Sarath	7000.00	80
Clara	10500.00	80
Danielle	9500.00	80
Mattea	7200.00	80
David	6800.00	80
Sundar	6400.00	80
Amit	6200.00	80
Lisa	11500.00	80
Harrison	10000.00	80
Tayler	9600.00	80
William	7400.00	80
Elizabeth	7300.00	80
Sundita	6100.00	80
Ellen	11000.00	80
Alyssa	8800.00	80
Jonathon	8600.00	80
Jack	8400.00	80
Kimberely	7000.00	NULL
Charles	6200.00	80
Winston	3200.00	50

Jean	3100.00	50
Martha	2500.00	50
Girard	2800.00	50
Nandita	4200.00	50
Alexis	4100.00	50
Julia	3400.00	50
Anthony	3000.00	50
Kelly	3800.00	50
Jennifer	3600.00	50
Timothy	2900.00	50
Randall	2500.00	50
Sarah	4000.00	50
Britney	3900.00	50
Samuel	3200.00	50
Vance	2800.00	50
Alana	3100.00	50
Kevin	3000.00	50
Donald	2600.00	50
Douglas	2600.00	50
Jennifer	4400.00	10
Michael	13000.00	20
Pat	6000.00	20
Susan	6500.00	40
Hermann	10000.00	70
Shelley	12000.00	110

| William | 8300.00 | 110 |

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

107 rows in set (0.001 sec)

MariaDB [hr]> select e.first_name, e.salary, e.department_id from employees e join departments d on e.department_id=d.department_id join locations l on d.location_id=l.location_id where l.city='seattle';

+-------------+----------+---------------+
| first_name | salary | department_id |
+-------------+----------+---------------+
Jennifer	4400.00	10
Den	11000.00	30
Alexander	3100.00	30
Shelli	2900.00	30
Sigal	2800.00	30
Guy	2600.00	30
Karen	2500.00	30
Steven	24000.00	90
Neena	17000.00	90
Lex	17000.00	90
Nancy	12000.00	100
Daniel	9000.00	100
John	8200.00	100
Ismael	7700.00	100
Jose Manuel	7800.00	100
Luis	6900.00	100
Shelley	12000.00	110

| William | 8300.00 | 110 |

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

18 rows in set (0.001 sec)

MariaDB [hr]> select e.first_name, e.salary, e.department_id from employees e join employees k on e.department_id=k.department_id where e.salary<(select avg(salary) from employees) and k.first_name='kevin';

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

| first_name | salary | department_id |

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

| Kevin | 5800.00 | 50 |

| Kevin | 5800.00 | 50 |

| Julia | 3200.00 | 50 |

| Julia | 3200.00 | 50 |

| Irene | 2700.00 | 50 |

| Irene | 2700.00 | 50 |

| James | 2400.00 | 50 |

| James | 2400.00 | 50 |

| Steven | 2200.00 | 50 |

| Steven | 2200.00 | 50 |

| Laura | 3300.00 | 50 |

| Laura | 3300.00 | 50 |

| Mozhe | 2800.00 | 50 |

| Mozhe | 2800.00 | 50 |

| James | 2500.00 | 50 |

| James | 2500.00 | 50 |

TJ	2100.00	50
TJ	2100.00	50
Jason	3300.00	50
Jason	3300.00	50
Michael	2900.00	50
Michael	2900.00	50
Ki	2400.00	50
Ki	2400.00	50
Hazel	2200.00	50
Hazel	2200.00	50
Renske	3600.00	50
Renske	3600.00	50
Stephen	3200.00	50
Stephen	3200.00	50
John	2700.00	50
John	2700.00	50
Joshua	2500.00	50
Joshua	2500.00	50
Trenna	3500.00	50
Trenna	3500.00	50
Curtis	3100.00	50
Curtis	3100.00	50
Randall	2600.00	50
Randall	2600.00	50
Peter	2500.00	50

Peter	2500.00	50
Winston	3200.00	50
Winston	3200.00	50
Jean	3100.00	50
Jean	3100.00	50
Martha	2500.00	50
Martha	2500.00	50
Girard	2800.00	50
Girard	2800.00	50
Nandita	4200.00	50
Nandita	4200.00	50
Alexis	4100.00	50
Alexis	4100.00	50
Julia	3400.00	50
Julia	3400.00	50
Anthony	3000.00	50
Anthony	3000.00	50
Kelly	3800.00	50
Kelly	3800.00	50
Jennifer	3600.00	50
Jennifer	3600.00	50
Timothy	2900.00	50
Timothy	2900.00	50
Randall	2500.00	50
Randall	2500.00	50

| Sarah | 4000.00 | 50 |

| Sarah | 4000.00 | 50 |

| Britney | 3900.00 | 50 |

| Britney | 3900.00 | 50 |

| Samuel | 3200.00 | 50 |

| Samuel | 3200.00 | 50 |

| Vance | 2800.00 | 50 |

| Vance | 2800.00 | 50 |

| Alana | 3100.00 | 50 |

| Alana | 3100.00 | 50 |

| Kevin | 3000.00 | 50 |

| Kevin | 3000.00 | 50 |

| Donald | 2600.00 | 50 |

| Donald | 2600.00 | 50 |

| Douglas | 2600.00 | 50 |

| Douglas | 2600.00 | 50 |

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

82 rows in set (0.006 sec)

MariaDB [hr]> select e.last_name as employee, m.last_name as manager from employees e join employees m on e.manager_id=m.employee_id;

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

| employee | manager |

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

| Kochhar | King |

| De Haan | King |

| Hunold | De Haan |

| Ernst | Hunold |

| Austin | Hunold |

| Pataballa | Hunold |

| Lorentz | Hunold |

| Greenberg | Kochhar |

| Faviet | Greenberg |

| Chen | Greenberg |

| Sciarra | Greenberg |

| Urman | Greenberg |

| Popp | Greenberg |

| Raphaely | King |

| Khoo | Raphaely |

| Baida | Raphaely |

| Tobias | Raphaely |

| Himuro | Raphaely |

| Colmenares | Raphaely |

| Weiss | King |

| Fripp | King |

| Kaufling | King |

| Vollman | King |

| Mourgos | King |

| Nayer | Weiss |

| Mikkilineni | Weiss |

| Landry | Weiss |

| Markle | Weiss |

| Bissot | Fripp |

| Atkinson | Fripp |

| Marlow | Fripp |

| Olson | Fripp |

| Mallin | Kaufling |

| Rogers | Kaufling |

| Gee | Kaufling |

| Philtanker | Kaufling |

| Ladwig | Vollman |

| Stiles | Vollman |

| Seo | Vollman |

| Patel | Vollman |

| Rajs | Mourgos |

| Davies | Mourgos |

| Matos | Mourgos |

| Vargas | Mourgos |

| Russell | King |

| Partners | King |

| Errazuriz | King |

| Cambrault | King |

| Zlotkey | King |

| Tucker | Russell |

| Bernstein | Russell |

| Hall | Russell |

Olsen	Russell
Cambrault	Russell
Tuvault	Russell
King	Partners
Sully	Partners
McEwen	Partners
Smith	Partners
Doran	Partners
Sewall	Partners
Vishney	Errazuriz
Greene	Errazuriz
Marvins	Errazuriz
Lee	Errazuriz
Ande	Errazuriz
Banda	Errazuriz
Ozer	Cambrault
Bloom	Cambrault
Fox	Cambrault
Smith	Cambrault
Bates	Cambrault
Kumar	Cambrault
Abel	Zlotkey
Hutton	Zlotkey
Taylor	Zlotkey
Livingston	Zlotkey

Grant	Zlotkey
Johnson	Zlotkey
Taylor	Weiss
Fleaur	Weiss
Sullivan	Weiss
Geoni	Weiss
Sarchand	Fripp
Bull	Fripp
Dellinger	Fripp
Cabrio	Fripp
Chung	Kaufling
Dilly	Kaufling
Gates	Kaufling
Perkins	Kaufling
Bell	Vollman
Everett	Vollman
McCain	Vollman
Jones	Vollman
Walsh	Mourgos
Feeney	Mourgos
OConnell	Mourgos
Grant	Mourgos
Whalen	Kochhar
Hartstein	King
Fay	Hartstein

| Mavris | Kochhar |

| Baer | Kochhar |

| Higgins | Kochhar |

| Gietz | Higgins |

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

106 rows in set (0.001 sec)

