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

```
mysql> SELECT * FROM employees WHERE birth_date < '1965-01-01'; ●
+--------+------------+-------------+-------------+--------+------------+
| emp_no | birth_date | first_name  | last_name   | gender | hire_date  |
+--------+------------+-------------+-------------+--------+------------+
|  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 |
|  10007 | 1957-05-23 | Tzvetan     | Zielinski   | F      | 1989-02-10 |
|  10008 | 1958-02-19 | Saniya      | Kalloufi    | M      | 1994-09-15 |
|  10009 | 1952-04-19 | Sumant      | Peac        | F      | 1985-02-18 |
|  10010 | 1963-06-01 | Duangkaew   | Piveteau    | F      | 1989-08-24 |
|  10011 | 1953-11-07 | Mary        | Sluis       | F      | 1990-01-22 |
|  10012 | 1960-10-04 | Patricio    | Bridgland   | M      | 1992-12-18 |
|  10013 | 1963-06-07 | Eberhardt   | Terkki      | M      | 1985-10-20 |
|  10014 | 1956-02-12 | Berni       | Genin       | M      | 1987-03-11 |
|  10015 | 1959-08-19 | Guoxiang    | Nooteboom   | M      | 1987-07-02 |
|  10016 | 1961-05-02 | Kazuhito    | Cappelletti | M      | 1995-01-27 |
|  10017 | 1958-07-06 | Cristinel   | Bouloucos   | F      | 1993-08-03 |
|  10018 | 1954-06-19 | Kazuhide    | Peha        | F      | 1987-04-03 |
|  10019 | 1953-01-23 | Lillian     | Haddadi     | M      | 1999-04-30 |
|  10020 | 1952-12-24 | Mayuko      | Warwick     | M      | 1991-01-26 |
|  10021 | 1960-02-20 | Ramzi       | Erde        | M      | 1988-02-10 |
|  10022 | 1952-07-08 | Shahaf      | Famili      | M      | 1995-08-22 |
|  10023 | 1953-09-29 | Bojan       | Montemayor  | F      | 1989-12-17 |
|  10024 | 1958-09-05 | Suzette     | Pettey      | F      | 1997-05-19 |
|  10025 | 1958-10-31 | Prasadram   | Heyers      | M      | 1987-08-17 |
|  10026 | 1953-04-03 | Yongqiao    | Berztiss    | M      | 1995-03-20 |
|  10027 | 1962-07-10 | Divier      | Reistad     | F      | 1989-07-07 |
```

2. Show all employees who are female and were hired after 1990

```
mysql> SELECT * FROM employees WHERE gender= 'f' AND hire_date > '1990-12-31';
+--------+------------+------------+--------------+--------+------------+
| emp_no | birth_date | first_name | last_name    | gender | hire_date  |
+--------+------------+------------+--------------+--------+------------+
|  10017 | 1958-07-06 | Cristinel  | Bouloucos    | F      | 1993-08-03 |
|  10024 | 1958-09-05 | Suzette    | Pettey       | F      | 1997-05-19 |
|  10040 | 1959-09-13 | Weiyi      | Meriste      | F      | 1993-02-14 |
|  10042 | 1956-02-26 | Magy       | Stamatiou    | F      | 1993-03-21 |
|  10044 | 1961-09-21 | Mingsen    | Casley       | F      | 1994-05-21 |
|  10049 | 1961-04-24 | Basil      | Tramer       | F      | 1992-05-04 |
|  10057 | 1954-05-30 | Ebbe       | Callaway     | F      | 1992-01-15 |
|  10059 | 1953-09-19 | Alejandro  | McAlpine     | F      | 1991-06-26 |
|  10101 | 1952-04-15 | Perla      | Heyers       | F      | 1992-12-28 |
|  10102 | 1959-11-04 | Paraskevi  | Luby         | F      | 1994-01-26 |
|  10107 | 1956-06-13 | Dung       | Baca         | F      | 1994-03-22 |
|  10109 | 1958-11-25 | Mariusz    | Prampolini   | F      | 1993-06-16 |
|  10114 | 1957-02-16 | Munir      | Demeyer      | F      | 1992-07-17 |
|  10120 | 1960-03-26 | Armond     | Fairtlough   | F      | 1996-07-06 |
|  10139 | 1963-03-03 | Ewing      | Foong        | F      | 1998-03-15 |
|  10140 | 1957-03-11 | Yucel      | Auria        | F      | 1991-03-14 |
|  10141 | 1960-01-17 | Shahaf     | Ishibashi    | F      | 1993-05-06 |
|  10166 | 1953-05-10 | Samphel    | Siegrist     | F      | 1993-01-01 |
|  10169 | 1961-05-03 | Sampalli   | Snedden      | F      | 1992-07-24 |
|  10172 | 1957-03-25 | Shigeu     | Matzen       | F      | 1995-10-13 |
|  10176 | 1957-01-24 | Brendon    | Lenart       | F      | 1994-12-22 |
|  10187 | 1961-05-26 | Tommaso    | Narwekar     | F      | 1991-06-01 |
|  10197 | 1963-08-06 | Kasidit    | Krzyzanowski | F      | 1993-11-22 |
|  10205 | 1953-05-20 | Mabhin     | Leijenhorst  | F      | 1993-08-23 |
|  10207 | 1955-05-28 | Girolamo   | Anandan      | F      | 1992-10-11 |
|  10209 | 1956-12-12 | Yolla      | Ellozy       | F      | 1991-11-23 |
|  10220 | 1958-05-25 | Kish       | Fasbender    | F      | 1992-06-25 |
|  10228 | 1953-04-21 | Karoline   | Cesareni     | F      | 1991-08-26 |
|  10231 | 1963-07-21 | Shaowen    | Desikan      | F      | 1996-04-13 |
|  10232 | 1956-03-11 | Marko      | Auria        | F      | 1992-06-04 |
|  10235 | 1958-03-27 | Susanta    | Roccetti     | F      | 1995-04-06 |
|  10236 | 1960-03-26 | Susumu     | Bade         | F      | 1996-08-30 |
```

3. Show the first and last name of the first 50 employees whose last name starts with F

```
mysql> SELECT first_name, last_name FROM employees WHERE last_name LIKE 'f%' LIMIT 50;
+-------------+-------------+
| first_name  | last_name   |
+-------------+-------------+
| Georgi      | Facello     |
| Shahaf      | Famili      |
| Somnath     | Foote       |
| Sudharsan   | Flasterstein|
| Armond      | Fairtlough  |
| Ewing       | Foong       |
| Sumali      | Fargier     |
| Badri       | Furudate    |
| Arve        | Fairtlough  |
| Mohua       | Falck       |
| Pranav      | Furedi      |
| Kish        | Fasbender   |
| Foong       | Flasterstein|
| Roded       | Facello     |
| Clyde       | Fandrianto  |
| Anneli      | Frijda      |
| Masoud      | Fabrizio    |
| Przemyslawa | Falby       |
| Hisao       | Famili      |
| Lalit       | Francisci   |
| Heejo       | Frolund     |
| Otmar       | Feinberg    |
| Unal        | Fendler     |
| Yuchang     | Francisci   |
| Chenyi      | Feinberg    |
```

