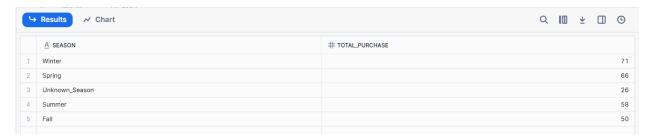
```
--- Find all records where size is missing and purchase_amount is >50

SELECT customer_id,
size,
purchase_amount,
item_purchased,
FROM shopping_trends
WHERE size IS NULL
AND purchase_amount > 50;
```



2.

```
9 --- List the total number of purchase grouped by Season, treating null values as unknown season
10 SELECT
11 COALESCE(season, 'Unknown_Season') AS season,
12 COUNT(item_purchased) AS total_purchase
13 FROM shopping_trends
14 GROUP BY (season, 'Unknown_Season');
```



```
15 ---- Count how many customers used each PaymentMethod, treating NULLs as 'Not Provided'
16 SELECT
17 COALESCE (PAYMENT_METHOD, 'Not Provided') AS payment_method,
18 COUNT (customer_id) as customer_count
19 FROM SHOPPING_TRENDS
20 GROUP BY (PAYMENT_METHOD, 'Not Provided')
```

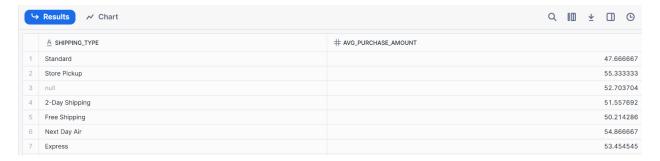


```
--- Show customers where promo code is NULL and review rating is below 3.0
21
22
    SELECT customer_id,
23
     promo_code_used,
24
     review_rating,
25
     item_purchased,
26
     FROM shopping_trends
27
      WHERE promo_code_used IS NULL
28
      AND review_rating < 3.0;
```



5.

```
29 ---- Group customers by shipping, type and return the average purchase_amount, treating missing values as 0
50 SELECT
51 shipping_type,
52 AVG(COALESCE(purchase_amount, 0)) AS avg_purchase_amount
53 FROM shopping_trends
54 GROUP BY shipping_type;
```



```
---- Display the number of purchases per location only for those with more than 5 purchases and no NULL payment method

SELECT

Cocation,

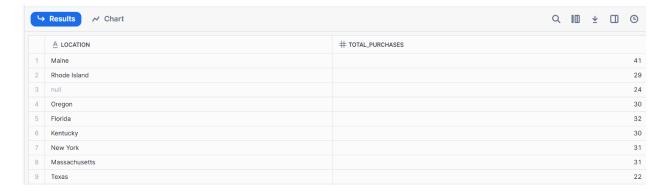
COUNT(*) AS total_purchases

FROM shopping_trends

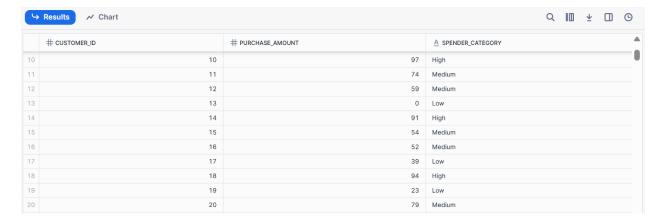
WHERE payment_method IS NOT NULL

GROUP BY location

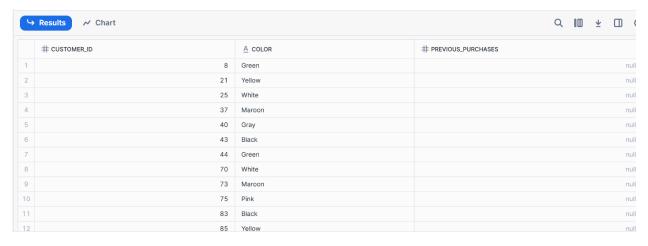
HAVING COUNT(*) > 5;
```



```
---- Create a column 'spender category' that classifies customers using CASE: 'High' if amount
43
      SELECT
44
45
      customer_id,
      COALESCE(purchase_amount, 0) AS purchase_amount,
46
47
      CASE
48
      WHEN purchase_amount > 80 THEN 'High'
      WHEN purchase_amount BETWEEN 50 AND 80 THEN 'Medium'
49
50
      ELSE 'Low'
      END AS spender_category
51
52
      FROM shopping_trends;
```



```
53
      ---- Find customers who have no previous purchases value but whose color is not null
      SELECT
54
55
      customer_id,
56
      color,
      previous_purchases
57
58
      FROM shopping_trends
59
      WHERE previous_purchases IS NULL
      AND color IS NOT NULL;
60
```





