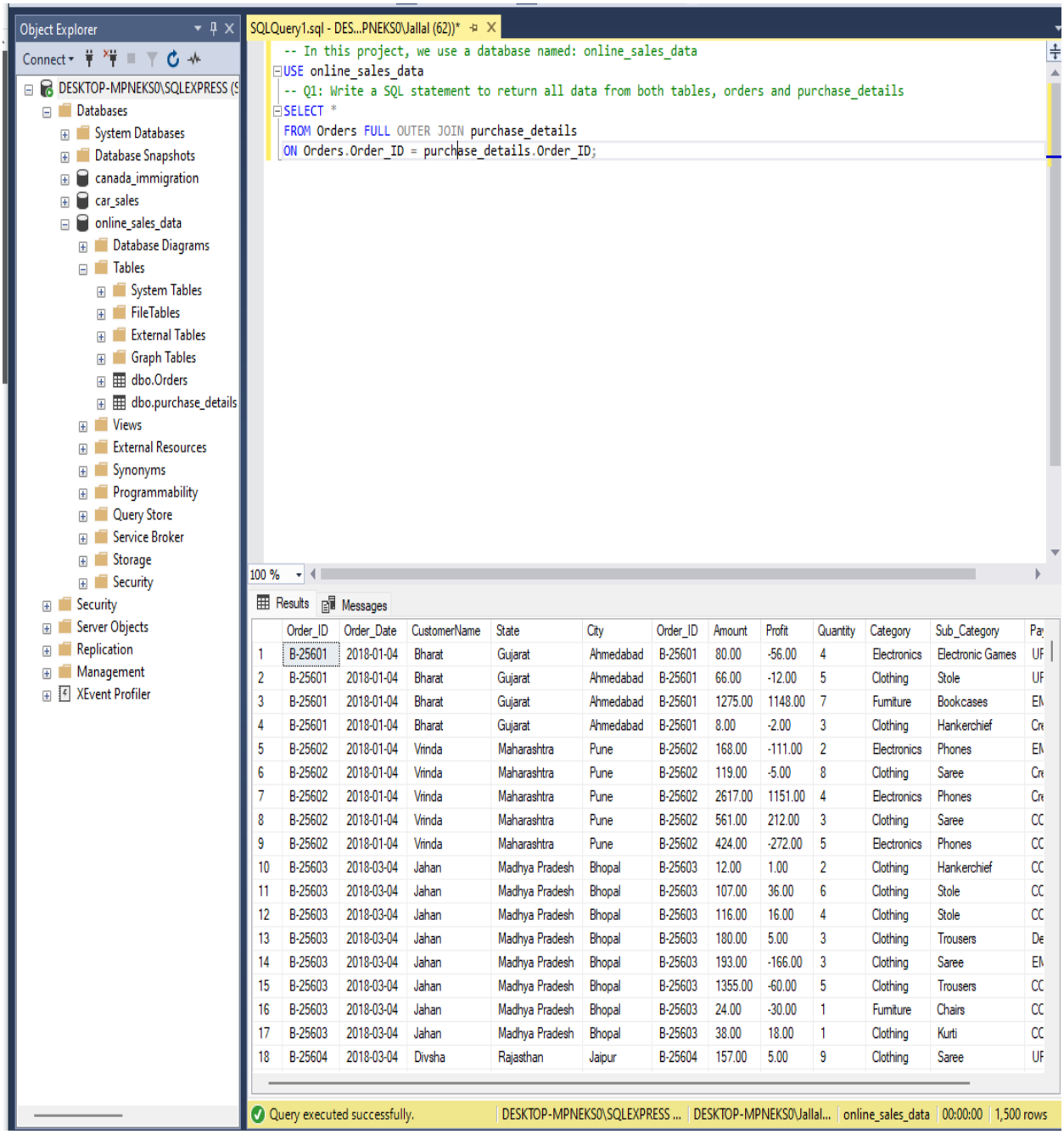
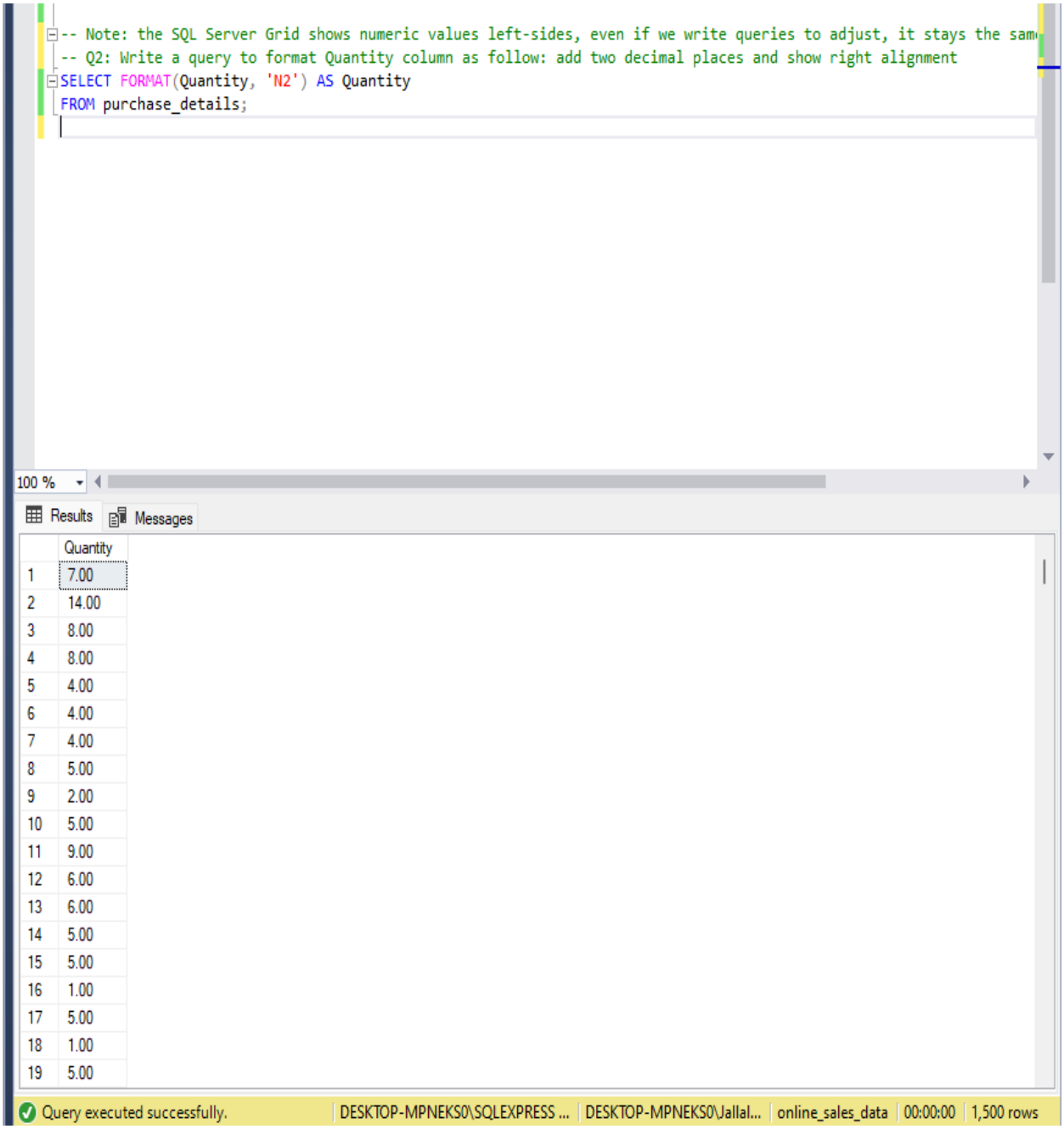


