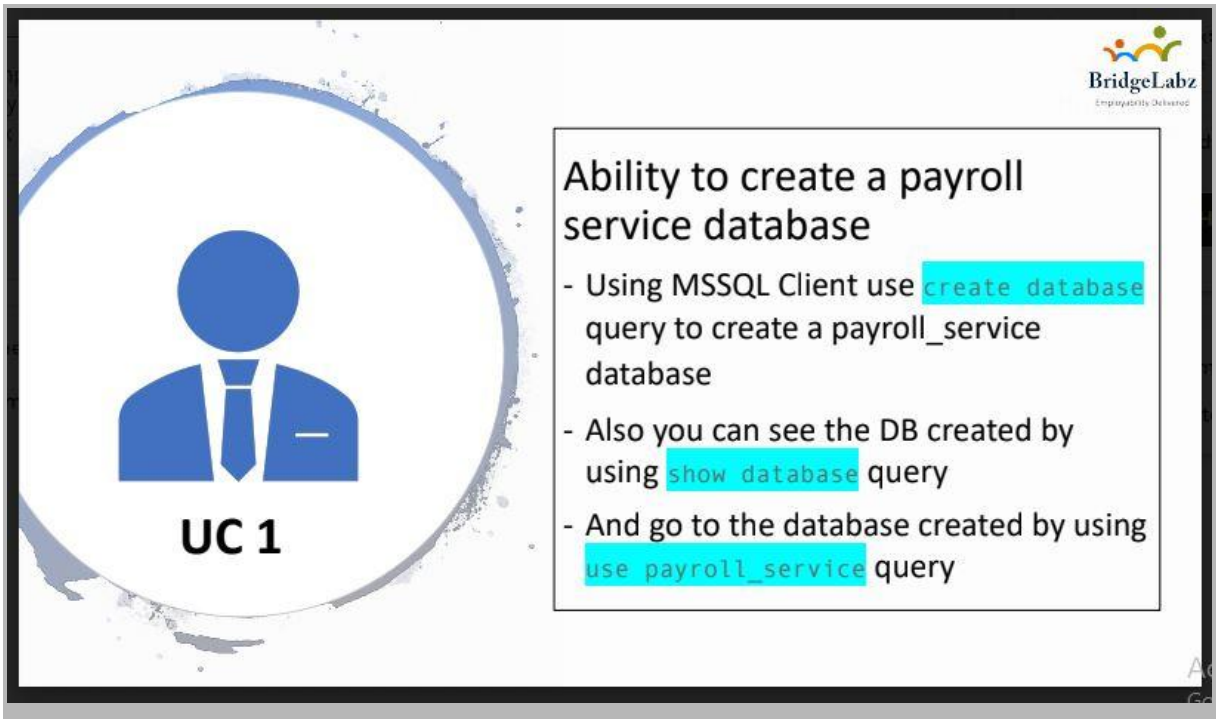
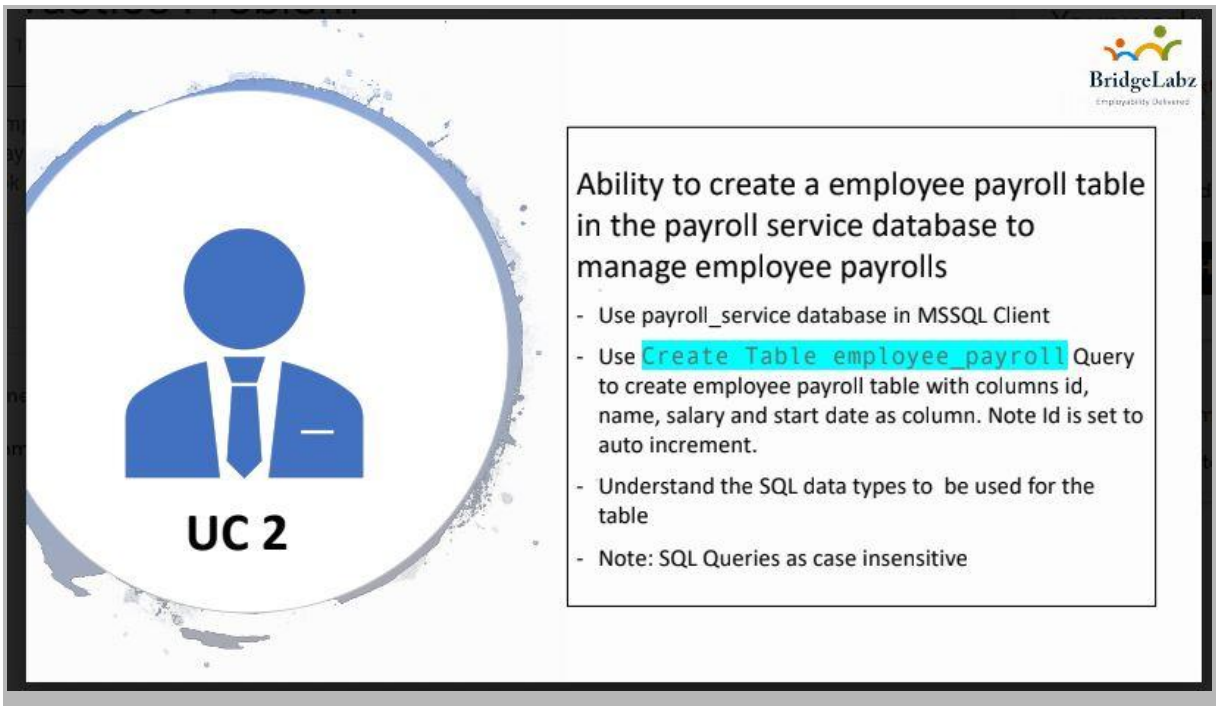
MSSQL DB

UC1



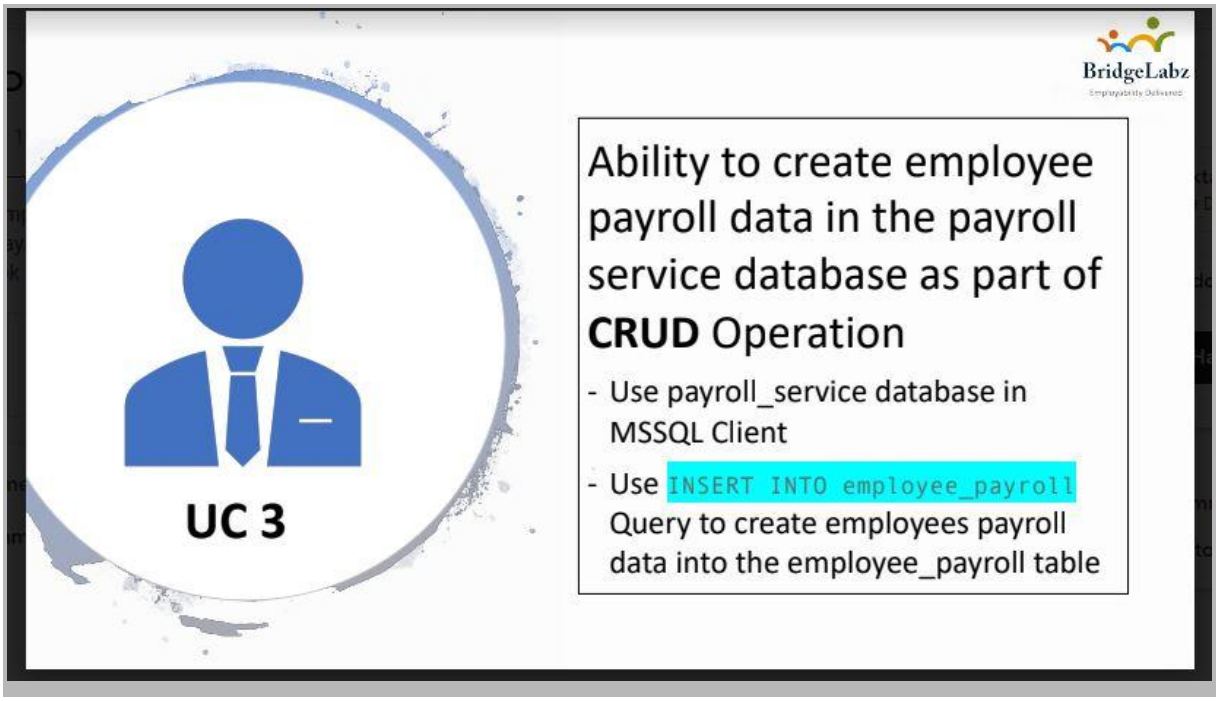

```
mysql> CREATE DATABASE payroll_service;
Query OK, 1 row affected (0.35 sec)

mysql> show databases;
+--------------------+
| Database           |
+--------------------+
| information_schema |
| mysql              |
| payroll_service    |
| performance_schema |
| sakila             |
| sys                |
| world              |
+--------------------+
7 rows in set (0.00 sec)

mysql> USE payroll_service;
Database changed
mysql> SELECT DATABASE();
+-----------------+
| DATABASE()      |
+-----------------+
| payroll_service |
+-----------------+
1 row in set (0.00 sec)

mysql>
```

UC2



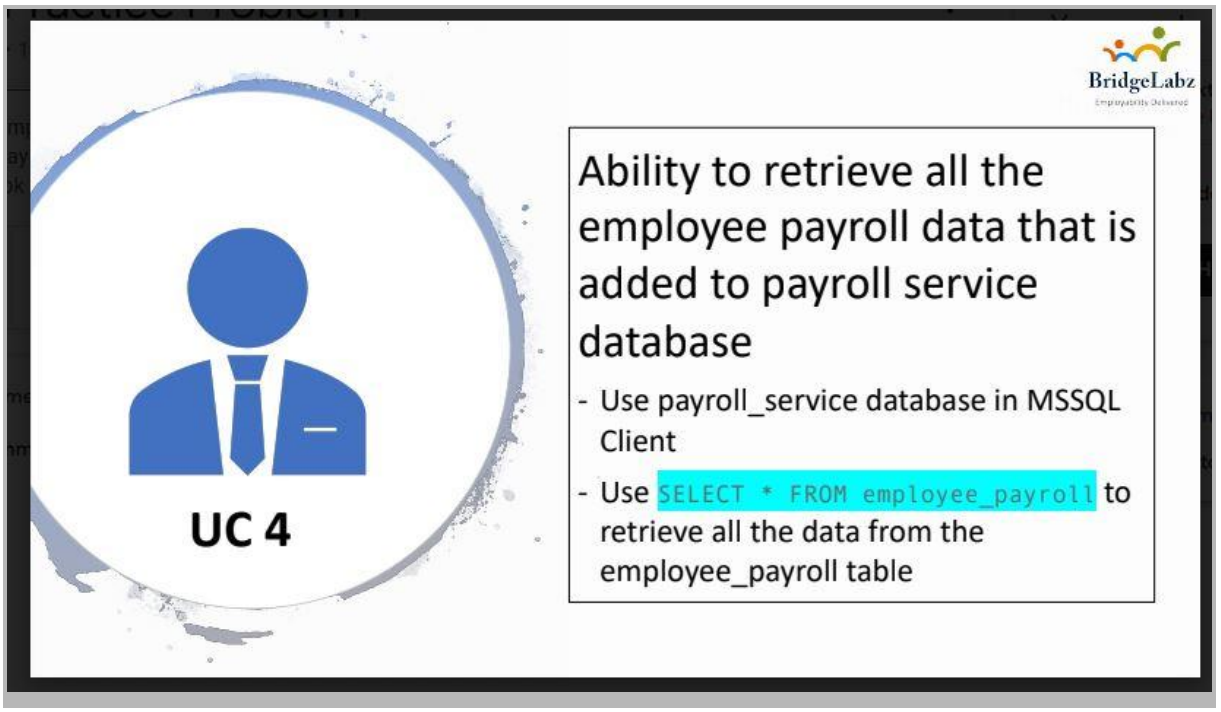

```
mysql> CREATE TABLE employee_payroll
    -> (
    -> id INT unsigned NOT NULL AUTO_INCREMENT,
    -> name VARCHAR(150) NOT NULL,
    -> salary Double NOT NULL,
    -> start DATE NOT NULL,
    -> PRIMARY KEY (id)
    -> );
Query OK, 0 rows affected (1.69 sec)

mysql> DESCRIBE employee_payroll;
+--------+--------------+------+-----+---------+----------------+
| Field  | Type         | Null | Key | Default | Extra          |
+--------+--------------+------+-----+---------+----------------+
| id     | int unsigned | NO   | PRI | NULL    | auto_increment |
