

- a) The purpose of this query might be for joining tuples of CustFirstName, CustLastName on Customers table and OrderDate on Order table, and sorting it with OrderDate from the most early to the latest.
- b) The result after modifying the query:

```
XAMPP for Windows - mysql -u root -p
944 rows in set (0.386 sec)

MariaDB [SalesOrdersExample]> SELECT CustFirstName, CustLastName, OrderDate
-> FROM Customers c JOIN Orders o
-> WHERE o.CustomerID=c.CustomerID
-> ORDER BY CustLastName, CustFirstName, OrderDate DESC;
```

| CustFirstName | CustLastName | OrderDate |
|---------------|--------------|------------|
| Sam | Abolrous | 2013-02-28 |
| Sam | Abolrous | 2013-02-25 |
| Sam | Abolrous | 2013-02-23 |
| Sam | Abolrous | 2013-02-13 |
| Sam | Abolrous | 2013-02-12 |
| Sam | Abolrous | 2013-02-11 |
| Sam | Abolrous | 2013-02-10 |
| Sam | Abolrous | 2013-02-05 |
| Sam | Abolrous | 2013-01-28 |
| Sam | Abolrous | 2013-01-28 |
| Sam | Abolrous | 2013-01-27 |
| Sam | Abolrous | 2013-01-22 |
| Sam | Abolrous | 2013-01-09 |
| Sam | Abolrous | 2013-01-07 |
| Sam | Abolrous | 2013-01-06 |
| Sam | Abolrous | 2012-12-27 |
| Sam | Abolrous | 2012-12-25 |
| Sam | Abolrous | 2012-12-10 |
| Sam | Abolrous | 2012-12-06 |
| Sam | Abolrous | 2012-12-05 |
| Sam | Abolrous | 2012-11-27 |
| Sam | Abolrous | 2012-11-19 |
| Sam | Abolrous | 2012-11-13 |
| Sam | Abolrous | 2012-11-12 |
| Sam | Abolrous | 2012-11-10 |
| Sam | Abolrous | 2012-10-29 |
| Sam | Abolrous | 2012-10-22 |
| Sam | Abolrous | 2012-10-18 |
| Sam | Abolrous | 2012-10-16 |
| Sam | Abolrous | 2012-10-12 |
| Sam | Abolrous | 2012-10-12 |
| Sam | Abolrous | 2012-10-10 |
| Sam | Abolrous | 2012-09-24 |
| Sam | Abolrous | 2012-09-22 |
| Sam | Abolrous | 2012-09-12 |

- c) The query to include null order date and result:

```
XAMPP for Windows - mysql -u root -p
ORDER BY CustLastName, CustFirstName, OrderDate...' at line 3
MariaDB [SalesOrdersExample]> SELECT CustFirstName, CustLastName, OrderDate
-> FROM Customers c RIGHT OUTER JOIN Orders o
-> ON o.CustomerID=c.CustomerID
-> ORDER BY CustLastName, CustFirstName, OrderDate DESC;
```

| CustFirstName | CustLastName | OrderDate |
|---------------|--------------|------------|
| Sam | Abolrous | 2013-02-28 |
| Sam | Abolrous | 2013-02-25 |
| Sam | Abolrous | 2013-02-23 |
| Sam | Abolrous | 2013-02-13 |
| Sam | Abolrous | 2013-02-12 |
| Sam | Abolrous | 2013-02-11 |
| Sam | Abolrous | 2013-02-10 |
| Sam | Abolrous | 2013-02-05 |
| Sam | Abolrous | 2013-01-28 |
| Sam | Abolrous | 2013-01-28 |
| Sam | Abolrous | 2013-01-27 |
| Sam | Abolrous | 2013-01-22 |
| Sam | Abolrous | 2013-01-09 |
| Sam | Abolrous | 2013-01-07 |
| Sam | Abolrous | 2013-01-06 |
| Sam | Abolrous | 2012-12-27 |
| Sam | Abolrous | 2012-12-25 |
| Sam | Abolrous | 2012-12-10 |
| Sam | Abolrous | 2012-12-06 |
| Sam | Abolrous | 2012-12-05 |
| Sam | Abolrous | 2012-11-27 |
| Sam | Abolrous | 2012-11-19 |
| Sam | Abolrous | 2012-11-13 |
| Sam | Abolrous | 2012-11-12 |
| Sam | Abolrous | 2012-11-10 |
| Sam | Abolrous | 2012-10-29 |
| Sam | Abolrous | 2012-10-22 |
| Sam | Abolrous | 2012-10-18 |
| Sam | Abolrous | 2012-10-16 |
| Sam | Abolrous | 2012-10-12 |
| Sam | Abolrous | 2012-10-12 |
| Sam | Abolrous | 2012-10-10 |
| Sam | Abolrous | 2012-09-24 |
| Sam | Abolrous | 2012-09-22 |
| Sam | Abolrous | 2012-09-12 |
| Sam | Abolrous | 2012-09-09 |

| | | |
|---------|------------|------------|
| William | Thompson | 2012-09-13 |
| William | Thompson | 2012-09-12 |
| William | Thompson | 2012-09-08 |
| William | Thompson | 2012-09-01 |
| Jeffrey | Tirekicker | NULL |
| Caleb | Viescas | 2013-02-24 |
| Caleb | Viescas | 2013-02-21 |
| Caleb | Viescas | 2013-02-20 |
| Caleb | Viescas | 2013-02-16 |

d)Select the latest day for ordering(idea taken from deepinthe code:<https://deepinthe code.com/2017/06/29/using-max-in-a-sql-subquery/>):

```
MariaDB [SalesOrdersExample]> SELECT CustFirstName, CustLastName, OrderDate
-> FROM Customers c JOIN Orders o
-> ON o.CustomerID=c.CustomerID
-> WHERE o.OrderDate = (SELECT MAX(o.OrderDate) FROM Orders o)
-> ORDER BY CustLastName, CustFirstName, OrderDate DESC;
```

| CustFirstName | CustLastName | OrderDate |
|---------------|--------------|------------|
| Sam | Abolrous | 2013-02-28 |
| Joyce | Bonnicksen | 2013-02-28 |
| Kirk | DeGrasse | 2013-02-28 |
| Zachary | Ehrlich | 2013-02-28 |
| Alaina | Hallmark | 2013-02-28 |
| Maria | Patterson | 2013-02-28 |
| Estella | Pundt | 2013-02-28 |
| Mariya | Sergienko | 2013-02-28 |
| William | Thompson | 2013-02-28 |

9 rows in set (0.003 sec)