	Order_ID	Order_Date	CustomerName	State	City	Order_ID	Amount	Profit	Quantity	Category	Sub_Category	Pay
1	B-25601	2018-01-04	Bharat	Gujarat	Ahmedabad	B-25601	80.00	-56.00	4	Electronics	Electronic Games	UP
2	B-25601	2018-01-04	Bharat	Gujarat	Ahmedabad	B-25601	66.00	-12.00	5	Clothing	Stole	UP
3	B-25601	2018-01-04	Bharat	Gujarat	Ahmedabad	B-25601	1275.00	1148.00	7	Furniture	Bookcases	EM
4	B-25601	2018-01-04	Bharat	Gujarat	Ahmedabad	B-25601	8.00	-2.00	3	Clothing	Hankerchief	Cre
5	B-25602	2018-01-04	Vrinda	Maharashtra	Pune	B-25602	168.00	-111.00	2	Electronics	Phones	EM
6	B-25602	2018-01-04	Vrinda	Maharashtra	Pune	B-25602	119.00	-5.00	8	Clothing	Saree	Cre
7	B-25602	2018-01-04	Vrinda	Maharashtra	Pune	B-25602	2617.00	1151.00	4	Electronics	Phones	Cre
8	B-25602	2018-01-04	Vrinda	Maharashtra	Pune	B-25602	561.00	212.00	3	Clothing	Saree	CC
9	B-25602	2018-01-04	Vrinda	Maharashtra	Pune	B-25602	424.00	-272.00	5	Electronics	Phones	CC
10	B-25603	2018-03-04	Jahan	Madhya Pradesh	Bhopal	B-25603	12.00	1.00	2	Clothing	Hankerchief	CC
11	B-25603	2018-03-04	Jahan	Madhya Pradesh	Bhopal	B-25603	107.00	36.00	6	Clothing	Stole	CC
12	B-25603	2018-03-04	Jahan	Madhya Pradesh	Bhopal	B-25603	116.00	16.00	4	Clothing	Stole	CC
13	B-25603	2018-03-04	Jahan	Madhya Pradesh	Bhopal	B-25603	180.00	5.00	3	Clothing	Trousers	De
14	B-25603	2018-03-04	Jahan	Madhya Pradesh	Bhopal	B-25603	193.00	-166.00	3	Clothing	Saree	EM
15	B-25603	2018-03-04	Jahan	Madhya Pradesh	Bhopal	B-25603	1355.00	-60.00	5	Clothing	Trousers	CC
16	B-25603	2018-03-04	Jahan	Madhya Pradesh	Bhopal	B-25603	24.00	-30.00	1	Furniture	Chairs	CC
17	B-25603	2018-03-04	Jahan	Madhya Pradesh	Bhopal	B-25603	38.00	18.00	1	Clothing	Kurti	CC
18	B-25604	2018-03-04	Divsha	Rajasthan	Jaipur	B-25604	157.00	5.00	9	Clothing	Saree	UP


-- Note: the SQL Server Grid shows numeric values left-sides, even if we write queries to adjust, it stays the sam
-- Q2: Write a query to format Quantity column as follow: add two decimal places and show right alignment
SELECT FORMAT(Quantity, 'N2') AS Quantity
FROM purchase_details;
100 %
Results
Messages
Quantity
1 7.00
2 14.00
3 8.00
4 8.00
5 4.00
6 4.00
7 4.00
8 5.00
9 2.00
10 5.00
11 9.00
12 6.00
13 6.00
14 5.00
15 5.00
16 1.00
17 5.00
18 1.00
19 5.00
Query executed successfully.
DESKTOP-MPNEKS0\SQLEXPRESS ...
DESKTOP-MPNEKS0\Jallal...
online_sales_data
00:00:00
1,500 rows

```sql
-- Q3: Write a query to check for null values in CustomerName, City and Order_ID columns

SELECT * from Orders
WHERE CustomerName IS NULL OR City IS NULL OR Order_ID IS NULL;
```

100 %

Results | Messages

Order_ID	Order_Date	CustomerName	State	City

```sql
-- Q4: write a select statement to add dollar sign ($) to both, Amount and Profit columns
SELECT '$' + CAST(Amount AS VARCHAR(20)) AS Amount,
       '$' + CAST(Profit AS VARCHAR(20)) AS Profit
FROM purchase_details;
```

100 %

Results | Messages

	Amount	Profit
1	$1096.00	$658.00
2	$5729.00	$64.00
3	$2927.00	$146.00
4	$2847.00	$712.00
5	$2617.00	$1151.00
6	$2244.00	$247.00
7	$275.00	$-275.00
8	$387.00	$-213.00
9	$50.00	$-44.00
10	$135.00	$-54.00
11	$231.00	$-190.00
12	$2125.00	$-234.00
13	$3873.00	$-891.00
14	$729.00	$-492.00
15	$2188.00	$1050.00
16	$6.00	$-3.00
17	$1854.00	$433.00
18	$6.00	$1.00
19	$2093.00	$721.00

Query executed successfully. | DESKTOP-MPNEKS0\SQLEXPRESS ... | DESKTOP-MPNEKS0\Jallal... | online_sales_data | 00:00:00 | 1,500 rows

```sql
-- Q5: The above statement worked, but it did not permanently change it
-- we will use the UPDATE function to permanently change those two columns to add dollar sign with them

UPDATE purchase_details
SET Amount = '$' + CAST(Amount AS VARCHAR(20)),
    Profit = '$' + CAST(Profit AS VARCHAR(20));
```

100 %

Messages

```
(1500 rows affected)

Completion time: 2024-09-24T16:29:52.6766081-05:00
```

```sql
-- Q6: Even afer conducting the UPDATE function, we see that the Profit and Amount did not change
-- This could be SQL Server resriction or something like that
SELECT * FROM purchase_details

-- Currently, our date shows as yyyy-mm-dd, but we want it as dd-mm-yyyy
-- Q7: Write a select statement to change data type as explained above

SELECT CONVERT(VARCHAR(10), Order_Date, 103) AS Order_Date
FROM Orders;

-- Q8:
SELECT Order_ID, CONVERT(VARCHAR(10), Order_Date, 103) AS Order_Date_Formatted
FROM Orders;
```