MariaDB [hr]> select e.last_name, e.department_id from employees e join employees k on e.department_id=k.department_id where k.last_name='king';

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

| last_name | department_id |

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

| King | 90 |

| Kochhar | 90 |

| De Haan | 90 |

| Russell | 80 |

| Partners | 80 |

| Errazuriz | 80 |

| Cambrault | 80 |

| Zlotkey | 80 |

| Tucker | 80 |

| Bernstein | 80 |

| Hall | 80 |

| Olsen | 80 |

| Cambrault | 80 |

| Tuvault | 80 |

| King | 80 |

| Sully | 80 |

| McEwen | 80 |

| Smith | 80 |

| Doran | 80 |

| Sewall | 80 |

| Vishney | 80 |

| Greene | 80 |

| Marvins | 80 |

| Lee | 80 |

| Ande | 80 |

| Banda | 80 |

| Ozer | 80 |

| Bloom | 80 |

| Fox | 80 |

| Smith | 80 |

| Bates | 80 |

| Kumar | 80 |

| Abel | 80 |

| Hutton | 80 |

| Taylor | 80 |

| Livingston | 80 |

| Johnson | 80 |

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

37 rows in set (0.006 sec)

MariaDB [hr]> select last_name, salary from employees where salary<(select salary from employees where employee_id=103);

```
+-------------+---------+
| last_name   | salary  |
+-------------+---------+
| Ernst       | 6000.00 |
| Austin      | 4800.00 |
| Pataballa   | 4800.00 |
| Lorentz     | 4200.00 |
| Chen        | 8200.00 |
| Sciarra     | 7700.00 |
| Urman       | 7800.00 |
| Popp        | 6900.00 |
| Khoo        | 3100.00 |
| Baida       | 2900.00 |
| Tobias      | 2800.00 |
| Himuro      | 2600.00 |
| Colmenares  | 2500.00 |
| Weiss       | 8000.00 |
| Fripp       | 8200.00 |
| Kaufling    | 7900.00 |
| Vollman     | 6500.00 |
| Mourgos     | 5800.00 |
| Nayer       | 3200.00 |
| Mikkilineni | 2700.00 |
```

Landry	2400.00
Markle	2200.00
Bissot	3300.00
Atkinson	2800.00
Marlow	2500.00
Olson	2100.00
Mallin	3300.00
Rogers	2900.00
Gee	2400.00
Philtanker	2200.00
Ladwig	3600.00
Stiles	3200.00
Seo	2700.00
Patel	2500.00
Rajs	3500.00
Davies	3100.00
Matos	2600.00
Vargas	2500.00
Olsen	8000.00
Cambrault	7500.00
Tuvault	7000.00
Smith	8000.00
Doran	7500.00
Sewall	7000.00
Marvins	7200.00

| Lee | 6800.00 |

| Ande | 6400.00 |

| Banda | 6200.00 |

| Smith | 7400.00 |

| Bates | 7300.00 |

| Kumar | 6100.00 |

| Hutton | 8800.00 |

| Taylor | 8600.00 |

| Livingston | 8400.00 |

| Grant | 7000.00 |

| Johnson | 6200.00 |

| Taylor | 3200.00 |

| Fleaur | 3100.00 |

| Sullivan | 2500.00 |

| Geoni | 2800.00 |

| Sarchand | 4200.00 |

| Bull | 4100.00 |

| Dellinger | 3400.00 |

| Cabrio | 3000.00 |

| Chung | 3800.00 |

| Dilly | 3600.00 |

| Gates | 2900.00 |

| Perkins | 2500.00 |

| Bell | 4000.00 |

| Everett | 3900.00 |

```
| McCain    | 3200.00 |
| Jones     | 2800.00 |
| Walsh     | 3100.00 |
| Feeney    | 3000.00 |
| OConnell  | 2600.00 |
| Grant     | 2600.00 |
| Whalen    | 4400.00 |
| Fay       | 6000.00 |
| Mavris    | 6500.00 |
| Gietz     | 8300.00 |
+------------+---------+
80 rows in set (0.001 sec)


MariaDB [hr]>
```