



COEN 380

Project 1

1. JDBC DRIVER CONNECTED IS Connector/J 8.0.19

2. CREATE TABLES

```
1 CREATE TABLE Orders (  
2   Order_id INT NOT NULL,  
3   Ordered_Date DateTime NOT NULL,  
4   Order_Status VARCHAR(50) NOT NULL,  
5   Quantity_Ordered INT NOT NULL,  
6   PriceOfEach INT,  
7   PRIMARY KEY (Order_id)  
8 );  
9  
10 DESCRIBE Orders;
```

<						
Result Grid						
Filter Rows: <input type="text"/>						
Export: 						
Wrap Cell Content: 						
	Field	Type	Null	Key	Default	Extra
▶	Order_id	int	NO	PRI	NULL	
	Ordered_Date	datetime	NO		NULL	
	Order_Status	varchar(50)	NO		NULL	
	Quantity_Ordered	int	NO		NULL	
	PriceOfEach	int	YES		NULL	

```
11
12 • CREATE TABLE Customer(
13     Order_Id INT NOT NULL,
14     CustomerID INT NOT NULL,
15     Customer_Name VARCHAR(50),
16     Customer_Address VARCHAR(75),
17     PRIMARY KEY(CustomerID),
18     FOREIGN KEY(Order_id) REFERENCES Orders(Order_id)
19 );
20
21 • DESCRIBE Customer;
```

<

Result Grid | Filter Rows: | Export: | Wrap Cell Content: |

	Field	Type	Null	Key	Default	Extra
►	Order_Id	int	NO	MUL	NULL	
	CustomerID	int	NO	PRI	NULL	
	Customer_Name	varchar(50)	YES		NULL	
	Customer_Address	varchar(75)	YES		NULL	

3. INSERT STATEMENT

```
23  INSERT INTO Orders VALUES
24  (1001, '2019-05-19', 'Delivered', 40, 135 ),
25  (1012, '2020-01-02', 'In Transit', 15, 1100 ),
26  (1023, '2019-12-17', 'Shipped', 1, 14200 ),
27  (1025, '2020-01-02', 'Processing', 9, 300 ),
28  (1027, '2019-12-19', 'In Transit', 11, 4100 ),
29  (1030, '2020-01-04', 'Out For Delivery', 30, 1770 ),
30  (1032, '2019-12-02', 'In Transit', 100, 2060 ),
31  (2004, '2019-11-10', 'Delivered', 80, 510 ),
32  (2010, '2019-10-22', 'Shipped', 35, 800 ),
33  (2203, '2019-12-19', 'Processing', 60, 1255 ),
34  (3107, '2020-01-07', 'In Transit', 55, 1515 );
--
```

```
38  •  INSERT INTO Customer VALUES
39  (1001, 23, 'Ross Geller', '5 Morton Street, New York'),
40  (1023, 29, 'Monica Cox', '495 Grove Street, New York'),
41  (1025, 32, 'Chandler Bing', '1050 Benton Street, California'),
42  (1032, 44, 'Joey Tribbiani', '90 Bedford St. Apt. 19, New York'),
43  (2004, 47, 'Rachel Green', 'Lighthouse Management and Media, Los Angeles'),
44  (2010, 48, 'Phoebe Buffay', '8391 Beverly Blvd, California'),
45  (2203, 59, 'Gunther', '1409 Cold Canyon Rd,, California'),
46  (3107, 67, 'Mike Hannigan', '601 Buena Vista Avenue West, Georgia');
47
```

4. SELECT STATEMENT

36 • **SELECT *FROM Orders;**

Order_id	Ordered_Date	Order_Status	Quantity_Ordered	PriceOfEach
1001	2019-05-19 00:00:00	Delivered	40	135
1012	2020-01-02 00:00:00	In Transit	15	1100
1023	2019-12-17 00:00:00	Shipped	1	14200
1025	2020-01-02 00:00:00	Processing	9	300
1027	2019-12-19 00:00:00	In Transit	11	4100
1030	2020-01-04 00:00:00	Out For Delivery	30	1770
1032	2019-12-02 00:00:00	In Transit	100	2060
2004	2019-11-10 00:00:00	Delivered	80	510
2010	2019-10-22 00:00:00	Shipped	35	800
2203	2019-12-19 00:00:00	Processing	60	1255
3107	2020-01-07 00:00:00	In Transit	55	1515
NULL	NULL	NULL	NULL	NULL

48 • **Select *FROM Customer;**

49

Order_Id	CustomerID	Customer_Name	Customer_Address
1001	23	Ross Geller	5 Morton Street, New York
1023	29	Monica Cox	495 Grove Street, New York
1025	32	Chandler Bing	1050 Benton Street, California
1032	44	Joey Tribbiani	90 Bedford St. Apt. 19, New York
2004	47	Rachel Green	Lighthouse Management and Media, Los Angeles
2010	48	Phoebe Buffay	8391 Beverly Blvd, California
2203	59	Gunther	1409 Cold Canyon Rd,, California
3107	67	Mike Hannigan	601 Buena Vista Avenue West, Georgia
NULL	NULL	NULL	NULL

5. UPDATE STATEMENT

```

50 • UPDATE Orders SET Order_Status = 'Out For Delivery'
51 WHERE Order_Id = 3107;
52
53 • SELECT *FROM Orders WHERE Order_Id = 3107;
54

```

<					
Result Grid Filter Rows: <input type="text"/> Edit: Export/Import: Wra					
	Order_id	Ordered_Date	Order_Status	Quantity_Ordered	PriceOfEach
▶	3107	2020-01-07 00:00:00	Out For Delivery	55	1515
*	NULL	NULL	NULL	NULL	NULL

6. DELETE STATEMENT

```

55 • DELETE FROM Customer Where CustomerID = 67;
56 • SELECT *FROM Customer;

```

<				
Result Grid Filter Rows: <input type="text"/> Edit: Export/Import: Wrap				
	Order_Id	CustomerID	Customer_Name	Customer_Address
▶	1001	23	Ross Geller	5 Morton Street, New York
	1023	29	Monica Cox	495 Grove Street, New York
	1025	32	Chandler Bing	1050 Benton Street, California
	1032	44	Joey Tribbiani	90 Bedford St. Apt. 19, New York
	2004	47	Rachel Green	Lighthouse Management and Media, Los Angeles
	2010	48	Phoebe Buffay	8391 Beverly Blvd, California
	2203	59	Gunther	1409 Cold Canyon Rd,, California
*	NULL	NULL	NULL	NULL

7. INNER JOIN STATEMENT


```
58 • SELECT *FROM Orders INNER JOIN Customer ON Orders.Order_Id = Customer.Order_Id;
```

```
59
```

```
60
```

Order_id	Ordered_Date	Order_Status	Quantity_Ordered	PriceOfEach	Order_Id	CustomerID	Customer_Name	Customer_Address
1001	2019-05-19 00:00:00	Delivered	40	135	1001	23	Ross Geller	5 Morton Street, New York
1023	2019-12-17 00:00:00	Shipped	1	14200	1023	29	Monica Cox	495 Grove Street, New York
1025	2020-01-02 00:00:00	Processing	9	300	1025	32	Chandler Bing	1050 Benton Street, California
1032	2019-12-02 00:00:00	In Transit	100	2060	1032	44	Joey Tribbiani	90 Bedford St. Apt. 19, New York
2004	2019-11-10 00:00:00	Delivered	80	510	2004	47	Rachel Green	Lighthouse Management and Media, Los Angeles
2010	2019-10-22 00:00:00	Shipped	35	800	2010	48	Phoebe Buffay	8391 Beverly Blvd, California
2203	2019-12-19 00:00:00	Processing	60	1255	2203	59	Gunther	1409 Cold Canyon Rd,, California

8. LEFT JOIN STATEMENT

```
58 • SELECT *FROM Orders LEFT JOIN Customer ON Orders.Order_Id = Customer.Order_Id;
```

```
59
```

Order_id	Ordered_Date	Order_Status	Quantity_Ordered	PriceOfEach	Order_Id	CustomerID	Customer_Name	Customer_Address
1001	2019-05-19 00:00:00	Delivered	40	135	1001	23	Ross Geller	5 Morton Street, New York
1012	2020-01-02 00:00:00	In Transit	15	1100	NULL	NULL	NULL	NULL
1023	2019-12-17 00:00:00	Shipped	1	14200	1023	29	Monica Cox	495 Grove Street, New York
1025	2020-01-02 00:00:00	Processing	9	300	1025	32	Chandler Bing	1050 Benton Street, California
1027	2019-12-19 00:00:00	In Transit	11	4100	NULL	NULL	NULL	NULL
1030	2020-01-04 00:00:00	Out For Delivery	30	1770	NULL	NULL	NULL	NULL
1032	2019-12-02 00:00:00	In Transit	100	2060	1032	44	Joey Tribbiani	90 Bedford St. Apt. 19, New York
2004	2019-11-10 00:00:00	Delivered	80	510	2004	47	Rachel Green	Lighthouse Management and Media, Los Angeles
2010	2019-10-22 00:00:00	Shipped	35	800	2010	48	Phoebe Buffay	8391 Beverly Blvd, California
2203	2019-12-19 00:00:00	Processing	60	1255	2203	59	Gunther	1409 Cold Canyon Rd,, California
3107	2020-01-07 00:00:00	Out For Delivery	55	1515	NULL	NULL	NULL	NULL

9. RIGHT JOIN STATEMENT

```
58 • SELECT *FROM Orders RIGHT JOIN Customer ON Orders.Order_Id = Customer.Order_Id;
```

```
59
```

