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

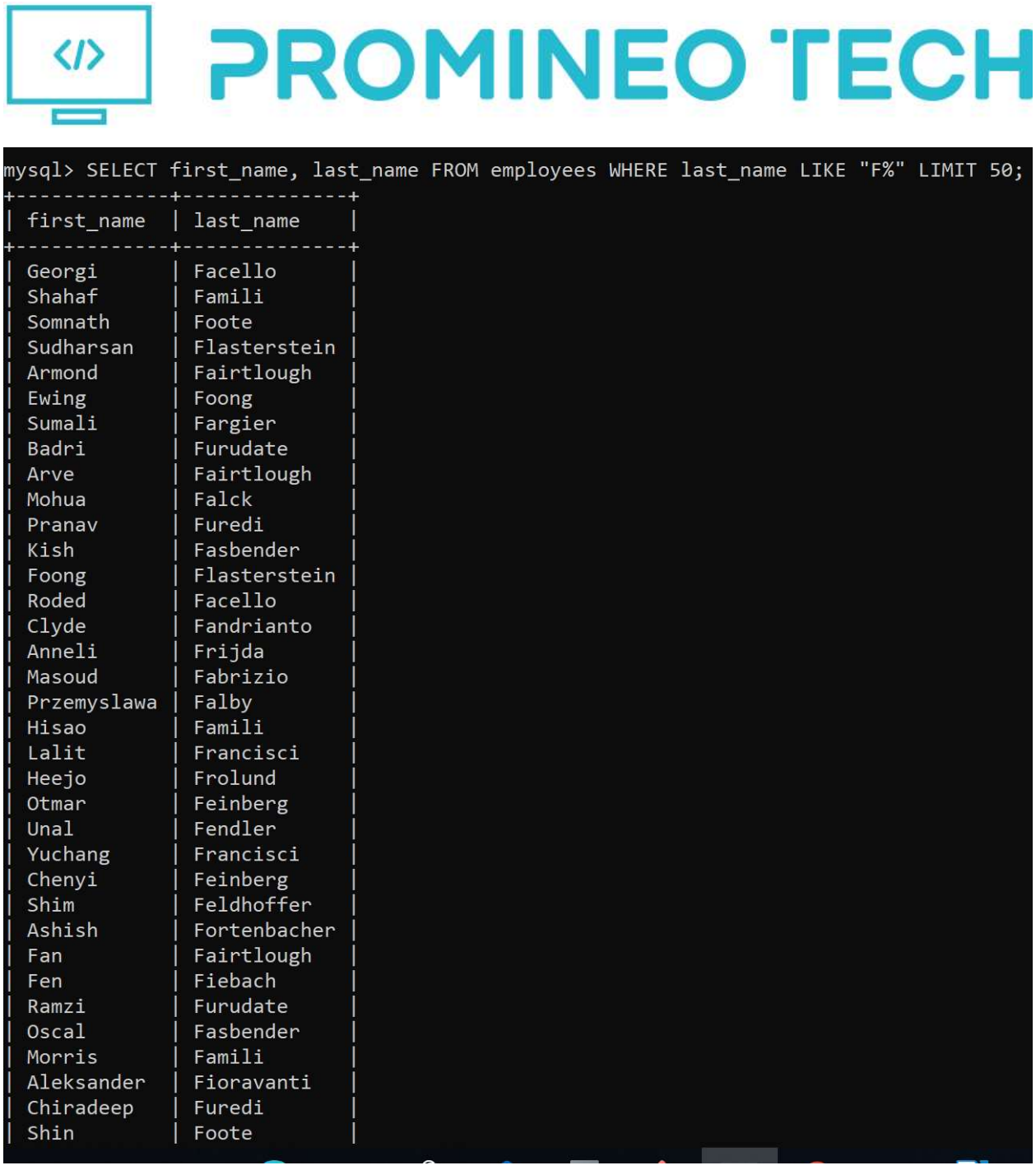
PROMINEO TECH

```
mysql> SELECT * FROM employees WHERE birth_date < "1965-01-01" ORDER BY birth_date DESC LIMIT 20;
+--------+------------+-------------+-------------+--------+------------+
| emp_no | birth_date | first_name  | last_name   | gender | hire_date  |
+--------+------------+-------------+-------------+--------+------------+
|  82357 | 1964-12-31 | Eric        | Fontan      | F      | 1985-10-27 |
| 205989 | 1964-12-31 | Przemyslawa | Heydon      | M      | 1990-03-30 |
|  82268 | 1964-12-31 | Giri        | Mukaidono   | M      | 1992-01-06 |
| 105550 | 1964-12-31 | Youpyo      | Gustavson   | F      | 1991-12-19 |
|  99659 | 1964-12-31 | Charlene    | Waterhouse  | M      | 1994-11-24 |
|  86260 | 1964-12-31 | Aruna       | Hartvigsen  | M      | 1993-06-06 |
|  88242 | 1964-12-31 | Mohit       | Schapiro    | F      | 1993-03-14 |
|  69992 | 1964-12-31 | Takahiro    | Sudbeck     | M      | 1987-10-09 |
|  93196 | 1964-12-31 | Jagoda      | Lindenbaum  | F      | 1985-08-07 |
|  15078 | 1964-12-31 | Steen       | Thiran      | M      | 1993-04-13 |
|  45051 | 1964-12-31 | Girolamo    | Billawala   | M      | 1995-06-09 |
|  63761 | 1964-12-31 | Kwangsub    | Mamelak     | M      | 1994-10-05 |
|  79907 | 1964-12-31 | Elliott     | Emmart      | F      | 1988-01-31 |
|  35251 | 1964-12-31 | Sudhanshu   | Gustavson   | F      | 1991-07-08 |
|  38361 | 1964-12-31 | Tonia       | Comyn       | M      | 1987-11-07 |
| 206317 | 1964-12-31 | Manton      | Fargier     | F      | 1992-05-01 |
|  57129 | 1964-12-31 | Shai        | Navazio     | F      | 1985-07-30 |
| 103212 | 1964-12-31 | Khatoun     | Bratten     | M      | 1992-04-29 |
|  33385 | 1964-12-31 | Nalini      | Feldhoffer  | F      | 1990-08-04 |
| 102505 | 1964-12-31 | Zejun       | Krychniak   | M      | 1989-02-23 |
+--------+------------+-------------+-------------+--------+------------+
20 rows in set (0.23 sec)
```