100 %

Results | Messages

	Order_ID	Amount	Profit	Quantity	Category	Sub_Category	PaymentMode
1	B-25681	1096.00	658.00	7	Electronics	Electronic Games	COD
2	B-26055	5729.00	64.00	14	Furniture	Chairs	EMI
3	B-25955	2927.00	146.00	8	Furniture	Bookcases	EMI
4	B-26093	2847.00	712.00	8	Electronics	Printers	Credit Card
5	B-25602	2617.00	1151.00	4	Electronics	Phones	Credit Card
6	B-25881	2244.00	247.00	4	Clothing	Trousers	Credit Card
7	B-25696	275.00	-275.00	4	Clothing	Saree	COD
8	B-25687	387.00	-213.00	5	Clothing	Saree	UPI
9	B-25643	50.00	-44.00	2	Clothing	Hankerchief	UPI
10	B-25851	135.00	-54.00	5	Clothing	Kurti	COD
11	B-25703	231.00	-190.00	9	Clothing	Hankerchief	COD
12	B-25887	2125.00	-234.00	6	Electronics	Printers	EMI

```sql
-- Currently, our date shows as yyyy-mm-dd, but we want it as dd-mm-yyyy
-- Q7: Write a select statement to change data type as explained above

SELECT CONVERT(VARCHAR(10), Order_Date, 103) AS Order_Date
FROM Orders;
```

100 %

Results | Messages

	Order_Date
1	04/01/2018
2	04/01/2018
3	04/03/2018
4	04/03/2018
5	04/05/2018
6	04/06/2018
7	04/06/2018
8	04/08/2018
9	04/09/2018
10	04/09/2018
11	04/11/2018
12	04/12/2018
13	04/12/2018
14	13/04/2018
15	15/04/2018
16	15/04/2018
17	17/04/2018
18	18/04/2018
19	18/04/2018

```sql
-- Q8: write a query to select CustomerName, State And from Orders, and amount, profit and quantity from purchase_details
-- the query should return ALL records from Orders table, even if there is no matching record from purchase_details

ELECT CustomerName, State, Amount, Profit, Quantity
ROM Orders LEFT JOIN purchase_details
N Orders.Order_ID = purchase_details.Order_ID;
```

100 %

Results | Messages

	CustomerName	State	Amount	Profit	Quantity
1	Bharat	Gujarat	80.00	-56.00	4
2	Bharat	Gujarat	66.00	-12.00	5
3	Bharat	Gujarat	1275.00	1148.00	7
4	Bharat	Gujarat	8.00	-2.00	3
5	Vrinda	Maharashtra	168.00	-111.00	2
6	Vrinda	Maharashtra	119.00	-5.00	8
7	Vrinda	Maharashtra	2617.00	1151.00	4
8	Vrinda	Maharashtra	561.00	212.00	3
9	Vrinda	Maharashtra	424.00	-272.00	5
10	Jahan	Madhya Pradesh	12.00	1.00	2
11	Jahan	Madhya Pradesh	107.00	36.00	6
12	Jahan	Madhya Pradesh	116.00	16.00	4

Query executed successfully. | DESKTOP-MPNEKS0\SQLEXPRESS ... | DESKTOP-MPNEKS0\Jallal... | online_sales_data | 00:00:00 | 1,500 rows

```sql
--Q9: Rewrite the above query but only include records that are a match in both tables
-- Ensure it is listed by Quantity in ascending orders(smallest to largest)

SELECT CustomerName, State, Amount, Profit, Quantity
FROM Orders INNER JOIN purchase_details
ON Orders.Order_ID = purchase_details.Order_ID
ORDER BY Quantity ASC;
```

100 %

Results | Messages

	CustomerName	State	Amount	Profit	Quantity
1	Jahan	Madhya Pradesh	24.00	-30.00	1
2	Jahan	Madhya Pradesh	38.00	18.00	1
3	Manju	Andhra Pradesh	362.00	127.00	1
4	Sarita	Maharashtra	193.00	46.00	1
5	Bhishm	Maharashtra	46.00	-14.00	1
6	Parishi	West Bengal	22.00	-6.00	1
7	Yaanvi	Madhya Pradesh	133.00	-42.00	1
8	Kirti	Jammu and Kashmir	36.00	-7.00	1
9	Aditya	Punjab	30.00	13.00	1
10	Aditya	Punjab	100.00	-23.00	1
11	Anurag	Madhya Pradesh	49.00	3.00	1
12	Anurag	Madhya Pradesh	7.00	0.00	1

```sql
--Q10: Write a query to select order_date and City from Orders, and category, sub_category and paymentMode from Purchase_details
-- Order by orderdate in desc order

SELECT Order_Date, City, Category, Sub_Category, PaymentMode
FROM Orders
LEFT JOIN purchase_details
on Orders.Order_ID = purchase_details.Order_ID
ORDER BY Order_Date DESC;
```

