```
mysql> CREATE TABLE inventory (
    ->      item_id INT PRIMARY KEY AUTO_INCREMENT,
    ->      item_name VARCHAR(50) NOT NULL,
    ->      quantity INT NOT NULL
    -> );
Query OK, 0 rows affected (0.02 sec)
```

```
mysql> INSERT INTO inventory (item_name, quantity) VALUES ('Apple', 50);
Query OK, 1 row affected (0.00 sec)

mysql> INSERT INTO inventory (item_name, quantity) VALUES ('Banana', 30);
Query OK, 1 row affected (0.01 sec)

mysql> INSERT INTO inventory (item_name, quantity) VALUES ('Orange', 20);
Query OK, 1 row affected (0.00 sec)
```

```
mysql> CREATE user 'tester'@'localhost' IDENTIFIED by 'tester';
Query OK, 0 rows affected (0.04 sec)
```

```
mysql> GRANT all privileges on ADS.* TO 'tester'@'localhost';
Query OK, 0 rows affected, 1 warning (0.02 sec)

mysql>
```

```
 →   ~ docker exec -it mysqlContainer bash
bash-5.1#
bash-5.1# mysql -utester -p
Enter password:
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 10
Server version: 9.0.0 MySQL Community Server - GPL

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affiliates. Other names may be trademarks of their respective
owners.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

mysql>
```

```
mysql> start transaction;
Query OK, 0 rows affected (0.01 sec)

mysql> SELECT * FROM inventory WHERE item_name = 'Apple' LOCK IN SHARE MODE;
+---------+-----------+----------+
| item_id | item_name | quantity |
+---------+-----------+----------+
|       1 | Apple     |       50 |
+---------+-----------+----------+
1 row in set (0.00 sec)

mysql>
```

```
[mysql> UPDATE inventory
[    -> SET quantity = 30
[    -> WHERE item_name = 'apple'
[    -> ;
Query OK, 1 row affected (0.01 sec)
Rows matched: 1  Changed: 1  Warnings: 0

mysql> █
```

```
[mysql> select * from inventory ;
+---------+-----------+----------+
| item_id | item_name | quantity |
+---------+-----------+----------+
|       1 | Apple     |       50 |
|       2 | Banana    |       30 |
|       3 | Orange    |       20 |
+---------+-----------+----------+
3 rows in set (0.00 sec)

mysql> █
```

```
[mysql> SELECT * FROM inventory WHERE item_name = 'Apple' FOR UPDATE;
+---------+-----------+----------+
| item_id | item_name | quantity |
+---------+-----------+----------+
|       1 | Apple     |       50 |
+---------+-----------+----------+
1 row in set (0.00 sec)

mysql> █
```

```
[mysql> UPDATE inventory
[    -> SET quantity = 30
[    -> WHERE item_name = 'apple'
[    -> ;

ERROR 1205 (HY000): Lock wait timeout exceeded; try restarting transaction
mysql>
```

```
[mysql> UPDATE inventory
[    -> SET quantity = 30
[    -> WHERE item_name = 'apple'
[    -> ;

ERROR 1205 (HY000): Lock wait timeout exceeded; try restarting transaction
mysql>
```

```
[mysql> commit ;
Query OK, 0 rows affected (0.00 sec)
```