

Relational Databases with MySQL Week 1 Coding Assignment

Points possible: 70

Category	Criteria	% of Grade
Functionality	Does the code work?	25
Organization	Is the code clean and organized? Proper use of white space, syntax, and consistency are utilized. Names and comments are concise and clear.	25
Creativity	Student solved the problems presented in the assignment using creativity and out of the box thinking.	25
Completeness	All requirements of the assignment are complete.	25

Instructions: Using a text editor of your choice, write the queries that accomplishes the objectives listed below. Take screenshots of the queries and results and paste them in this document where instructed below. Create a new repository on GitHub for this week's assignments and push this document, with your Java project code, to the repository. Add the URL for this week's repository to this document where instructed and submit this document to your instructor when complete.

Coding Steps:

Using the employees database you installed, write SQL queries that do the following (the SQL queries you write are what you will turn in for your homework):

1. Show all employees who were born before 1965-01-01
2. Show all employees who are female and were hired after 1990
3. Show the first and last name of the first 50 employees whose last name starts with F
4. Insert 3 new employees into the employees table. There emp_no should be 100, 101, and 102. You can choose the rest of the data.
5. Change the employee's first name to Bob for the employee with the emp_no of 10023.
6. Change all employees hire dates to 2002-01-01 whose first or last names start with P.
7. Delete all employees who have an emp_no less than 10000
8. Delete all employee who have an emp_no of 10048, 10099, 10234, and 20089.

Screenshots of Queries:

```
-- MySQL week 1 Coding Assignment
-- Backend Coding Bootcamp
-- Promineo Tech
--

SELECT * FROM employees LIMIT 10;
SELECT count(*) FROM employees;

-- Requirement #1
-- Show all employees who were born before 1965-01-01
SELECT *
FROM employees
WHERE birth_date < '1965-01-01';

-- Requirement #2
-- Show all employees who are female and were hired after 1990
SELECT *
FROM employees
WHERE gender = 'f' AND hire_date > '1990-12-31';

-- Requirement #3
-- Show the first and last name of the first 50 employees whose last name starts with F
SELECT first_name, last_name FROM employees
WHERE last_name LIKE 'f%' LIMIT 50;

-- Requirement #4
-- Insert 3 new employees in the employees table.
-- Their emp_nos should be 100, 101, and 102.
-- Choose the rest of the data!
-- (I added emp_no 103, Can't hire Mickey without Minnie!)
INSERT INTO employees (emp_no, birth_date, first_name, last_name, gender, hire_date)
VALUES (100, '1950-01-01', 'Mickey', 'Mouse', 'M', '1969-01-01'),
       (101, '1951-02-03', 'Daisy', 'Duck', 'F', '1970-02-02'),
       (102, '1949-03-03', 'Donald', 'Duck', 'M', '1970-03-03'),
       (103, '1951-04-04', 'Minnie', 'Mouse', 'F', '1969-02-02');

-- Confirm INSERT worked!
SELECT * FROM employees LIMIT 10;

-- Requirement #5
-- Check that the WHERE clause is correct before updating data
SELECT * FROM employees
WHERE emp_no = 10023;

-- Change the employee's first name to Bob for the employee with the emp_no of 10023
UPDATE employees SET first_name = 'Bob'
WHERE emp_no = 10023;

-- Confirm that UPDATE worked!
SELECT * FROM employees
WHERE emp_no = 10023;

-- Requirement #6
-- Check that the WHERE clause is correct before updating data
SELECT count(*) FROM employees WHERE first_name LIKE 'P%' || last_name LIKE 'P%';

SELECT * FROM employees WHERE first_name LIKE 'P%' || last_name LIKE 'P%' LIMIT 10;
-- Change all employees hire dates to 2002-01-01 whose first or last names start with P
UPDATE employees SET hire_date = '2002-01-01' WHERE first_name LIKE 'P%' || last_name LIKE 'P%';

-- Confirm that UPDATE worked!
SELECT * FROM employees WHERE first_name LIKE 'P%' || last_name LIKE 'P%' LIMIT 10;

-- Requirement #7
-- Check that the WHERE clause is correct before updating data
SELECT * FROM employees WHERE emp_no < 10000;

-- Delete all employees who have an emp_no less than 10000;
DELETE FROM employees WHERE emp_no < 10000;

-- Confirm that DELETE worked!
SELECT * FROM employees WHERE emp_no < 10000;

-- Requirement #8
-- Check that the WHERE clause is correct before updating data
SELECT * FROM employees WHERE emp_no IN (10048, 10099, 10234, 20089);

-- Delete all employees who have an emp_no of 10048, 10099, 10234 and 20089
DELETE FROM employees WHERE emp_no IN (10048, 10099, 10234, 20089);

-- Confirm that DELETE worked!
SELECT * FROM employees WHERE emp_no IN (10048, 10099, 10234, 20089);
```