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.

```
mysql> INSERT INTO employees VALUES(100,'1908-04-04','Gene','Stapler','M','1910-09-04'),
    -> (101,'1988-05-05','Mark','Cat','F','1994-09-04'),
    -> (102,'1832-08-08','Reginald','Triangle','M','1866-03-03');
Query OK, 3 rows affected (0.01 sec)
Records: 3  Duplicates: 0  Warnings: 0

mysql> SELECT * FROM employees LIMIT 5;
+--------+------------+------------+-----------+--------+------------+
| emp_no | birth_date | first_name | last_name | gender | hire_date  |
+--------+------------+------------+-----------+--------+------------+
|    100 | 1908-04-04 | Gene       | Stapler   | M      | 1910-09-04 |
|    101 | 1988-05-05 | Mark       | Cat       | F      | 1994-09-04 |
|    102 | 1832-08-08 | Reginald   | Triangle  | M      | 1866-03-03 |
|  10001 | 1953-09-02 | Georgi     | Facello   | M      | 1986-06-26 |
|  10002 | 1964-06-02 | Bezalel    | Simmel    | F      | 1985-11-21 |
+--------+------------+------------+-----------+--------+------------+
5 rows in set (0.00 sec)
```

5. 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> SELECT emp_no=10023;
ERROR 1054 (42S22): Unknown column 'emp_no' in 'field list'
mysql> SELECT emp_no=10023 FROM employees;
+--------------+
| emp_no=10023 |
+--------------+
|            0 |
|            0 |
```

```
|            0 |
|            0 |
      C -- query aborted
   0 |
+--------------+
300027 rows in set (0.19 sec)

mysql>
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 (0.01 sec)
```

6. 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%';
Query OK, 10247 rows affected (0.74 sec)
Rows matched: 10247  Changed: 10247  Warnings: 0

mysql> UPDATE employees SET hire_date ='2002-01-01' WHERE last_name LIKE 'p%';
Query OK, 21319 rows affected (0.88 sec)
Rows matched: 22088  Changed: 21319  Warnings: 0
```

```
mysql> SELECT * FROM employees WHERE first_name LIKE 'p%' AND last_name LIKE 'p%' LIMIT 20;
+--------+------------+--------------+---------------+--------+------------+
| emp_no | birth_date | first_name   | last_name     | gender | hire_date  |
+--------+------------+--------------+---------------+--------+------------+
|  11606 | 1952-11-05 | Perry        | Pepe          | M      | 2002-01-01 |
|  12227 | 1958-09-21 | Pramod       | Percebois     | M      | 2002-01-01 |
|  12780 | 1963-01-24 | Premal       | Puppo         | M      | 2002-01-01 |
|  13401 | 1961-07-30 | Przemyslawa  | Pavlopoulou   | M      | 2002-01-01 |
|  13480 | 1962-10-24 | Patricio     | Parascandalo  | M      | 2002-01-01 |
|  13541 | 1962-01-03 | Pasqua       | Peral         | F      | 2002-01-01 |
|  14518 | 1955-06-19 | Patricia     | Peir          | M      | 2002-01-01 |
|  14672 | 1964-07-01 | Parto        | Pietracaprina | M      | 2002-01-01 |
|  15293 | 1964-04-29 | Pantung      | Puppo         | M      | 2002-01-01 |
|  15347 | 1958-03-30 | Przemyslawa  | Paciorek      | M      | 2002-01-01 |
|  15369 | 1952-10-11 | Premal       | Penttonen     | F      | 2002-01-01 |
|  15509 | 1962-09-25 | Przemyslawa  | Puoti         | M      | 2002-01-01 |
|  16470 | 1961-01-05 | Poornachandra| Plesums       | F      | 2002-01-01 |
|  16516 | 1963-04-29 | Persi        | Porenta       | M      | 2002-01-01 |
|  16634 | 1956-08-20 | Parviz       | Peroz         | F      | 2002-01-01 |
|  17074 | 1960-01-03 | Pramod       | Pleszkun      | M      | 2002-01-01 |
|  17536 | 1959-03-07 | Padma        | Pollacia      | F      | 2002-01-01 |
|  17725 | 1960-06-18 | Parviz       | Poulakidas    | M      | 2002-01-01 |
|  18712 | 1958-04-02 | Pranay       | Panwar        | F      | 2002-01-01 |
|  18910 | 1952-08-21 | Pantung      | Peral         | F      | 2002-01-01 |
+--------+------------+--------------+---------------+--------+------------+
20 rows in set (0.03 sec)
```