| name   | varchar(150) | NO   |     | NULL    |                |
| salary | double       | NO   |     | NULL    |                |
| start  | date         | NO   |     | NULL    |                |
+--------+--------------+------+-----+---------+----------------+
4 rows in set (0.18 sec)

mysql>
```

UC3



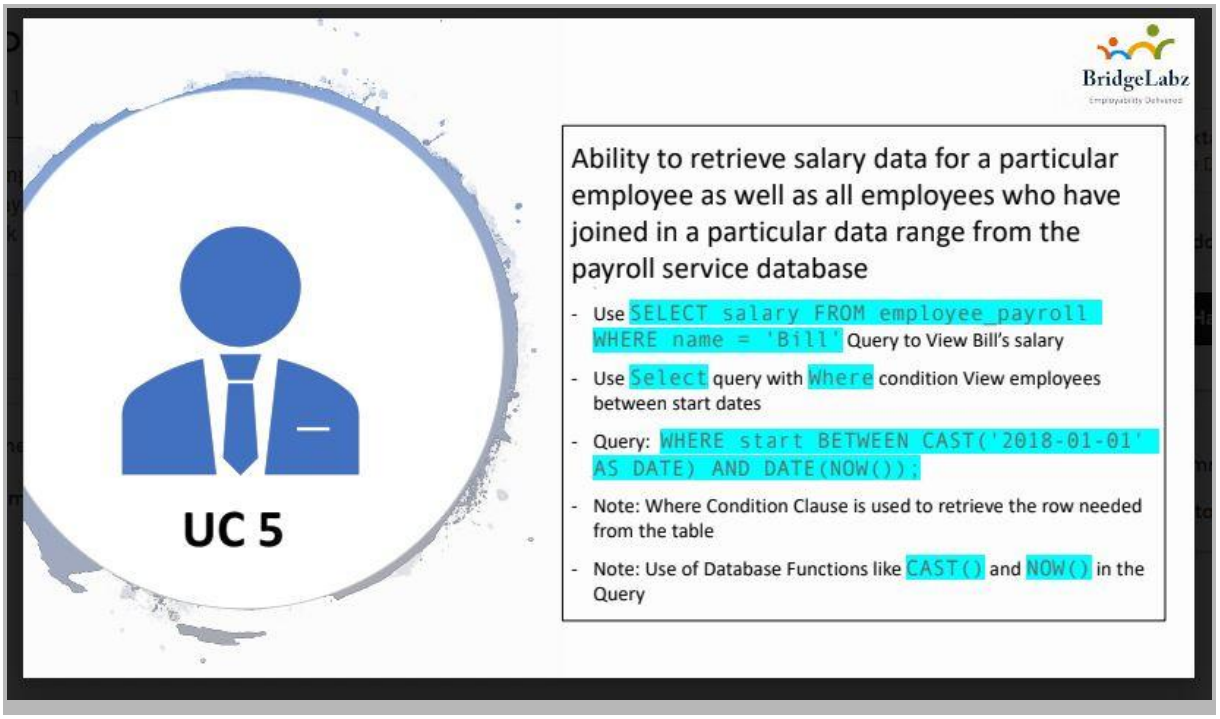

```
mysql> Insert INTO employee_payroll (name, salary, start) VALUES
    -> ( 'Bill', 1000000.00, '2018-01-03'),
    -> ( 'Terisa', 2000000.00, '2019-11-13'),
    -> ('Charlie', 3000000.00, '2020-05-21');
Query OK, 3 rows affected (0.30 sec)
Records: 3  Duplicates: 0  Warnings: 0

mysql>
```

UC4



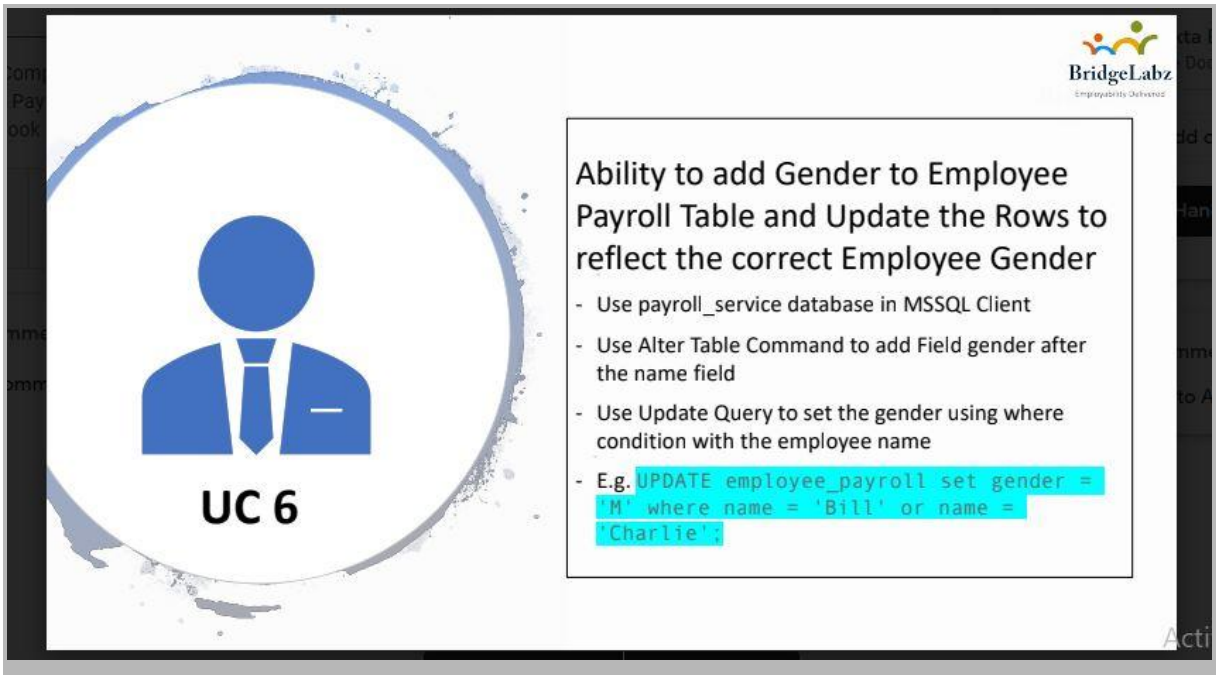

```
mysql> SELECT * FROM employee_payroll;
+----+---------+---------+------------+
| id | name    | salary  | start      |
+----+---------+---------+------------+
|  1 | Bill    | 1000000 | 2018-01-03 |
|  2 | Terisa  | 2000000 | 2019-11-13 |
|  3 | Charlie | 3000000 | 2020-05-21 |
+----+---------+---------+------------+
3 rows in set (0.11 sec)
```

UC5




```
mysql> SELECT salary FROM employee_payroll WHERE name = 'Bill';
+---------+
| salary  |
+---------+
| 1000000 |
+---------+
1 row in set (0.00 sec)

mysql> SELECT * FROM employee_payroll WHERE start BETWEEN CASR('2018-01-01' AS DATE) ANDD DATE(NOW());
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near 'ANDD DATE(NOW
())' at line 1
mysql> SELECT * FROM employee_payroll WHERE start BETWEEN CAST('2018-01-01' AS DATE) ANDD DATE(NOW());
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near 'ANDD DATE(NOW
())' at line 1
mysql> SELECT * FROM employee_payroll WHERE start BETWEEN CAST('2018-01-01' AS DATE) AND DATE(NOW());
+----+---------+---------+------------+
| id | name    | salary  | start      |
+----+---------+---------+------------+
|  1 | Bill    | 1000000 | 2018-01-03 |
|  2 | Terisa  | 2000000 | 2019-11-13 |
|  3 | Charlie | 3000000 | 2020-05-21 |
+----+---------+---------+------------+
3 rows in set (0.10 sec)

mysql>
```

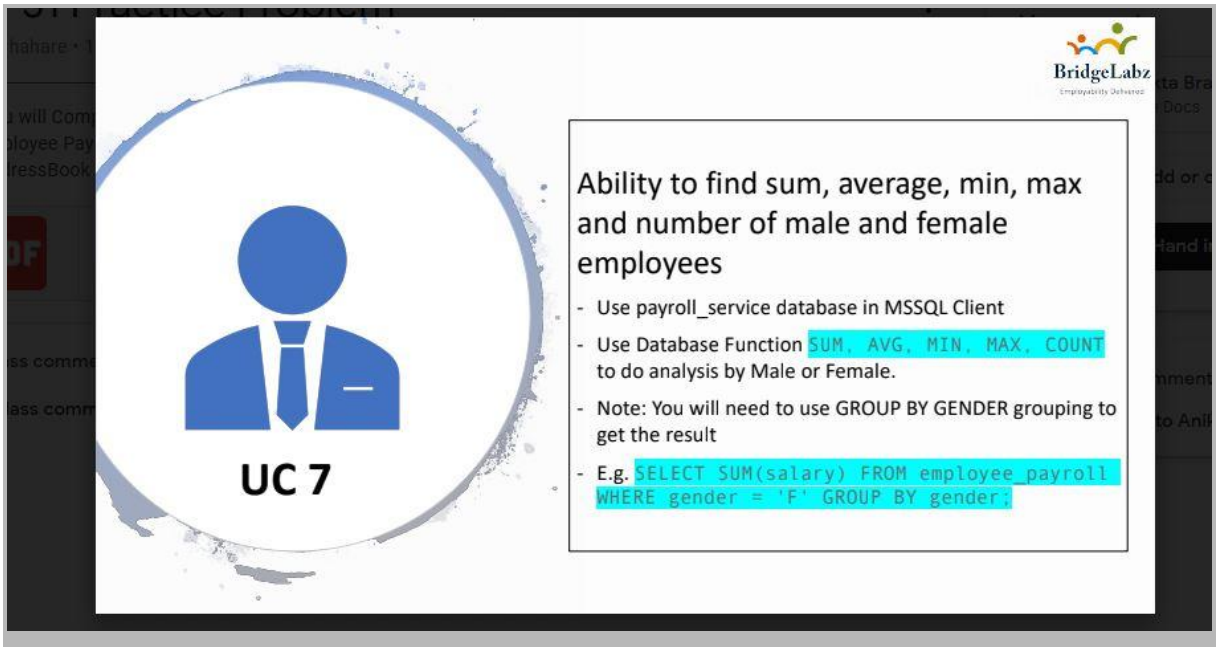

UC6




```
mysql> ALTER TABLE employee_pyroll ADD gendder CHAR(1) AFTER name;
ERROR 1146 (42S02): Table 'payroll_service.employee_pyroll' doesn't exist
mysql> ALTER TABLE employee_payroll ADD gendder CHAR(1) AFTER name;
Query OK, 0 rows affected (3.25 sec)
Records: 0  Duplicates: 0  Warnings: 0

mysql> describe employee_payroll;
+---------+--------------+------+-----+---------+----------------+
| Field   | Type         | Null | Key | Default | Extra          |
+---------+--------------+------+-----+---------+----------------+
| id      | int unsigned | NO   | PRI | NULL    | auto_increment |
| name    | varchar(150) | NO   |     | NULL    |                |
| gendder | char(1)      | YES  |     | NULL    |                |
| salary  | double       | NO   |     | NULL    |                |
| start   | date         | NO   |     | NULL    |                |
+---------+--------------+------+-----+---------+----------------+
5 rows in set (0.04 sec)

mysql> update employee_payroll set gender = 'F' where name = 'Terisa';
ERROR 1054 (42S22): Unknown column 'gender' in 'field list'
mysql> update employee_payroll set gendder = 'F' where name = 'Terisa';
Query OK, 1 row affected (0.06 sec)
Rows matched: 1  Changed: 1  Warnings: 0

mysql> SELECT * FROM employee_payroll;
+----+---------+---------+---------+------------+
| id | name    | gendder | salary  | start      |
+----+---------+---------+---------+------------+
|  1 | Bill    | NULL    | 1000000 | 2018-01-03 |
|  2 | Terisa  | F       | 2000000 | 2019-11-13 |
|  3 | Charlie | NULL    | 3000000 | 2020-05-21 |
+----+---------+---------+---------+------------+
3 rows in set (0.00 sec)

mysql> update employee_payroll set gender = 'M' where name = 'Bill' or name = 'Charlie';
ERROR 1054 (42S22): Unknown column 'gender' in 'field list'
mysql> update employee_payroll set gendder = 'M' where name = 'Bill' or name = 'Charlie';
Query OK, 2 rows affected (0.08 sec)
Rows matched: 2  Changed: 2  Warnings: 0
```

```
mysql> SELECT * FROM employee_payroll;
+----+---------+---------+---------+------------+
| id | name    | gendder | salary  | start      |
+----+---------+---------+---------+------------+
|  1 | Bill    | M       | 1000000 | 2018-01-03 |
|  2 | Terisa  | F       | 2000000 | 2019-11-13 |
|  3 | Charlie | M       | 3000000 | 2020-05-21 |
+----+---------+---------+---------+------------+
3 rows in set (0.09 sec)

mysql> update employee_payroll set salary = 3000000.00 where name = 'Terisa';
Query OK, 1 row affected (0.11 sec)
Rows matched: 1  Changed: 1  Warnings: 0

mysql> SELECT * FROM employee_payroll;
+----+---------+---------+---------+------------+
| id | name    | gendder | salary  | start      |
+----+---------+---------+---------+------------+
|  1 | Bill    | M       | 1000000 | 2018-01-03 |
|  2 | Terisa  | F       | 3000000 | 2019-11-13 |
|  3 | Charlie | M       | 3000000 | 2020-05-21 |
+----+---------+---------+---------+------------+
3 rows in set (0.10 sec)

mysql>
```

UC7



```
mysql> SELECT AVG(salary) FROM employee_payroll WHERE gender = 'M' GROUP BY gender;
ERROR 1054 (42S22): Unknown column 'gender' in 'where clause'
mysql> SELECT AVG(salary) FROM employee_payroll WHERE gendder = 'M' GROUP BY gender;
ERROR 1054 (42S22): Unknown column 'gender' in 'group statement'
mysql> SELECT AVG(salary) FROM employee_payroll WHERE gendder = 'M' GROUP BY gendder;
+-------------+
| AVG(salary) |
+-------------+
|     2000000 |
+-------------+
1 row in set (0.10 sec)

mysql> SELECT AVG(salary) FROM employee_payroll WHERE  GROUP BY gendder;
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near 'GROUP BY gend
der' at line 1
mysql> SELECT AVG(salary) FROM employee_payroll GROUP BY gendder;
+-------------+
| AVG(salary) |
+-------------+
|     2000000 |
|     3000000 |
+-------------+
2 rows in set (0.10 sec)

mysql> SELECT gendder, AVG(salary) FROM employee_payroll GROUP BY gendder;
+---------+-------------+
| gendder | AVG(salary) |
+---------+-------------+
| M       |     2000000 |
| F       |     3000000 |
+---------+-------------+
2 rows in set (0.00 sec)

mysql> SELECT gendder, COUNT(name) FROM employee_payroll GROUP BY gendder;
+---------+-------------+
| gendder | COUNT(name) |
+---------+-------------+
| M       |           2 |
| F       |           1 |
+---------+-------------+
2 rows in set (0.00 sec)

mysql> SELECT gendder, SUM(salary) FROM employee_payroll GROUP BY gendder;
+---------+
```



```
mysql> SELECT gendder, COUNT(name) FROM employee_payroll GROUP BY gendder;
+---------+-------------+
| gendder | COUNT(name) |
+---------+-------------+
| M       |           2 |
| F       |           1 |