Screenshots of Query Results (only include the last 20 rows):

Query 1 (last rows of result):

499956	1959-01-08	Zhonghua	Crooks	F	1994-10-12
499957	1956-10-08	Steen	Keohane	M	1987-02-25
499958	1957-07-08	Srinidhi	Theuretzbacher	F	1989-12-17
499959	1956-01-29	Lillian	Setiz	M	1991-11-08
499960	1952-12-02	Gaetan	Veldwijk	F	1989-09-16
499961	1962-10-02	Holgard	Nanard	F	1988-07-04
499962	1956-03-28	Yongqiao	Dalton	M	1995-06-20
499963	1962-03-14	Danny	Lenart	F	1989-08-07
499964	1958-02-24	Randy	Matzov	M	1988-11-18
499965	1961-12-07	Ronghao	Morrow	F	1985-05-26
499966	1955-12-04	Mihalis	Crabtree	F	1985-06-13
499967	1954-04-21	Bangqing	Bodoff	M	1996-08-15
499968	1959-03-07	Dharma	Ertl	M	1991-10-08
499969	1960-09-02	Masanoa	Ducloy	M	1992-02-16
499970	1963-03-25	Danai	Hedayat	M	1994-08-06
499971	1963-12-28	Uwe	Uludag	M	1989-02-26
499972	1957-07-25	Katsuo	Leuchs	F	1989-11-23
499973	1963-06-03	Lobel	Taubman	M	1994-02-01
499974	1956-09-10	Shuichi	Piazza	F	1989-09-16
499975	1962-11-09	Masoli	Chorvat	M	1992-01-23
499976	1963-08-20	Guozhong	Felder	M	1988-12-26
499977	1956-06-05	Martial	Weisert	F	1996-09-17
499978	1960-03-29	Chiranjit	Kuzuoka	M	1990-05-24
499979	1962-10-29	Prasadram	Waleschowski	M	1994-01-04
499980	1959-06-28	Gino	Usery	M	1991-02-11
499981	1955-01-02	Yunning	Mitina	F	1991-03-07
499982	1954-08-25	Mohammed	Pleszkun	M	1986-02-21
499983	1955-08-29	Uri	Juneja	F	1989-08-28
499984	1959-08-31	Kaijung	Rodhan	M	1985-09-11
499985	1964-12-26	Gila	Lukaszewicz	M	1997-02-11
499986	1952-07-22	Nathan	Ranta	F	1985-08-11
499987	1961-09-05	Rimli	Dusink	F	1998-09-20
499988	1962-09-28	Bangqing	Kleiser	F	1986-06-06
499989	1954-05-26	Keiichiro	Lindqvist	M	1993-10-28
499990	1963-11-03	Khaled	Kohling	M	1985-10-10
499991	1962-02-26	Pohua	Sichman	F	1989-01-12
499992	1960-10-12	Siamak	Salverda	F	1987-05-10
499993	1963-06-04	DeForest	Mullainathan	M	1997-04-07
499994	1952-02-26	Navin	Argence	F	1990-04-24
499995	1968-09-24	Dekang	Lichtner	F	1993-01-12
499996	1963-03-07	Zito	Baaz	M	1990-09-27
499997	1961-08-03	Berhard	Lenart	M	1986-04-21
499998	1956-09-05	Patricia	Breugel	M	1993-10-13
499999	1958-05-01	Sachin	Tsukuda	M	1997-11-30

298084 rows in set (0.21 sec)

499725	1952-05-29	Fumitate	Sudbeck	F	1992-07-26
499727	1957-07-28	Khaled	Ellozy	F	1992-02-07
499728	1953-07-17	Jinxi	Bernini	F	1994-04-19
499731	1953-02-03	Yechzekel	Pews	F	1992-10-23
499738	1954-09-09	Jiafu	Hutter	F	1994-08-25
499739	1953-05-25	Siama	Nollmann	F	1994-03-29
499747	1959-09-29	Mori	Colorni	F	1991-05-16
499785	1956-12-22	Lakshmi	Polajnar	F	1997-12-09
499790	1954-05-25	Mechthild	Poupard	F	1992-07-09
499886	1958-10-11	Ingmar	Barbanera	F	1995-04-14
499812	1962-03-27	Ulif	Mapelli	F	1994-10-10
499821	1957-03-15	Kazuhsisa	Raney	F	1992-05-22
499823	1956-12-27	Changho	Noriega	F	1994-11-19
499825	1953-04-23	Kwun	Rennele	F	1996-01-13
499830	1952-07-10	Ohene	Gurbaxani	F	1996-05-13
499834	1956-04-04	Nathan	Chimia	F	1995-05-12
499839	1964-06-16	Nadjib	McAffer	F	1996-10-22
499840	1963-08-03	Troy	Sifakis	F	1993-06-19
499841	1962-11-03	Deniz	Lundstrom	F	1995-06-05
499846	1963-05-14	Bezalel	Ranon	F	1993-07-02
499849	1954-10-12	Moriyoshi	Pusterhofer	F	1993-11-13
499854	1954-12-26	Goilgen	Sankaranarayanan	F	1992-07-14
499855	1957-07-01	Constantine	Michaels	F	1995-09-05
499856	1962-11-23	Yoshinari	Theuretzbacher	F	1997-05-17
499861	1959-11-18	Subhash	Barriga	F	1998-02-15
499871	1958-11-13	Elirique	Walstra	F	1993-07-05
499875	1961-01-11	Chenyi	Hainaut	F	1991-07-16
499885	1963-09-21	Jagoda	Langhier	F	1997-05-09
499892	1952-07-31	Aloke	Wuwongse	F	1991-06-18
499910	1957-11-07	Dowon	Versino	F	1991-12-22
499912	1956-06-19	Parke	Pell	F	1993-10-23
499916	1962-01-09	Florina	Cusworth	F	1997-05-18
499923	1964-12-21	Sergi	Melton	F	1993-04-08
499933	1957-10-21	Chuanti	Riesenhuber	F	1993-05-28
499934	1957-02-19	Tonia	Butner	F	1991-01-02
499938	1968-06-30	JiYoung	Binding	F	1993-04-18
499941	1956-10-16	Udairapakash	Hockney	F	1994-02-04
499942	1963-01-18	Feiyu	Sanella	F	1997-02-18
499950	1964-07-15	Weidon	Gente	F	1991-06-05
499956	1959-01-08	Zhonghua	Crooks	F	1994-10-12
499977	1956-06-05	Martial	Weisert	F	1996-09-17
499981	1955-01-02	Yuming	Mintha	F	1991-03-07
499987	1961-08-05	Rimli	Dusink	F	1998-09-28
499995	1958-09-24	Dekang	Lichtner	F	1993-01-12

43639 rows in set (0.13 sec)

Query 3:

Georgi	Facello
Shahaf	Famili
Somnath	Foote
Sudharsan	Flasterstein
Armond	Fairtlough
Ewing	Foong
Sumali	Fargier
Badri	Furudate
Arve	Fairtlough
Mohua	Falchi
Pranav	Furedi
Kish	Fasbender
Foong	Flasterstein
Roded	Facello
Clyde	Fandrianto
Anneli	Frijda
Masoud	Fabrizio
Przemyslawa	Falby
Hisao	Famili
Latif	Francisci
Heejo	Frolund
Otmar	Feinberg
Unal	Fendler
Yuchang	Francisci
Chenyi	Feinberg
Shim	Feldhoffer
Ashish	Fortenbacher
Fan	Fairtlough
Fen	Fiebach
Ramzi	Furudate
Oscal	Fasbender
Morris	Famili
Aleksander	Fioravanti
Chiradeep	Furedi
Shin	Foote
Deniz	Fontan
Nathan	Flowers
Tse	Felcyn
Tadahiro	Fordan
Sahrash	Figueira
Dayanand	Figueira
Kwangjo	Fiebach
Gina	Falster
Bernice	Felcyn
Sreenivas	Farrag
Lillian	Fonet
Ult	Farrar
Heping	Fontan
Xiong	Ferriere
Kasturi	Fraisse

50 rows in set (0.00 sec)

Query 4:

.
mysql> -- Requirement #4					
mysql> -- Insert 3 new employees in the employees table. Their emp_no's should be 100, 101, and 102.					
mysql> INSERT INTO employees (emp_no, birth_date, first_name, last_name, gender, hire_date)					
-> VALUES (100, '1950-01-01', 'Mickey', 'Mouse', 'M', '1969-01-01'),					
-> (101, '1951-02-03', 'Daisy', 'Duck', 'F', '1970-02-02'),					
-> (102, '1949-03-03', 'Donald', 'Duck', 'M', '1970-03-03'),					
-> (103, '1951-04-04', 'Minnie', 'Mouse', 'F', '1969-02-02');					
Query OK, 4 rows affected (0.02 sec)					
Records: 4 Duplicates: 0 Warnings: 0					
mysql>					
mysql> -- Confirm INSERT worked!					
mysql> SELECT * FROM employees LIMIT 10;					
+-----+-----+-----+-----+-----+-----+					
emp_no birth_date first_name last_name gender hire_date					
+-----+-----+-----+-----+-----+-----+					
100 1950-01-01 Mickey Mouse M 1969-01-01					
101 1951-02-03 Daisy Duck F 1970-02-02					
102 1949-03-03 Donald Duck M 1970-03-03					
103 1951-04-04 Minnie Mouse F 1969-02-02					
10001 1953-09-02 Georgi Facello M 1986-06-26					
10002 1964-06-02 Bezalel Simmel F 1985-11-21					
10003 1959-12-03 Parto Bamford M 1986-08-28					
10004 1954-05-01 Chirstian Koblick M 1986-12-01					
10005 1955-01-21 Kyoichi Maliniak M 1989-09-12					
10006 1953-04-20 Anneke Preusig F 1989-06-02					
+-----+-----+-----+-----+-----+-----+					
10 rows in set (0.00 sec)					
mysql> ■					

Query 5:

```
mysql> -- Requirement #5
mysql> -- Check that the WHERE clause is correct before updating data
mysql> SELECT * FROM employees
   > WHERE emp_no = 10023;
+-----+-----+-----+-----+-----+
| emp_no | birth_date | first_name | last_name | gender | hire_date |
+-----+-----+-----+-----+-----+
| 10023 | 1953-09-29 | Bojan      | Montemayor | F      | 1989-12-17 |
+-----+-----+-----+-----+-----+
1 row in set (0.00 sec)

mysql>
mysql> -- Change the employee's first name to Bob for the employee with the emp_no of 10023
mysql> UPDATE employees SET first_name = 'Bob'
   > WHERE emp_no = 10023;
Query OK, 1 row affected (0.02 sec)
Rows matched: 1 Changed: 1 Warnings: 0

mysql>
mysql> -- Confirm that UPDATE worked!
mysql> SELECT * FROM employees
   > WHERE emp_no = 10023;
+-----+-----+-----+-----+-----+
| emp_no | birth_date | first_name | last_name | gender | hire_date |
+-----+-----+-----+-----+-----+
| 10023 | 1953-09-29 | Bob        | Montemayor | F      | 1989-12-17 |
+-----+-----+-----+-----+-----+
1 row in set (0.00 sec)

mysql>
```

