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. Lastly, in the Learning Management System, click the "Add Submission" button and paste the URL to your GitHub repository.

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 -
    - 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
|
+--------+------------+----------
+
298084 rows in set (0.28 sec)
```

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

- 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

+
43640 rows in set (0.20 sec)

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

- SELECT * FROM employees WHERE first_name LIKE 'f%' AND last_name LIKE 'f%';

emp_no	birth_date	first_name	last_name	gender	hire_date
10244	1961-10-24	Foong	Flasterstein	M	1985-12-23
10825	1958-03-27	Fan	Fairtlough	M	1985-12-30
10830	1954-08-17	Fen	Fiebach	M	1991-08-24
13016	1961-08-15	Fuqing	Figueira	F	1986-06-02
16571	1963-12-09	Francoise	Fiutem	M	1990-05-25
18157	1955-01-05	Fen	Frolund	M	1997-07-21
21080	1954-02-06	Fen	Flasterstein	M	1990-04-12
22641	1952-12-16	Feiyu	Fujisaki	F	1997-10-09
23139	1964-07-15	Fen	Fritzsche	M	1993-10-10
23171	1954-11-05	Francoise	Ferretti	M	1994-10-07
24232	1961-05-27	Freyja	Frijda	F	1989-07-06
25475	1955-10-06	Flemming	Fujisaki	M	1988-01-20
25583	1954-09-15	Fun	Fandrianto	M	1998-01-15
26398	1952-09-23	Fay	Flowers	F	1995-05-28
27532	1958-08-28	Frazer	Fritzsche	F	1985-10-30
29508	1962-12-13	Fumitake	Famili	F	1988-04-20

255 rows in set (0.16 sec)

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.

- INSERT INTO employees VALUES (100, '2020-03-07', ‘Madyson’,'Smith','F','2020-12-31'), (101,'1988-06-01','Holly','Garner','F','2020-12-31'), (102,'1988-12-31','Chelsea','Smith','M','2020-12-09');

emp_no	birth_date	first_name	last_name	gender	hire_date
100	2020-03-07	Madyson	Smith	F	2020-12-31
101	1988-06-01	Holly	Garner	F	2020-12-31
102	1988-12-31	Chelsea	Smith	M	2020-12-09
10000	2001-01-01	Tom	Smith	M	2017-06-06
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

5. 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;

```
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> UPDATE employees SET first_name ='Bob' WHERE emp_no=10023;
Query OK, 1 row affected (0.01 sec)
Rows matched: 1  Changed: 1  Warnings: 0

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)
```

6. 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%' OR last_name LIKE ‘p%';`

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	Sumant	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
10062	1961-11-02	Anoosh	Peyn	M	2002-01-01
10080	1957-12-03	Premal	Baek	M	2002-01-01
10082	1963-09-09	Parviz	Lortz	M	2002-01-01
10101	1952-04-15	Perla	Heyers	F	2002-01-01
10102	1959-11-04	Paraskevi	Luby	F	2002-01-01
10105	1962-02-05	Hironoby	Piveteau	M	2002-01-01
10109	1958-11-25	Mariusz	Prampolini	F	2002-01-01
10119	1960-12-01	Domenick	Peltason	M	2002-01-01
10129	1955-12-02	Armond	Peir	M	2002-01-01
10136	1961-09-14	Zissis	Pintelas	M	2002-01-01

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

- `DELETE FROM employees WHERE emp_no < 10000;`

```
mysql> SELECT * FROM employees WHERE emp_no < 10000;
+--------+------------+------------+-----------+--------+------------+
| emp_no | birth_date | first_name | last_name | gender | hire_date  |
+--------+------------+------------+-----------+--------+------------+
|    100 | 2020-03-07 | Madyson    | Smith     | F      | 2020-12-31 |
|    101 | 1988-06-01 | Holly      | Garner    | F      | 2020-12-31 |
|    102 | 1988-12-31 | Chelsea    | Smith     | M      | 2020-12-09 |
+--------+------------+------------+-----------+--------+------------+
3 rows in set (0.00 sec)

mysql> DELETE FROM employees WHERE emp_no < 10000;
Query OK, 3 rows affected (0.00 sec)

mysql> SELECT * FROM employees LIMIT 15;
+--------+------------+------------+-----------+--------+------------+
| emp_no | birth_date | first_name | last_name | gender | hire_date  |
+--------+------------+------------+-----------+--------+------------+
|  10000 | 2001-01-01 | Tom        | Smith     | M      | 2017-06-06 |
|  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 |
+--------+------------+------------+-----------+--------+------------+
```

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

- `DELETE FROM employees WHERE emp_no IN (10048,10099,10234,20089)`

```
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> DELETE FROM employees WHERE emp_no IN (10048,10099,10234,20089);
Query OK, 4 rows affected (0.02 sec)

mysql> SELECT * FROM employees WHERe emp_no IN (10048,10099,10234,20089);
Empty set (0.00 sec)
```

URL to GitHub Repository: