

# **PRACTICAL 2.1**

# **ADVANCED SQL**

## **ON SNOWFLAKE**




# Question 1

```
--Question1
select customer_id,size,purchase_amount,item_purchased,
from shoping_trends
where size is null and purchase_amount > 50;
```

	# CUSTOMER_ID	A SIZE	# PURCHASE_AMOUNT	A ITEM_PURCHASED
1	11	null	74.0	Handbag
2	15	null	54.0	Jeans
3	22	null	88.0	Shirt
4	32	null	54.0	Blouse
5	62	null	57.0	Blouse
6	73	null	65.0	Sandals
7	91	null	54.0	Shoes

## QUESTION 2



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ACCOUNTADMIN COMPUTE\_WH (X-Small) Share

PRACTICAL2\_1.PUBLIC Settings

--Question2

select

count(customer\_id) as Total\_purchases,

ifnull(season, 'Unknown Season') as Season

from shoping\_trends

group by season;

Results Chart

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	⌵ TOTAL_PURCHASES	⌵ SEASON
1	80	Winter
2	73	Spring
3	27	Unknown Season
4	65	Summer
5	55	Fall

## QUESTION 3

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ACCOUNTADMIN COMPUTE\_WH (X-Small) Share

PRACTICAL2.1.PUBLIC Settings

17  
18  
19 --Question3  
20 select count(customer\_id) as Customer\_count,  
21 ifnull(payment\_method,'Not Provided') as Payment\_method  
22 from shoping\_trends  
group by 2;

Results Chart

	CUSTOMER_COUNT	PAYMENT_METHOD
1	51	PayPal
2	42	Debit Card
3	30	Not Provided
4	38	Bank Transfer
5	53	Venmo
6	44	Credit Card
7	42	Cash

## QUESTION 4

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ACCOUNTADMIN COMPUTE\_WH (X-Small) Share

PRACTICAL2.1.PUBLIC Settings

```
22      group by 2;
23
24  --Question4
25  select customer_id,promo_code_used,review_rating,item_purchased,
26         from shoping_trends
27  where promo_code_used is null and review_rating < 3.0;
```

Results Chart

	# CUSTOMER_ID	0! PROMO_CODE_USED	:	# REVIEW_RATING	ITEM_PURCHASED
1	21	null		2.5	Jeans
2	38	null		2.6	Jeans
3	61	null		2.5	Jeans
4	80	null		2.6	Sneakers
5	125	null		2.8	Sneakers
6	128	null		2.5	Shoes
7	180	null		2.5	Shorts
8	285	null		2.9	Blouse

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## QUESTION 5

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ACCOUNTADMIN COMPUTE\_WH (X-Small) Share

PRACTICAL2.1.PUBLIC Settings

```
28
29 --Question5
30 select shipping_type,
31 round(avg(ifnull(purchase_amount,0)),2) as Average_purchase_amount
32 from shoping_trends
33 group by shipping_type;
```

Results Chart

	SHIPPING_TYPE	AVERAGE_PURCHASE_AMOUNT
1	Standard	47.67
2	Store Pickup	55.33
3	null	52.70
4	Express	53.45
5	2-Day Shipping	51.56
6	Free Shipping	50.21
7	Next Day Air	54.87

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## QUESTION 6

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ACCOUNTADMIN

COMPUTE\_WH (X-Small)

Share

PRACTICAL2.1.PUBLIC

Settings

```
35 --Question6
36 select ifnull(location,'Unknown') as locaton,
37        count(customer_id) as Total_purchases,
38        from shoping_trends
39        where previous_purchases >5 and payment_method is not null
40        group by location;
```

Results

Chart

	LOCATON	# TOTAL_PURCHASES
1	Maine	30
2	Rhode Island	20
3	Unknown	22
4	Oregon	20
5	Florida	26
6	Kentucky	28
7	New York	24
8	Massachusetts	27
9	Texas	17

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## QUESTION 7

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ACCOUNTADMIN COMPUTE\_WH (X-Small) Share

PRACTICAL2.1.PUBLIC Settings

```
42 --Question 7
43 select customer_id,
44 ifnull(purchase_amount,0) as PURCHASE_AMOUNT,
45 case
46 when purchase_amount >80 then 'High'
47 when purchase_amount between 50 and 80 then 'Medium'
48 ELSE 'Low'
49 end as Spender_Category
50 from shoping_trends;
```

Results Chart

	# CUSTOMER_ID	# PURCHASE_AMOUNT	SPENDER_CATEGORY
1	1	20.0	Low
2	2	21.0	Low
3	3	27.0	Low
4	4	45.0	Low
5	5	80.0	Medium
6	6	82.0	High
7	7	50.0	Medium
8	8	29.0	Low
9	9	100.0	High



## QUESTION 8

Practical2.1

ACCOUNTADMIN COMPUTE\_WH (X-Small) Share

```
50 from shoping_trends;
51
52 --Question8
53 select customer_id,color,previous_purchases,
54        from shoping_trends
55        where previous_purchases is null and color is not null;
```

Results Chart

	# CUSTOMER_ID	A COLOR	# PREVIOUS_PURCHASES
1	8	Green	null
2	21	Yellow	null
3	25	White	null
4	37	Maroon	null
5	40	Gray	null
6	43	Black	null
7	44	Green	null
8	70	White	null
9	73	Maroon	null
10	75	Pink	null
11	83	Black	null
12	95	Yellow	null

## QUESTION 9

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ACCOUNTADMIN COMPUTE\_WH (X-Small) Share

PRACTICAL2.1.PUBLIC Settings

```
56
57 --Question9
58 select ifnull(frequency_of_purchases,'Unknown') FREQUENCY_OF_PURCHASES,
59 sum(purchase_amount) as Total_purchase_amount,
60 from shoping_trends
61 GROUP BY FREQUENCY_OF_PURCHASES;
```

Results Chart

	FREQUENCY_OF_PURCHASES	# TOTAL_PURCHASE_AMOUNT
1	Every 3 Months	1,749.0
2	Weekly	2,184.0
3	Bi-Weekly	2,099.0
4	Monthly	1,780.0
5	Annually	1,765.0
6	Unknown	1,518.0
7	Quarterly	2,541.0
8	Fortnightly	2,033.0

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## QUESTION 10

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ACCOUNTADMIN

COMPUTE\_WH (X-Small)

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PRACTICAL2.1.PUBLIC

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--Question 10

64

select CATEGORY,

65

count(customer\_id) as Total\_purchases,

66

from shoping\_trends

67

where category is not null

68

group by category;

Results

Chart

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	⚙ CATEGORY	# TOTAL_PURCHASES
1	Footwear	70
2	Outerwear	60
3	Clothing	59
4	Accessories	78

## QUESTION 11

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ACCOUNTADMIN COMPUTE\_WH (X-Small) Share

PRACTICAL2.1.PUBLIC Settings

```
67 where category is not null
68 group by category;
69
70 --Question11
71 select location,
72 sum(ifnull(purchase_amount,0)) as Total_purchase_amount
73 from shoping_trends
74 group by location
75 order by Total_purchase_amount desc
76 limit 5;
```

Results Chart

	LOCATION	TOTAL_PURCHASE_AMOUNT
1	Maine	2294.0
2	Florida	1980.0
3	Massachusetts	1899.0
4	Rhode Island	1876.0
5	Kentucky	1798.0

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## QUESTION 12

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ACCOUNTADMIN COMPUTE\_WH (X-Small) Share

PRACTICAL2.1.PUBLIC Settings

```
74 group by location
75 order by Total_purchase_amount desc
76 limit 5;
77
78 --Question12
79 select gender, size,
80        count(customer_id) as Null_color_count
81 from shopping_trends
82 where color is null
83 group by gender, size;
```

Results Chart

	GENDER	SIZE	# NULL_COLOR_COUNT
1	Male	M	7
2	Male	null	6
3	Male	S	5
4	Male	XL	5
5	Male	L	6

## QUESTION 13

Practical2.1

ACCOUNTADMIN COMPUTE\_WH (X-Small) Share

```
82 where color is null
83 group by gender, size;
84
85 --Question13
86 select item_purchased,
87 count(customer_id) Null_shipping_type_count
88 from shopping_trends
89 where shipping_type is null and previous_purchases > 3
90 group by item_purchased;
91
```

Results Chart

	ITEM_PURCHASED	NULL_SHIPPING_TYPE_COUNT
1	null	3
2	Jeans	1
3	Blouse	3
4	Shoes	4
5	Shirt	4
6	Shorts	3
7	Sandals	2
8	Handbag	1
9	Coat	1

## QUESTION 14

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ACCOUNTADMIN COMPUTE\_WH (X-Small) Share

PRACTICAL2.1.PUBLIC Settings

```
88 from shoping_trends
89 where shipping_type is null and previous_purchases > 3
90 group by item_purchased;
91
92 --Question14
93 select payment_method,
94        count(customer_id) as Missing_review_rating_count
95 from shoping_trends
96 where review_rating is null
97 group by payment_method;
```

Results Chart

	PAYMENT_METHOD	MISSING_REVIEW_RATING_COUNT
1	Credit Card	8
2	Cash	4
3	Bank Transfer	4
4	Debit Card	7
5	Venmo	9
6	PayPal	3
7	null	2

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## QUESTION 15

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ACCOUNTADMIN COMPUTE\_WH (X-Small) Share

PRACTICAL2.1.PUBLIC Settings

```
95 from shoping_trends
96 where review_rating is null
97 group by payment_method;
98
99 --Questio15
100 select ifnull(category,'Unknown') CATEGORY,|
101         avg(ifnull(review_rating,0)) as Average_review_rating
102 from shoping_trends
103 where review_rating > 3.5
104 group by category;
```

Results Chart

	CATEGORY	AVERAGE_REVIEW_RATING
1	Footwear	4.3
2	Outerwear	4.3
3	Unknown	4.2
4	Accessories	4.2
5	Clothing	4.2

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## QUESTION 16

The screenshot shows a SQL IDE interface with a dark theme. The top bar includes a snowflake logo, a tab labeled 'Practical2.1', and buttons for '+', 'ACCOUNTADMIN', 'COMPUTE\_WH (X-Small)', 'Share', and a play button. The main editor area displays a SQL query with line numbers 102 to 111. The query is as follows:

```
102 from shoping_trends
103 where review_rating > 3.5
104 group by category;
105
106 --Question 16
107 select color,
108        avg(age) as average_age
109 from shoping_trends
110 where color is null
111 group by color;
```

Below the editor, the 'Results' tab is active, showing a table with two columns: 'COLOR' and 'AVERAGE\_AGE'. The table contains one row with the values 'null' and '48'.

COLOR	AVERAGE_AGE
1 null	48

The bottom of the interface features a sidebar with various icons and a 'KT' button.

## QUESTION 17

The screenshot shows the Snowflake web interface with a SQL query executed. The query is as follows:

```
--Question17
select count(customer_id) as customer_count,
       case
         when shipping_type = 'Express' or shipping_type = 'Next Day Air' then 'Fast'
         when shipping_type = 'Standard' then 'Slow'
         else 'Other'
       end as Delivery_speed
from shopping_trends
group by all;
```

The results are displayed in a table with two columns: CUSTOMER\_COUNT and DELIVERY\_SPEED. The table contains three rows of data.

	CUSTOMER_COUNT	DELIVERY_SPEED
1	45	Slow
2	166	Other
3	89	Fast

Query Details:

- Query duration: 86ms
- Rows: 3
- Query ID: 01bc59ab-0001-052c-0...

The interface also shows a sidebar with navigation icons and a top bar with the Snowflake logo and account information.

## QUESTION 18

The screenshot shows a web browser window with the URL <https://app.snowflake.com/dyhnrav/eb39132/w4maxAZegN1S#query>. The browser tabs include 'Search', 'Practical2.1 - Snowflake', 'BrightLight Advanced SQL P', and 'Kabza De Small Lawule'. The Snowflake interface shows a query editor with the following SQL code:

```
121 group by all;
122
123 --Question18
124 select customer_id, purchase_amount, promo_code_used,
125 from shoping_trends
126 where purchase_amount is null and promo_code_used = 'Yes';
```

Below the query editor, the 'Results' tab is active, displaying a table with 7 rows and 4 columns: # CUSTOMER\_ID, # PURCHASE\_AMOUNT, # PROMO\_CODE\_USED, and # PROMO\_CODE\_USED. The data is as follows:

	# CUSTOMER_ID	# PURCHASE_AMOUNT	# PROMO_CODE_USED	# PROMO_CODE_USED
1		13	null	TRUE
2		30	null	TRUE
3		78	null	TRUE
4		95	null	TRUE
5		124	null	TRUE
6		129	null	TRUE
7		130	null	TRUE

The bottom of the screen shows a Windows taskbar with the Start button, a search bar, and various application icons. The system clock indicates 22:08 on 2025/05/14.

## QUESTION 19

The screenshot displays the Snowflake web interface. The browser address bar shows the URL: `https://app.snowflake.com/dyhnrav/eb39132/w4maxAZegN1S#query`. The interface includes a sidebar with navigation icons and a main workspace. The workspace shows a SQL query in the editor and its results in a table below.

**SQL Query:**

```
129 select location,
130       max(ifnull(previous_purchases,0)) as Max_pvious_purchases,
131       avg(ifnull(review_rating,0)) as Average_review_rating
132 from shoping_trends
133 where review_rating > 4.0
134 group by location;
```

**Query Results Table:**

	LOCATION	MAX_PVIOUS_PURCHASES	AVERAGE_REVIEW_RATING
1	Florida	48	4.7
2	Oregon	38	4.6
3	Kentucky	45	4.5
4	New York	47	4.5
5	Rhode Island	50	4.5
6	Massachusetts	47	4.6
7	null	49	4.5

The bottom of the image shows a Windows taskbar with the date 2025/05/14 and time 22:18.

## QUESTION 20

The screenshot shows the Snowflake web interface. The browser address bar displays the URL: <https://app.snowflake.com/dyhnrav/eb39132/w4maxAZegN1S#query>. The interface includes a sidebar with navigation icons, a top navigation bar with tabs for 'Practical2.1' and 'Exercise 2.1', and a main workspace. The workspace contains a SQL editor with the following query:

```
134 group by location;
135
136 --Question20
137 select customer_id, shipping_type, purchase_amount, item_purchased
138 from shopping_trends
139 where shipping_type is null and purchase_amount between 30 and 70;
```

Below the editor, the 'Results' tab is active, displaying a table with 7 rows and 5 columns. The columns are: # CUSTOMER\_ID, SHIPPING\_TYPE, PURCHASE\_AMOUNT, and ITEM\_PURCHASED. The data is as follows:

#	CUSTOMER_ID	SHIPPING_TYPE	PURCHASE_AMOUNT	ITEM_PURCHASED
1	15	null	54.0	Jeans
2	105	null	43.0	Shirt
3	141	null	37.0	Shorts
4	196	null	66.0	Coat
5	213	null	36.0	Shirt
6	235	null	38.0	Sandals
7	293	null	35.0	null

On the right side of the results table, the 'Query Details' panel shows the following information:

- Query duration: 60ms
- Rows: 7
- Query ID: 01bc5986-0001-0529-0...
- Show more button
- CUSTOMER\_ID column selected

The bottom of the image shows a Windows taskbar with the date and time: 22:57, 2025/05/14.