100 %

Results | Messages

	Order_Date	City	Category	Sub_Category	PaymentMode
1	2018-12-31	Lucknow	Electronics	Electronic Games	Credit Card
2	2018-12-30	Indore	Clothing	Leggings	Debit Card
3	2018-12-29	Mumbai	Furniture	Chairs	UPI
4	2018-12-29	Mumbai	Clothing	Stole	Debit Card
5	2018-12-29	Mumbai	Electronics	Electronic Games	Credit Card
6	2018-12-28	Bangalore	Furniture	Chairs	UPI
7	2018-12-27	Mumbai	Clothing	Trousers	Debit Card
8	2018-12-27	Mumbai	Electronics	Accessories	COD
9	2018-12-27	Mumbai	Electronics	Phones	Credit Card
10	2018-12-27	Mumbai	Electronics	Printers	Debit Card
11	2018-12-26	Surat	Clothing	Stole	COD
12	2018-12-25	Amritsar	Electronics	Accessories	COD
13	2018-12-25	Amritsar	Clothing	T-shirt	UPI
14	2018-12-25	Amritsar	Electronics	Accessories	UPI
15	2018-12-24	Prayagraj	Clothing	T-shirt	UPI

```sql
--Q11: Write a SELECT statement to return Online_sales data as follow: customer name, Profit, quantity, Category
-- Group orders based on their category

SELECT O.CustomerName,FORMAT(SUM(PD.Profit), 'C', 'en-US') AS Profit,  SUM(PD.Quantity) AS Quantity, PD.Category
FROM Orders O INNER JOIN purchase_details PD
ON O.Order_ID = PD.Order_ID
GROUP BY O.CustomerName, PD.Category
```

100 %

Results | Messages

	CustomerName	Profit	Quantity	Category
1	Aakanksha	($12.00)	7	Clothing
2	Aarushi	$41.00	24	Clothing
3	Aastha	$12.00	16	Clothing
4	Aayush	$45.00	15	Clothing
5	Aayushi	$59.00	11	Clothing
6	Abhijeet	$630.00	28	Clothing
7	Abhijit	$27.00	3	Clothing
8	Abhishek	$448.00	55	Clothing
9	Aditi	($66.00)	20	Clothing
10	Aditya	$43.00	16	Clothing
11	Aishwarya	$32.00	7	Clothing
12	Ajay	$66.00	36	Clothing
13	Akancha	$22.00	10	Clothing
14	Akanksha	($15.00)	1	Clothing
15	Akshat	($7.00)	5	Clothing

```sql
--Q12: Write a query to generate a combination of orders data with purchase_details and show them as a list

SELECT *
FROM Orders
CROSS JOIN purchase_details;
```

100 %

Results | Messages

	Order_ID	Order_Date	CustomerName	State	City	Order_ID	Amount	Profit	Quantity	Category	Sub_Category	PaymentMode
1	B-25601	2018-01-04	Bharat	Gujarat	Ahmedabad	B-25681	1096.00	658.00	7	Electronics	Electronic Games	COD
2	B-25601	2018-01-04	Bharat	Gujarat	Ahmedabad	B-26055	5729.00	64.00	14	Furniture	Chairs	EMI
3	B-25601	2018-01-04	Bharat	Gujarat	Ahmedabad	B-25955	2927.00	146.00	8	Furniture	Bookcases	EMI
4	B-25601	2018-01-04	Bharat	Gujarat	Ahmedabad	B-26093	2847.00	712.00	8	Electronics	Printers	Credit Card
5	B-25601	2018-01-04	Bharat	Gujarat	Ahmedabad	B-25602	2617.00	1151.00	4	Electronics	Phones	Credit Card
6	B-25601	2018-01-04	Bharat	Gujarat	Ahmedabad	B-25881	2244.00	247.00	4	Clothing	Trousers	Credit Card
7	B-25601	2018-01-04	Bharat	Gujarat	Ahmedabad	B-25696	275.00	-275.00	4	Clothing	Saree	COD
8	B-25601	2018-01-04	Bharat	Gujarat	Ahmedabad	B-25687	387.00	-213.00	5	Clothing	Saree	UPI
9	B-25601	2018-01-04	Bharat	Gujarat	Ahmedabad	B-25643	50.00	-44.00	2	Clothing	Hankerchief	UPI
10	B-25601	2018-01-04	Bharat	Gujarat	Ahmedabad	B-25851	135.00	-54.00	5	Clothing	Kurti	COD
11	B-25601	2018-01-04	Bharat	Gujarat	Ahmedabad	B-25703	231.00	-190.00	9	Clothing	Hankerchief	COD
12	B-25601	2018-01-04	Bharat	Gujarat	Ahmedabad	B-25887	2125.00	-234.00	6	Electronics	Printers	EMI
13	B-25601	2018-01-04	Bharat	Gujarat	Ahmedabad	B-25923	3873.00	-891.00	6	Electronics	Phones	Credit Card
14	B-25601	2018-01-04	Bharat	Gujarat	Ahmedabad	B-25756	729.00	-492.00	5	Furniture	Bookcases	UPI
15	B-25601	2018-01-04	Bharat	Gujarat	Ahmedabad	B-25761	2188.00	1050.00	5	Furniture	Bookcases	Credit Card

```sql
--Q13 Write a query to combine and return data for all sales orders of any customers that have matching profit and quantity

SELECT Orders.CustomerName, FORMAT(SUM(purchase_details.Profit), 'C', 'en-US') AS Profit,
SUM(purchase_details.Quantity) AS Quantity
FROM Orders
FULL OUTER JOIN purchase_details
ON Orders.Order_ID = purchase_details.Order_ID
GROUP BY CustomerName;
```

100 %

Results | Messages

	CustomerName	Profit	Quantity
1	Aakanksha	($18.00)	8
2	Aarushi	$2,059.00	49
3	Aastha	$873.00	28
4	Aayush	($38.00)	18
5	Aayushi	$37.00	18
6	Abhijeet	$1,078.00	45
7	Abhijit	$27.00	3
8	Abhishek	$484.00	75
9	Adhvaita	($275.00)	3
10	Aditi	($129.00)	28
11	Aditya	$57.00	23
12	Aishwarya	$41.00	9
13	Ajay	$236.00	42
14	Akancha	$22.00	10
15	Akanksha	($15.00)	1

```sql
--Q14: Find all orders whith a specific order Id

SELECT *
FROM Orders
WHERE State = (SELECT State FROM Orders WHERE Order_ID = 'B-25601');
```

100 %

Results | Messages

	Order_ID	Order_Date	CustomerName	State	City
1	B-25601	2018-01-04	Bharat	Gujarat	Ahmedabad
2	B-25619	2018-04-18	Ramesh	Gujarat	Ahmedabad
3	B-25673	2018-05-28	Arsheen	Gujarat	Ahmedabad
4	B-25745	2018-09-08	Kartik	Gujarat	Ahmedabad
5	B-25763	2018-08-27	Noshiba	Gujarat	Ahmedabad
6	B-25781	2018-09-14	Rutuja	Gujarat	Ahmedabad
7	B-25799	2018-01-10	Divyansh	Gujarat	Ahmedabad
8	B-25835	2018-10-29	Moumita	Gujarat	Ahmedabad
9	B-25853	2018-08-11	Gaurav	Gujarat	Ahmedabad
10	B-25871	2018-11-21	Gunjal	Gujarat	Surat
11	B-25877	2018-11-24	Dashyam	Gujarat	Surat
12	B-25883	2018-11-27	Saptadeep	Gujarat	Surat
13	B-25889	2018-03-12	Abhishek	Gujarat	Surat
14	B-25895	2018-04-12	Sathya	Gujarat	Surat
15	B-25901	2018-10-12	Suraj	Gujarat	Surat

```sql
-- The above query did return data, however, results were not specific, this is likely due to subquery condition
--Q15 We can directly filter based on state instead

SELECT *
FROM Orders
WHERE Order_ID = 'B-25601';
```

100 %

Results | Messages

	Order_ID	Order_Date	CustomerName	State	City
1	B-25601	2018-01-04	Bharat	Gujarat	Ahmedabad

```sql
--Q16: Find city where orders were places in the date: 2018-08-04

SELECT *
FROM Orders
WHERE City = (SELECT City FROM Orders WHERE Order_Date = '2018-08-04');
```

100 %

Results | Messages

	Order_ID	Order_Date	CustomerName	State	City
1	B-25608	2018-08-04	Aarushi	Tamil Nadu	Chennai
2	B-25698	2018-06-23	Amisha	Tamil Nadu	Chennai
3	B-25716	2018-11-07	Surabhi	Tamil Nadu	Chennai
4	B-25788	2018-09-21	Dinesh	Tamil Nadu	Chennai
5	B-25860	2018-11-15	Akshay	Tamil Nadu	Chennai
6	B-26008	2018-09-02	Kalyani	Tamil Nadu	Chennai
7	B-26018	2018-02-14	Aarushi	Tamil Nadu	Chennai
8	B-26081	2018-03-22	Aarushi	Tamil Nadu	Chennai

```sql
-- Different dates were pulled not just the desired date
--Q17: We will use direct filtering based on a specific date and results should 1 answer

SELECT Order_Date, City
FROM Orders
WHERE Order_Date = '2018-08-04';
```