Order_id	Ordered_Date	Order_Status	Quantity_Ordered	PriceOfEach	Order_Id	CustomerID	Customer_Name	Customer_Address
1001	2019-05-19 00:00:00	Delivered	40	135	1001	23	Ross Geller	5 Morton Street, New York
1023	2019-12-17 00:00:00	Shipped	1	14200	1023	29	Monica Cox	495 Grove Street, New York
1025	2020-01-02 00:00:00	Processing	9	300	1025	32	Chandler Bing	1050 Benton Street, California
1032	2019-12-02 00:00:00	In Transit	100	2060	1032	44	Joey Tribbiani	90 Bedford St. Apt. 19, New York
2004	2019-11-10 00:00:00	Delivered	80	510	2004	47	Rachel Green	Lighthouse Management and Media, Los Angeles
2010	2019-10-22 00:00:00	Shipped	35	800	2010	48	Phoebe Buffay	8391 Beverly Blvd, California
2203	2019-12-19 00:00:00	Processing	60	1255	2203	59	Gunther	1409 Cold Canyon Rd,, California

10. ORDER BY STATEMENT

```
62 • SELECT *FROM Orders ORDER BY Quantity_Ordered ASC;
```

Order_id	Ordered_Date	Order_Status	Quantity_Ordered	PriceOfEach
1023	2019-12-17 00:00:00	Shipped	1	14200
1025	2020-01-02 00:00:00	Processing	9	300
1027	2019-12-19 00:00:00	In Transit	11	4100
1012	2020-01-02 00:00:00	In Transit	15	1100
1030	2020-01-04 00:00:00	Out For Delivery	30	1770
2010	2019-10-22 00:00:00	Shipped	35	800
1001	2019-05-19 00:00:00	Delivered	40	135
3107	2020-01-07 00:00:00	Out For Delivery	55	1515
2203	2019-12-19 00:00:00	Processing	60	1255
2004	2019-11-10 00:00:00	Delivered	80	510
1032	2019-12-02 00:00:00	In Transit	100	2060
NULL	NULL	NULL	NULL	NULL

11. GROUP BY STATEMENT

```
63
64 • SELECT *, COUNT(*) FROM Orders
65 INNER JOIN Customer ON Orders.Order_Id = Customer.Order_Id
66 GROUP BY Order_Status;
67
```

Order_id	Ordered_Date	Order_Status	Quantity_Ordered	PriceOfEach	Order_Id	CustomerID	Customer_Name	Customer_Address	COUNT(*)
1001	2019-05-19 00:00:00	Delivered	40	135	1001	23	Ross Geller	5 Morton Street, New York	2
1023	2019-12-17 00:00:00	Shipped	1	14200	1023	29	Monica Cox	495 Grove Street, New York	2
1025	2020-01-02 00:00:00	Processing	9	300	1025	32	Chandler Bing	1050 Benton Street, California	2
1032	2019-12-02 00:00:00	In Transit	100	2060	1032	44	Joey Tribbiani	90 Bedford St. Apt. 19, New York	1

12. AGGREGATE FUNCTIONS STATEMENT

MAX() MIN() COUNT() AVG() SUM()

```
68 • SELECT MAX(PriceOfEach) FROM Orders;
69 • SELECT MIN(Quantity_Ordered) FROM Orders;
70 • SELECT COUNT(*) FROM Customer;
71 • SELECT AVG(PriceOfEach) As Average_Price FROM Orders;
72 • SELECT SUM(Quantity_Ordered) As TotalQuantity FROM Orders;
```

A screenshot of a SQL query result window. The title bar shows a back arrow and a search icon. Below the title bar, there is a tab labeled 'Result Grid' with a grid icon and a refresh icon. The main area displays a table with one column and one row. The column header is 'MAX(PriceOfEach)' and the value in the row is '14200'.

MAX(PriceOfEach)
14200

A screenshot of a SQL query result window. The title bar shows a back arrow and a search icon. Below the title bar, there is a tab labeled 'Result Grid' with a grid icon and a refresh icon. The main area displays a table with one column and one row. The column header is 'MIN(Quantity_Ordered)' and the value in the row is '1'.

MIN(Quantity_Ordered)
1

A screenshot of a SQL query result window. The title bar shows a back arrow and a search icon. Below the title bar, there is a tab labeled 'Result Grid' with a grid icon and a refresh icon. The main area displays a table with one column and one row. The column header is 'COUNT(*)' and the value in the row is '7'.

COUNT(*)
7

A screenshot of a SQL query result window. The title bar shows a back arrow and a search icon. Below the title bar, there is a tab labeled 'Result Grid' with a grid icon and a refresh icon. The main area displays a table with one column and one row. The column header is 'Average_Price' and the value in the row is '2522.2727'.

Average_Price
2522.2727

A screenshot of a SQL query result window. The title bar shows a back arrow and a search icon. Below the title bar, there is a tab labeled 'Result Grid' with a grid icon and a refresh icon. The main area displays a table with one column and one row. The column header is 'TotalQuantity' and the value in the row is '436'.

TotalQuantity
436