7. Delete all employees who have an emp_no less than 10000

```
mysql> DELETE FROM employees WHERE emp_no < 10000;
Query OK, 3 rows affected (0.02 sec)

mysql> SELECT * FROM employees LIMIT 20;
+--------+------------+------------+-------------+--------+------------+
| emp_no | birth_date | first_name | last_name   | gender | hire_date  |
+--------+------------+------------+-------------+--------+------------+
|  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      | 2002-01-01 |
|  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      | 2002-01-01 |
|  10007 | 1957-05-23 | Tzvetan    | Zielinski   | F      | 1989-02-10 |
|  10008 | 1958-02-19 | Saniya     | Kalloufi    | M      | 1994-09-15 |
|  10009 | 1952-04-19 | Sumant     | Peac        | F      | 2002-01-01 |
|  10010 | 1963-06-01 | Duangkaew  | Piveteau    | F      | 2002-01-01 |
|  10011 | 1953-11-07 | Mary       | Sluis       | F      | 1990-01-22 |
|  10012 | 1960-10-04 | Patricio   | Bridgland   | M      | 2002-01-01 |
|  10013 | 1963-06-07 | Eberhardt  | Terkki      | M      | 1985-10-20 |
|  10014 | 1956-02-12 | Berni      | Genin       | M      | 1987-03-11 |
|  10015 | 1959-08-19 | Guoxiang   | Nooteboom   | M      | 1987-07-02 |
|  10016 | 1961-05-02 | Kazuhito   | Cappelletti | M      | 1995-01-27 |
|  10017 | 1958-07-06 | Cristinel  | Bouloucos   | F      | 1993-08-03 |
|  10018 | 1954-06-19 | Kazuhide   | Peha        | F      | 2002-01-01 |
|  10019 | 1953-01-23 | Lillian    | Haddadi     | M      | 1999-04-30 |
|  10020 | 1952-12-24 | Mayuko     | Warwick     | M      | 1991-01-26 |
+--------+------------+------------+-------------+--------+------------+
20 rows in set (0.00 sec)
```

8. Delete all employee who have an emp_no of 10048, 10099, 10234, and 20089.

```
mysql> DELETE FROM employees WHERE emp_no = 10048 AND emp_no = 10099 AND emp_no = 10234 AND emp_no = 20089;
Query OK, 0 rows affected (0.00 sec)

mysql> DELETE FROM employees WHERE emp_no = 10048;
Query OK, 1 row affected (0.01 sec)●

mysql> DELETE FROM employees WHERE emp_no = 10099 OR emp_no = 10234 OR emp_no = 20089;
Query OK, 3 rows affected (0.02 sec)●

mysql> SELECT * FROM employees WHERE emp_no = 10048 OR emp_no = 10099 OR emp_no = 10234 OR emp_no = 20089;
Empty set (0.00 sec)●

mysql> SELECT * FROM employees WHERE emp_no < 10045 AND emp_no > 10050;
Empty set (0.00 sec)

mysql> SELECT * FROM employees WHERE emp_no > 10045 AND emp_no < 10050;●
+--------+------------+------------+------------+--------+------------+
| emp_no | birth_date | first_name | last_name  | gender | hire_date  |
+--------+------------+------------+------------+--------+------------+
|  10046 | 1960-07-23 | Lucien     | Rosenbaum  | M      | 1992-06-20 |
|  10047 | 1952-06-29 | Zvonko     | Nyanchama  | M      | 1989-03-31 |
|  10049 | 1961-04-24 | Basil      | Tramer     | F      | 1992-05-04 |
+--------+------------+------------+------------+--------+------------+
3 rows in set (0.00 sec)
```

URL to GitHub Repository:

https://github.com/wlindstrom55/MYSQL-wk1-coding-assignments