100 %

Results | Messages

	Order_Date	City
1	2018-08-04	Chennai

```sql
--Q18: Find all customers, their city, and order date that placed more than 7 online sales orders

SELECT Orders.Order_Date, Orders.CustomerName, Orders.City, purchase_details.Quantity

FROM Orders INNER JOIN purchase_details
ON Orders.Order_ID = purchase_details.Order_ID
WHERE Quantity > 7;
```

100 %

Results | Messages

	Order_Date	CustomerName	City	Quantity
1	2018-01-04	Vrinda	Pune	8
2	2018-03-04	Divsha	Jaipur	9
3	2018-12-04	Mohan	Chandigarh	9
4	2018-04-18	Ramesh	Ahmedabad	8
5	2018-04-26	Parth	Pune	8
6	2018-04-27	Paridhi	Jaipur	13
7	2018-04-28	Ajay	Bangalore	11
8	2018-04-29	Kirti	Kashmir	8
9	2018-04-30	Mayank	Mumbai	8
10	2018-06-05	Chirag	Mumbai	8
11	2018-08-05	Farah	Kohima	8
12	2018-08-05	Farah	Kohima	8
13	2018-08-05	Farah	Kohima	8
14	2018-11-05	Nida	Indore	9
15	2018-11-05	Nida	Indore	8

```sql
--Q19: Return customer names of people who made online sales orders to purchase clothes that has profit of at least $230

SELECT Orders.CustomerName, FORMAT(purchase_details.Profit, 'C', 'en-US'), purchase_details.Category
FROM Orders INNER JOIN purchase_details
ON Orders.Order_ID = purchase_details.Order_ID
WHERE Profit >= 230 AND Category = 'Clothing'
ORDER BY Profit ASC;
```

100 %

Results | Messages

	CustomerName	(No column name)	Category
1	Paridhi	$239.00	Clothing
2	Ekta	$241.00	Clothing
3	Lalita	$247.00	Clothing
4	Mahima	$254.00	Clothing
5	Ayush	$292.00	Clothing
6	Akshay	$312.00	Clothing
7	Shourya	$315.00	Clothing
8	Parna	$316.00	Clothing
9	Shikhar	$412.00	Clothing
10	Hemant	$421.00	Clothing
11	Abhijeet	$441.00	Clothing
12	Pranjali	$486.00	Clothing
13	Bhishm	$552.00	Clothing
14	Shourya	$564.00	Clothing
15	Dashyam	$568.00	Clothing

```sql
--Q20: return online sales orders of electrnics games that were ordered by credit cards

SELECT *
FROM purchase_details
where Category = 'Electronics' AND Sub_Category = 'Electronic Games' AND PaymentMode = 'Credit Card';
```

100 %

Results | Messages

	Order_ID	Amount	Profit	Quantity	Category	Sub_Category	PaymentMode
1	B-25762	1316.00	527.00	7	Electronics	Electronic Games	Credit Card
2	B-25897	734.00	213.00	6	Electronics	Electronic Games	Credit Card
3	B-25848	648.00	50.00	6	Electronics	Electronic Games	Credit Card
4	B-26016	429.00	61.00	3	Electronics	Electronic Games	Credit Card
5	B-25925	314.00	-41.00	3	Electronics	Electronic Games	Credit Card
6	B-25997	231.00	99.00	2	Electronics	Electronic Games	Credit Card
7	B-25621	228.00	63.00	3	Electronics	Electronic Games	Credit Card
8	B-25927	200.00	7.00	4	Electronics	Electronic Games	Credit Card
9	B-25953	188.00	-193.00	2	Electronics	Electronic Games	Credit Card
10	B-25614	98.00	-12.00	2	Electronics	Electronic Games	Credit Card

```sql
-- Q21: List all online sales details of orders that had profit between $400 to $600 and where ordered 2018-01-01 to 2018-12-31

SELECT Orders.CustomerName, Orders.Order_Date, FORMAT(SUM(purchase_details.Profit), 'C','en-US') AS Profit
FROM Orders INNER JOIN purchase_details
ON Orders.Order_ID = purchase_details.Order_ID
WHERE Profit BETWEEN 400 AND 600 AND (Order_Date BETWEEN '2018-01-01' AND '2018-12-31')
GROUP BY CustomerName, Profit, Order_Date
ORDER BY Order_Date ASC;
```

100 %

Results | Messages

	CustomerName	Order_Date	Profit
1	Oshin	2018-01-20	$546.00
2	Girase	2018-02-01	$536.00
3	Mukesh	2018-02-19	$447.00
4	Manju	2018-02-20	$547.00
5	Bhishm	2018-03-30	$552.00
6	Shikhar	2018-04-01	$412.00
7	Sudhir	2018-04-01	$460.00
8	Hemant	2018-04-24	$421.00
9	Abhijeet	2018-08-11	$441.00
10	Abhijeet	2018-08-11	$567.00
11	Shourya	2018-08-19	$564.00
12	Anudeep	2018-08-26	$527.00
13	Arpita	2018-09-02	$573.00
14	Yogesh	2018-09-04	$594.00
15	Madan Mohan	2018-09-19	$433.00

```sql
--Q22: Find total profit or loss for each state and for the date after 2018-05-20

SELECT Orders.State,Orders.Order_Date, FORMAT(SUM(purchase_details.Profit), 'C', 'en-US') AS Profit
FROM Orders INNER JOIN purchase_details
ON Orders.Order_ID = purchase_details.Order_ID
WHERE Order_Date > '2018-05-20'
GROUP BY State, Profit, Order_Date
ORDER BY Order_Date ASC;
```

100 %

Results | Messages

	State	Order_Date	Profit
1	Kerala	2018-05-21	($113.00)
2	Punjab	2018-05-22	($916.00)
3	Haryana	2018-05-23	($34.00)
4	Haryana	2018-05-23	($2.00)
5	Haryana	2018-05-23	$6.00
6	Haryana	2018-05-23	$69.00
7	Haryana	2018-05-23	$206.00
8	Himachal Pradesh	2018-05-24	$17.00
9	Goa	2018-05-25	($36.00)
10	Goa	2018-05-25	$1.00
11	Goa	2018-05-25	$2.00
12	Goa	2018-05-25	$29.00
13	Sikkim	2018-05-25	($66.00)
14	Nagaland	2018-05-27	$0.00
15	Andhra Pradesh	2018-05-28	($15.00)

```sql
--Q23: Find date between january 2018 to Dec 2019 where customers made purchase for funiture and used EMI payment method

SELECT Orders.CustomerName, Orders.Order_Date, purchase_details.Category, purchase_details.PaymentMode
FROM Orders LEFT JOIN purchase_details
ON Orders.Order_ID = purchase_details.Order_ID
WHERE Order_Date BETWEEN '2018-01-01' AND '2019-12-31' AND (Category = 'Furniture') AND (PaymentMode = 'EMI')
ORDER BY Order_Date ASC;
```

100 %

Results | Messages

	CustomerName	Order_Date	Category	PaymentMode
1	Bharat	2018-01-04	Furniture	EMI
2	Shishu	2018-01-10	Furniture	EMI
3	Krutika	2018-01-14	Furniture	EMI
4	Shiva	2018-01-16	Furniture	EMI
5	Shreya	2018-01-18	Furniture	EMI
6	Shivangi	2018-01-27	Furniture	EMI
7	Girase	2018-02-01	Furniture	EMI
8	Mukesh	2018-02-19	Furniture	EMI
9	Madhav	2018-03-02	Furniture	EMI
10	Sudhir	2018-04-01	Furniture	EMI
11	Parth	2018-04-03	Furniture	EMI
12	Monu	2018-04-12	Furniture	EMI
13	Bhishm	2018-04-23	Furniture	EMI
14	Kirti	2018-04-29	Furniture	EMI
15	Aman	2018-05-12	Furniture	EMI

Query executed successfully. | DESKTOP-MPNEKS0\SQLEXPRESS ... | DESKTOP-MPNEKS0\Jallal... | online_sales_data | 00:00:00 | 21 rows

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```sql
--Q24: Find locations of customers who purchased more than 2 trousers and at least 4 Saree

SELECT Orders.CustomerName, Orders.State, Orders.City, purchase_details.Sub_Category, purchase_details.Quantity
FROM Orders INNER JOIN purchase_details
ON Orders.Order_ID = purchase_details.Order_ID
WHERE Sub_Category IN ('Trousers', 'Saree') AND (Quantity > 2 AND Quantity >= 4);
```

100 %

Results | Messages

	CustomerName	State	City	Sub_Category	Quantity
1	Vrinda	Maharashtra	Pune	Saree	8
2	Jahan	Madhya Pradesh	Bhopal	Trousers	5
3	Divsha	Rajasthan	Jaipur	Saree	9
4	Kasheen	West Bengal	Kolkata	Saree	7
5	Jitesh	Uttar Pradesh	Lucknow	Saree	4
6	Mohan	Haryana	Chandigarh	Saree	9
7	Ramesh	Gujarat	Ahmedabad	Saree	8
8	Atharv	West Bengal	Kolkata	Saree	4
9	Pinky	Jammu and Kashmir	Kashmir	Saree	5
10	Pooja	Bihar	Patna	Saree	4
11	Amit	Sikkim	Gangtok	Saree	4
12	Nishi	Maharashtra	Mumbai	Saree	5
13	Paridhi	Rajasthan	Jaipur	Saree	4
14	Paridhi	Rajasthan	Jaipur	Saree	13
15	Sharda	Kerala	Thiruvananthapuram	Saree	4