Query 6:

```
mysql> -- Requirement #6
mysql> -- Check that the WHERE clause is correct before updating data
mysql> SELECT count(*) FROM employees WHERE first_name LIKE 'P%' || last_name LIKE 'P%';
+-----+
| count(*) |
+-----+
| 31566 |
+-----+
1 row in set, 1 warning (0.23 sec)

mysql> SELECT * FROM employees WHERE first_name LIKE 'P%' || last_name LIKE 'P%' LIMIT 10;
+-----+-----+-----+-----+-----+
| emp_no | birth_date | first_name | last_name | gender | hire_date |
+-----+-----+-----+-----+-----+
| 10003 | 1959-12-03 | Parto      | Bamford    | M      | 1986-08-28 |
| 10006 | 1953-04-20 | Anneke     | Preusig    | F      | 1989-06-02 |
| 10009 | 1952-04-19 | Suman      | Peac       | F      | 1985-02-18 |
| 10010 | 1963-06-01 | Duangkaew   | Piveteau   | F      | 1989-08-24 |
| 10012 | 1960-10-04 | Patricio   | Bridgland  | M      | 1992-12-18 |
| 10018 | 1954-06-19 | Kazuhide   | Peha       | F      | 1987-04-03 |
| 10024 | 1958-09-05 | Suzette    | Pettey    | F      | 1997-05-19 |
| 10025 | 1958-10-31 | Prasadram  | Heyers    | M      | 1987-08-17 |
| 10036 | 1959-08-10 | Adamantios | Portugali  | M      | 1992-01-03 |
| 10037 | 1963-07-22 | Pradeep    | Makrucki  | M      | 1990-12-05 |
+-----+-----+-----+-----+-----+
10 rows in set, 1 warning (0.01 sec)

mysql> -- Change all employees hire dates to 2002-01-01 whose first or last names start with P
mysql> UPDATE employees SET hire_date = '2002-01-01' WHERE first_name LIKE 'P%' || last_name LIKE 'P%';
Query OK, 31566 rows affected, 1 warning (1.02 sec)
Rows matched: 31566 Changed: 31566 Warnings: 1

mysql> SELECT * FROM employees WHERE first_name LIKE 'P%' || last_name LIKE 'P%' LIMIT 10;
+-----+-----+-----+-----+-----+
| emp_no | birth_date | first_name | last_name | gender | hire_date |
+-----+-----+-----+-----+-----+
| 10003 | 1959-12-03 | Parto      | Bamford    | M      | 2002-01-01 |
| 10006 | 1953-04-20 | Anneke     | Preusig    | F      | 2002-01-01 |
| 10009 | 1952-04-19 | Suman      | Peac       | F      | 2002-01-01 |
| 10010 | 1963-06-01 | Duangkaew   | Piveteau   | F      | 2002-01-01 |
| 10012 | 1960-10-04 | Patricio   | Bridgland  | M      | 2002-01-01 |
| 10018 | 1954-06-19 | Kazuhide   | Peha       | F      | 2002-01-01 |
| 10024 | 1958-09-05 | Suzette    | Pettey    | F      | 2002-01-01 |
| 10025 | 1958-10-31 | Prasadram  | Heyers    | M      | 2002-01-01 |
| 10036 | 1959-08-10 | Adamantios | Portugali  | M      | 2002-01-01 |
| 10037 | 1963-07-22 | Pradeep    | Makrucki  | M      | 2002-01-01 |
+-----+-----+-----+-----+-----+
10 rows in set, 1 warning (0.00 sec)

mysql>
```

Query 7:

```
mysql>
mysql> -- Requirement #7
mysql> -- Check that the WHERE clause is correct before updating data
mysql> SELECT * FROM employees WHERE emp_no < 10000;
+-----+-----+-----+-----+-----+
| emp_no | birth_date | first_name | last_name | gender | hire_date |
+-----+-----+-----+-----+-----+
| 100  | 1950-01-01 | Mickey     | Mouse     | M      | 1969-01-01 |
| 101  | 1951-02-03 | Daisy      | Duck      | F      | 1970-02-02 |
| 102  | 1949-03-03 | Donald     | Duck      | M      | 1970-03-03 |
| 103  | 1951-04-04 | Minnie     | Mouse     | F      | 1969-02-02 |
+-----+-----+-----+-----+-----+
4 rows in set (0.01 sec)
```

```
mysql>
mysql> -- Delete all employees who have an emp_no less than 10000;
mysql> DELETE FROM employees WHERE emp_no < 10000;
Query OK, 4 rows affected (0.02 sec)
```

```
mysql>
mysql> -- Confirm that DELETE worked!
mysql> SELECT * FROM employees WHERE emp_no < 10000;
Empty set (0.00 sec)

mysql>
```

Query 8:

```
mysql>
mysql> -- Requirement #8
mysql> -- Check that the WHERE clause is correct before updating data
mysql> SELECT * FROM employees WHERE emp_no IN (10048, 10099, 10234, 20089);
+-----+-----+-----+-----+-----+
| emp_no | birth_date | first_name | last_name | gender | hire_date |
+-----+-----+-----+-----+-----+
| 10048 | 1963-07-11 | Florian    | Syrotiuk   | M      | 1985-02-24 |
| 10099 | 1956-05-25 | Valter     | Sullins    | F      | 1988-10-18 |
| 10234 | 1961-01-18 | Arunachalam | Bakhtari   | M      | 1990-11-19 |
| 20089 | 1953-11-29 | Unal       | Merli     | M      | 1991-12-14 |
+-----+-----+-----+-----+-----+
4 rows in set (0.00 sec)

mysql>
mysql> -- Delete all employees who have an emp_no of 10048, 10099, 10234 and 20089
mysql> DELETE FROM employees WHERE emp_no IN (10048, 10099, 10234, 20089);
Query OK, 4 rows affected (0.05 sec)

mysql>
mysql> -- Confirm that DELETE worked!
mysql> SELECT * FROM employees WHERE emp_no IN (10048, 10099, 10234, 20089);
Empty set (0.00 sec)

mysql>
```