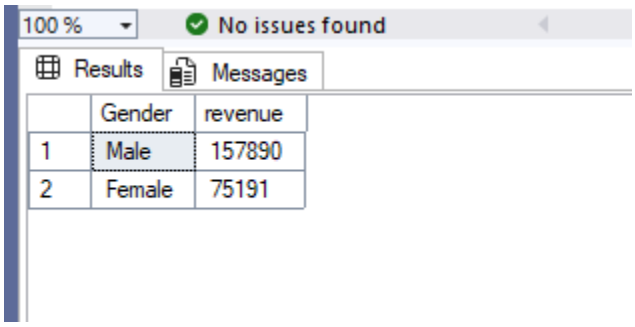
CUSTOMER'S SHOPPING BEHAVIOUR

```
SELECT * FROM customer_shopping_behavior
```

	Customer_ID	Age	Gender	Item_Purchased	Category	Purchase_Amount_USD	Location	Size	Color	Season	Review_Rating	Subscription_Status	Shipping_Type	Disc
1	1	55	Male	Blouse	Clothing	53	Kentucky	L	Gray	Winter	3.09999990463257	Yes	Express	Yes
2	2	19	Male	Sweater	Clothing	64	Maine	L	Maroon	Winter	3.09999990463257	Yes	Express	Yes
3	3	50	Male	Jeans	Clothing	73	Massachusetts	S	Maroon	Spring	3.09999990463257	Yes	Free Shipping	Yes
4	4	21	Male	Sandals	Footwear	90	Rhode Island	M	Maroon	Spring	3.5	Yes	Next Day Air	Yes
5	5	45	Male	Blouse	Clothing	49	Oregon	M	Turquoise	Spring	2.70000004768372	Yes	Free Shipping	Yes
6	6	46	Male	Sneakers	Footwear	20	Wyoming	M	White	Summer	2.90000009536743	Yes	Standard	Yes
7	7	63	Male	Shirt	Clothing	85	Montana	M	Gray	Fall	3.20000004768372	Yes	Free Shipping	Yes
8	8	27	Male	Shorts	Clothing	34	Louisiana	L	Charcoal	Winter	3.20000004768372	Yes	Free Shipping	Yes
9	9	26	Male	Coat	Outerw...	97	West Virginia	L	Silver	Summer	2.59999990463257	Yes	Express	Yes
10	10	57	Male	Handbag	Access...	31	Missouri	M	Pink	Spring	4.80000019073486	Yes	2-Day Shipping	Yes
11	11	53	Male	Shoes	Footwear	34	Arkansas	L	Purple	Fall	4.09999990463257	Yes	Store Pickup	Yes
12	12	30	Male	Shorts	Clothing	68	Hawaii	S	Olive	Winter	4.90000009536743	Yes	Store Pickup	Yes
13	13	61	Male	Coat	Outerw...	72	Delaware	M	Gold	Winter	4.5	Yes	Express	Yes

1. What is the total revenue generated by male vs. female customers?

```
SELECT Gender, SUM(Purchase_Amount_USD) as revenue
FROM customer_shopping_behavior
GROUP BY Gender
```



	Gender	revenue
1	Male	157890
2	Female	75191

2. Which customers used a discount but still spent more than the average purchase amount?

```
SELECT Customer_ID, Purchase_Amount_USD
FROM customer_shopping_behavior
WHERE Discount_Applied = 'Yes' AND Purchase_Amount_USD >= (SELECT
AVG(Purchase_Amount_USD) FROM customer_shopping_behavior)
```

Results | Messages

	Customer_ID	Purchase_Amount_USD
1	2	64
2	3	73
3	4	90
4	7	85
5	9	97
6	12	68
7	13	72
8	16	81
9	20	90
10	22	62
11	24	88
12	29	94
13	32	79
14	33	67

Query executed successfully.

3. Which are the top 5 products with the highest average review rating?

```
SELECT TOP 5 Item_Purchased, ROUND(AVG(Review_Rating),2) AS "Average Product Rating"
FROM customer_shopping_behavior
GROUP BY Item_Purchased
ORDER BY AVG(Review_Rating) DESC
```

Results | Messages

	Item_Purchased	Average Product Rating
1	Gloves	3.86
2	Sandals	3.84
3	Boots	3.82
4	Hat	3.8
5	Skirt	3.79

4. Compare the average Purchase Amounts between Standard and Express Shipping.

```
SELECT Shipping_Type,
ROUND(AVG(Purchase_Amount_USD),2) AS AVG_Purchase_Amount
FROM customer_shopping_behavior
WHERE Shipping_Type IN ('Standard','Express')
GROUP BY Shipping_Type;
```

Results | Messages

	Shipping_Type	AVG_Purchase_Amount
1	Express	60
2	Standard	58

5. Do subscribed customers spend more? Compare average spend and total revenue between subscribers and non-subscribers.

```
SELECT Subscription_Status,
    COUNT(Customer_ID) AS Total_Customers,
    ROUND(AVG(Purchase_Amount_USD),2) AS AVG_Spend,
    ROUND(SUM(Purchase_Amount_USD),2) AS Total_Revenue
FROM customer_shopping_behavior
GROUP BY Subscription_Status
ORDER BY Total_Revenue,AVG_Spend DESC;
```

Results | Messages

	Subscription_Status	Total_Customers	AVG_Spend	Total_Revenue
1	Yes	1053	59	62645
2	No	2847	59	170436

6. Which 5 products have the highest percentage of purchases with discounts applied?

```
SELECT TOP 5 Item_Purchased,
    ROUND(100.0 * SUM(CASE WHEN Discount_Applied = 'Yes' THEN 1 ELSE 0 END)/COUNT(*),2)
AS Discount_Rate
FROM customer_shopping_behavior
GROUP BY Item_Purchased
ORDER BY Discount_Rate DESC
```

Results | Messages

	Item_Purchased	Discount_Rate
1	Hat	50.000000000000
2	Sneakers	49.660000000000
3	Coat	49.070000000000
4	Sweater	48.170000000000
5	Pants	47.370000000000

7. Segment customers into New, Returning, and Loyal based on their total number of previous purchases, and show the count of each segment.

```
WITH Customer_Type AS (
SELECT Customer_ID, Previous_Purchases,
CASE
    WHEN Previous_Purchases = 1 THEN 'New'
    WHEN Previous_Purchases BETWEEN 2 AND 10 THEN 'Returning'
    ELSE 'Loyal'
    END AS Customer_Segment
FROM customer_shopping_behavior)

select Customer_Segment,count(*) AS "Number of Customers"
FROM Customer_Type
group by Customer_Segment;
```

Results | Messages

	Customer_Segment	Number of Customers
1	Returning	701
2	Loyal	3116
3	New	83

8. What are the top 3 most purchased products within each category?

```
WITH Item_Counts AS (
    SELECT Category,
        Item_Purchased,
        COUNT(Customer_ID) AS Total_Orders,
        ROW_NUMBER() OVER (PARTITION BY Category ORDER BY COUNT(Customer_ID) DESC)
AS Item_Rank
FROM customer_shopping_behavior
```

```
    GROUP BY Category, Item_Purchased
)
SELECT Item_Rank,Category, Item_Purchased, Total_Orders
FROM Item_Counts
WHERE Item_Rank <=3;
```

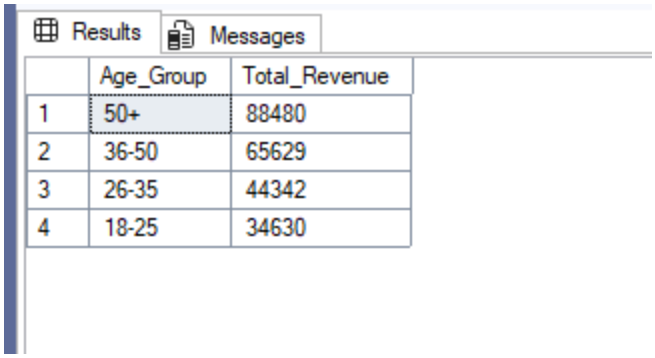
Results | Messages

	Item_Rank	Category	Item_Purchased	Total_Orders
1	1	Accessories	Jewelry	171
2	2	Accessories	Sunglasses	161
3	3	Accessories	Belt	161
4	1	Clothing	Blouse	171
5	2	Clothing	Pants	171
6	3	Clothing	Shirt	169
7	1	Footwear	Sandals	160
8	2	Footwear	Shoes	150
9	3	Footwear	Sneakers	145
10	1	Outerwear	Jacket	163
11	2	Outerwear	Coat	161

9. What is the revenue contribution of each age group?

```
WITH Age_Group AS (
    SELECT
        *,
        CASE
            WHEN Age < 18 THEN 'Under 18'
            WHEN Age BETWEEN 18 AND 25 THEN '18-25'
            WHEN Age BETWEEN 26 AND 35 THEN '26-35'
            WHEN Age BETWEEN 36 AND 50 THEN '36-50'
            ELSE '50+'
        END AS Age_Group_Category
    FROM customer_shopping_behavior
)

SELECT
    Age_Group_Category AS Age_Group,
    SUM(Purchase_Amount_USD) AS Total_Revenue
FROM Age_Group
GROUP BY Age_Group_Category
ORDER BY Total_Revenue DESC;
```

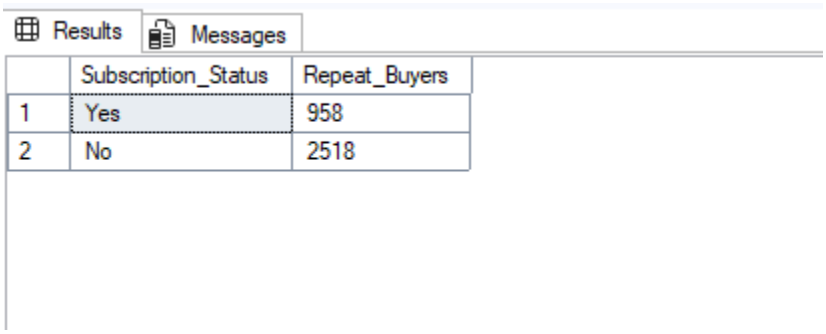


Results | Messages

	Age_Group	Total_Revenue
1	50+	88480
2	36-50	65629
3	26-35	44342
4	18-25	34630

10. Are customers who are repeat buyers (more than 5 previous purchases) also likely to subscribe?

```sql
SELECT Subscription_Status,
       COUNT(Customer_ID) AS Repeat_Buyers
FROM customer_shopping_behavior
WHERE Previous_Purchases > 5
GROUP BY Subscription_Status;
```



Results | Messages

	Subscription_Status	Repeat_Buyers
1	Yes	958
2	No	2518