10.

```
---- Display a list of all category values with the number of times each was purchased, excluding rows where category is null
SELECT
category,
COUNT(*) AS total_purchase
FROM shopping_trends
WHERE category IS NOT NULL
GROUP BY category
ORDER BY total_purchase DESC;
```



```
75
      ---- Return the top 5 locations with the highest total purchase_amount, replacing NULL in amount with 0
76
77
      location,
      {\tt SUM(COALESCE(purchase\_amount, 0))} \  \  {\tt AS} \  \  {\tt total\_purchase\_amount}
78
79
      FROM shopping_trends
80
      GROUP BY location
81
      ORDER BY total_purchase_amount DESC
      LIMIT 5;
Q III 👱 🗆 😉
   A LOCATION
                                                          # TOTAL_PURCHASE_AMOUNT
1 Maine
                                                                                                                     2294
2 Florida
                                                                                                                     1980
```

1798

12.

5 Kentucky

```
--- Group customers by gender and size and count how many entries has a null color

SELECT

GENDER,

SIZE,

COUNT (*) AS null_color_count

FROM shopping_trends

WHERE color IS NULL

GROUP BY gender,size;
```



```
91 --- Identify all items purchased where more than 3 purchases had null shipping type
92 SELECT
93 ITEM_PURCHASED,
94 COUNT(*) AS null_shipping_count
95 FROM shopping_trends
96 WHERE shipping_type IS NULL
97 GROUP BY item_purchased
98 HAVING COUNT(*) > 3;
```



```
99 ---- Show a count of how many customers per payment Method have null review rating
100 SELECT
101 payment_method,
102 COUNT(*) AS null_review_count
103 FROM shopping_trends
104 WHERE review_rating IS NULL
105 GROUP BY payment_method;
```



```
---Group by category and return review_rating, replacing NULL with 0 and filter any where average is greater than 3.5

SELECT
category,
AVG(COALESCE(review_rating, 0)) AS avg_review_rating

FROM shopping_trends
GROUP BY category
HAVING avg_review_rating > 3.5;
```



16.

```
--- List all colors that are missing (NULL) in at least 2 rows and the average Age of customers for those rows

SELECT

color,

avg (age) AS Average_age

FROM shopping_trends

WHERE color IS NULL

GROUP BY color

HAVING COUNT(*) >= 2;
```



```
--- Use CASE to create a column Delivery_Speed: 'fast' is shipping type is 'express' or 'next day air', 'slow' if standard 'other' for all else including null. Then count how many customers fall into each category

SELECT

count (customer_id) AS customer_count,

case WHEN shipping_type IN ('express', 'next day air') THEN 'fast'

WHEN shipping_type = 'standard' THEN 'slow'

ELSE 'other'

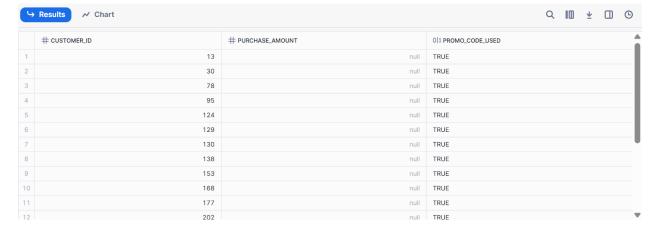
END AS Delivery_speed

FROM shopping_trends

GROUP BY Delivery_Speed;
```



```
--- Find customers whose purchase_amount is NULL and whose promo_code_used is 'yes'
130
131
       SELECT
132
       customer_id,
133
       purchase_amount,
       promo_code_used
134
135
       FROM shopping_trends
136
       WHERE purchase_amount IS NULL
137
       AND promo_code_used = 'yes';
```



```
--- Group by location and show maximum previous purchase, replacing nulls with 0, only where the average rating is above 4.0
SELECT
LOCATION,
MAX (previous_purchases) AS Maximum_Previous_Purchases,
AVG(COALESCE(Review_rating,0)) Average_Review_Rating
FROM shopping_trends
Group by LOCATION
HAVING Average_Review_Rating >4.0;
```



```
146 ----
147 SELECT
148 CUSTOMER_ID, SHIPPING_TYPE,
149 PURCHASE_AMOUNT, ITEM_PURCHASED
150 FROM shopping_trends
151 WHERE SHIPPING_TYPE is NULL
152 AND PURCHASE_AMOUNT BETWEEN 30 AND 70;
```

	# CUSTOMER_ID	A SHIPPING_TYPE	# PURCHASE_AMOUNT	A ITEM_PURCHASED
1	15	null	54	Jeans
2	105	null	43	Shirt
3	141	null	37	Shorts
4	196	null	66	Coat
5	213	null	36	Shirt
6	235	null	38	Sandals
7	293	null	35	null