+---------+-------------+
2 rows in set (0.00 sec)

mysql> SELECT gendder, SUM(salary) FROM employee_payroll GROUP BY gendder;
+---------+-------------+
| gendder | SUM(salary) |
+---------+-------------+
| M       |     4000000 |
| F       |     3000000 |
+---------+-------------+
2 rows in set (0.00 sec)

mysql> SELECT gendder, AVG(salary) FROM employee_payroll GROUP BY gendder;
+---------+-------------+
| gendder | AVG(salary) |
+---------+-------------+
| M       |     2000000 |
| F       |     3000000 |
+---------+-------------+
2 rows in set (0.00 sec)
```

```
mysql> SELECT gendder, AVG(salary) FROM employee_payroll GROUP BY gendder;
+---------+-------------+
| gendder | AVG(salary) |
+---------+-------------+
| M       |     2000000 |
| F       |     3000000 |
+---------+-------------+
2 rows in set (0.00 sec)

mysql> SELECT gendder, MIN(salary) FROM employee_payroll GROUP BY gendder;
+---------+-------------+
| gendder | MIN(salary) |
+---------+-------------+
| M       |     1000000 |
| F       |     3000000 |
+---------+-------------+
2 rows in set (0.08 sec)

mysql> SELECT gendder, MAX(salary) FROM employee_payroll GROUP BY gendder;
+---------+-------------+
| gendder | MAX(salary) |
+---------+-------------+
| M       |     3000000 |
| F       |     3000000 |
+---------+-------------+
2 rows in set (0.00 sec)

mysql>
```