

```

MariaDB [SalesOrdersExample]> SELECT * FROM Products WHERE ProductNumber = 1;
+-----+-----+-----+-----+-----+-----+
| ProductNumber | ProductName          | ProductDescription | RetailPrice | QuantityOnHand | CategoryID |
+-----+-----+-----+-----+-----+-----+
| 1 | Trek 9000 Mountain Bike | NULL              | 1200.00    | 2              | 2          |
+-----+-----+-----+-----+-----+-----+
1 row in set (0.044 sec)

MariaDB [SalesOrdersExample]> SELECT * FROM Orders WHERE OrderNumber=946;
+-----+-----+-----+-----+-----+
| OrderNumber | OrderDate | ShipDate | CustomerID | EmployeeID |
+-----+-----+-----+-----+-----+
| 946 | 2015-09-04 | 2015-09-05 | 1004 | 701 |
+-----+-----+-----+-----+-----+
1 row in set (0.000 sec)

MariaDB [SalesOrdersExample]> SELECT * FROM Order_Details WHERE OrderNumber=946;
+-----+-----+-----+-----+
| OrderNumber | ProductNumber | QuotedPrice | QuantityOrdered |
+-----+-----+-----+-----+
| 946 | 1 | 1200.00 | 2 |
+-----+-----+-----+-----+
1 row in set (0.002 sec)

MariaDB [SalesOrdersExample]> SELECT * FROM Order_Details WHERE OrderNumber=945;
+-----+-----+-----+-----+
| OrderNumber | ProductNumber | QuotedPrice | QuantityOrdered |
+-----+-----+-----+-----+
| 945 | 1 | 1200.00 | 2 |
+-----+-----+-----+-----+
1 row in set (0.000 sec)

MariaDB [SalesOrdersExample]> SELECT * FROM Orders WHERE OrderNumber=945;
+-----+-----+-----+-----+-----+
| OrderNumber | OrderDate | ShipDate | CustomerID | EmployeeID |
+-----+-----+-----+-----+-----+
| 945 | 2015-09-04 | 2015-09-05 | 1004 | 701 |
+-----+-----+-----+-----+-----+
1 row in set (0.001 sec)

```

That is what happened after running the first transaction of T2 in right workbench and running all T1 in the left. As we can see, there is no change yet in left workbench.

```

MariaDB [SalesOrdersExample]> INSERT INTO Orders (OrderNumber, OrderDate, ShipDate, CustomerID, EmployeeID) VALUES (947, '2015-09-04', '2015-09-05', 1005, 701);
Query OK, 1 row affected (0.043 sec)

MariaDB [SalesOrdersExample]> INSERT INTO Order_Details (OrderNumber, ProductNumber, QuotedPrice, QuantityOrdered) VALUES (947, 1, 1200.00, 2);
Query OK, 1 row affected (0.045 sec)

```

```

MariaDB [SalesOrdersExample]> SELECT * FROM Orders WHERE OrderNumber=947;
Empty set (0.003 sec)

MariaDB [SalesOrdersExample]> SELECT * FROM Order_Details WHERE OrderNumber=947;
Empty set (0.002 sec)

MariaDB [SalesOrdersExample]> _

```

This is what happened after running remaining commands of T2 in the right workbench and rerun T1 in the left. As we can see, data in left workbench are not updated yet.

```

MariaDB [SalesOrdersExample]> SELECT * FROM Orders WHERE OrderNumber=947;
+-----+-----+-----+-----+-----+
| OrderNumber | OrderDate | ShipDate | CustomerID | EmployeeID |
+-----+-----+-----+-----+-----+
|          947 | 2015-09-04 | 2015-09-05 |          1005 |          701 |
+-----+-----+-----+-----+-----+
1 row in set (0.000 sec)

MariaDB [SalesOrdersExample]> SELECT * FROM Order_Details WHERE OrderNumber=947;
+-----+-----+-----+-----+-----+
| OrderNumber | ProductNumber | QuotedPrice | QuantityOrdered |
+-----+-----+-----+-----+-----+
|          947 |          1 |      1200.00 |          2 |
+-----+-----+-----+-----+-----+
1 row in set (0.000 sec)

```

So after we commit T2 in the right and run T1 in the left, we could see that the data are fully updated. That is also the same after committing T1 in the left:

```

MariaDB [SalesOrdersExample]> COMMIT;
Query OK, 0 rows affected (0.000 sec)

MariaDB [SalesOrdersExample]> SELECT * FROM Orders WHERE OrderNumber=947;
+-----+-----+-----+-----+-----+
| OrderNumber | OrderDate | ShipDate | CustomerID | EmployeeID |
+-----+-----+-----+-----+-----+
|          947 | 2015-09-04 | 2015-09-05 |          1005 |          701 |
+-----+-----+-----+-----+-----+
1 row in set (0.001 sec)

MariaDB [SalesOrdersExample]> SELECT * FROM Order_Details WHERE OrderNumber=947;
+-----+-----+-----+-----+-----+
| OrderNumber | ProductNumber | QuotedPrice | QuantityOrdered |
+-----+-----+-----+-----+-----+
|          947 |          1 |      1200.00 |          2 |
+-----+-----+-----+-----+-----+
1 row in set (0.000 sec)

```

-Conclusion:

- This query is different from 9.2.1 in that it could read data committed in a different workbench, but still uncommitted in its own workbench.

- It could lead to a potential lost update because, if T1 and T2 write to the same data(or we could say T2 overwrites T1), then when T2 committed first, T1 is lost.

- MySQL commands necessary to cause a lost update:

T1: SELECT * FROM Orders WHERE OrderNumber = 947;

T2: SELECT * FROM Orders WHERE OrderNumber = 947;

UPDATE Orders SET EmployeeID = EmployeeID – 2 WHERE OrderNumber = 947;

COMMIT;

T1: UPDATE Orders SET EmployeeID = EmployeeID – 10 WHERE OrderNumber = 947;

COMMIT;

Then the result is T1 lost (because T2 has already committed).