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" ORDER BY hire_date ASC LIMIT 20;
+--------+------------+---------------+------------+--------+------------+
| emp_no | birth_date | first_name    | last_name  | gender | hire_date  |
+--------+------------+---------------+------------+--------+------------+
| 201800 | 1960-03-15 | Minghong      | Ohori      | F      | 1991-01-01 |
| 220262 | 1952-07-09 | Piyush        | Hertweck   | F      | 1991-01-01 |
| 298024 | 1962-08-15 | Deniz         | Worfolk    | F      | 1991-01-01 |
| 283118 | 1952-09-29 | Kagan         | Lodder     | F      | 1991-01-01 |
| 423258 | 1957-11-25 | Brendon       | Mamelak    | F      | 1991-01-01 |
|  31837 | 1957-08-18 | Nigel         | Muhling    | F      | 1991-01-01 |
| 442661 | 1961-03-01 | Kazuyasu      | Danecki    | F      | 1991-01-01 |
| 422137 | 1953-04-12 | Gladys        | Sinitsyn   | F      | 1991-01-01 |
|  30247 | 1953-05-29 | Jeanne        | Ranum      | F      | 1991-01-01 |
|  84764 | 1958-02-07 | Mari          | Quadeer    | F      | 1991-01-01 |
| 200278 | 1963-11-11 | Hatsukazu     | Strehl     | F      | 1991-01-01 |
|  36865 | 1963-05-17 | Toshiki       | Mahnke     | F      | 1991-01-01 |
| 246715 | 1956-02-02 | Denny         | Schaaf     | F      | 1991-01-01 |
| 421074 | 1965-01-07 | Zhaofang      | Falster    | F      | 1991-01-01 |
|  96616 | 1958-06-05 | Harjit        | Sambasivam | F      | 1991-01-01 |
| 248117 | 1953-05-22 | Miyeon        | Asrin      | F      | 1991-01-01 |
|  25715 | 1959-06-15 | Sudhanshu     | Rikino     | F      | 1991-01-01 |
| 213679 | 1959-12-14 | Pradeep       | Koshino    | F      | 1991-01-01 |
| 439110 | 1956-03-28 | Rajmohan      | Zweizig    | F      | 1991-01-01 |
|  31749 | 1959-08-20 | Gopalakrishnan | Lowrie     | F      | 1991-01-01 |
+--------+------------+---------------+------------+--------+------------+
20 rows in set (0.21 sec)
```

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
Shim	Feldhoffer
Ashish	Fortenbacher
Fan	Fairtlough
Fen	Fiebach
Ramzi	Furudate
Oscal	Fasbender
Morris	Famili
Aleksander	Fioravanti
Chiradeep	Furedi
Shin	Foote

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
Sahrah	Figueira
Dayanand	Figueira
Kwangjo	Fiebach
Gina	Falster
Bernice	Felcyn
Sreenivas	Farrag
Lillian	Fontet
Ult	Farrar
Heping	Fontan
Xiong	Ferriere
Kasturi	Fraisse

50 rows in set (0.01 sec)

PROMINEO TECH

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, "1950-06-01", "John", "Smith", "M", "1975-06-01");
Query OK, 1 row affected (0.01 sec)

mysql> INSERT INTO employees VALUES(101, "1975-06-01", "Jimmy", "Smith", "M", "2000-06-01");
Query OK, 1 row affected (0.01 sec)

mysql> INSERT INTO employees VALUES(102, "2000-06-01", "Jed", "Smith", "M", "2025-06-01");
Query OK, 1 row affected (0.01 sec)

mysql> SELECT * FROM employees WHERE emp_no > 99 AND WHERE emp_no < 103;
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to
< 103' at line 1
mysql> SELECT * FROM employees WHERE emp_no > 99 AND emp_no < 103;
+--------+------------+------------+-----------+--------+------------+
| emp_no | birth_date | first_name | last_name | gender | hire_date  |
+--------+------------+------------+-----------+--------+------------+
|    100 | 1950-06-01 | John       | Smith     | M      | 1975-06-01 |
|    101 | 1975-06-01 | Jimmy      | Smith     | M      | 2000-06-01 |
|    102 | 2000-06-01 | Jed        | Smith     | M      | 2025-06-01 |
+--------+------------+------------+-----------+--------+------------+
3 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 (0.01 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)

mysql> _
```

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%" OR last_name LIKE "P%";
Query OK, 31566 rows affected (0.70 sec)
Rows matched: 31566  Changed: 31566  Warnings: 0

mysql>
```

PROMINEO TECH

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 (0.01 sec)
```

8. Delete all employee 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 (0.01 sec)
```

Screenshots of Queries:

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

URL to GitHub Repository: