

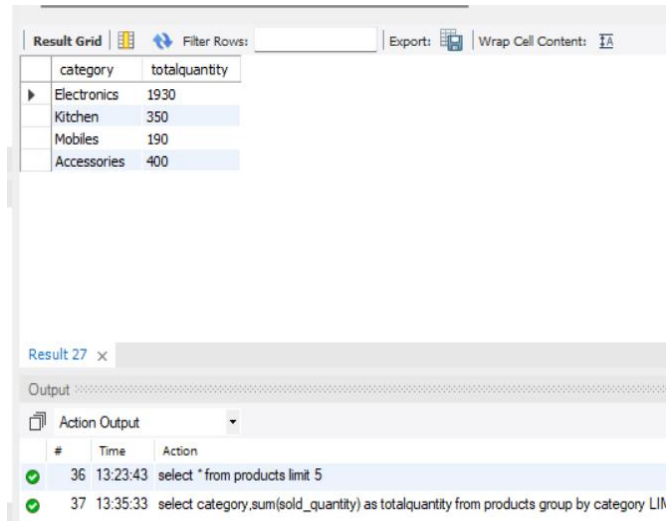
Questions on GROUP BY

1. Find the total sold_quantity of products for each category.

select category, sum(sold_quantity) as totalquantity

from products

group by category;



The screenshot shows a database interface with a 'Result Grid' and an 'Action Output' log. The 'Result Grid' displays the following data:

category	totalquantity
Electronics	1930
Kitchen	350
Mobiles	190
Accessories	400

The 'Action Output' log shows the following queries:

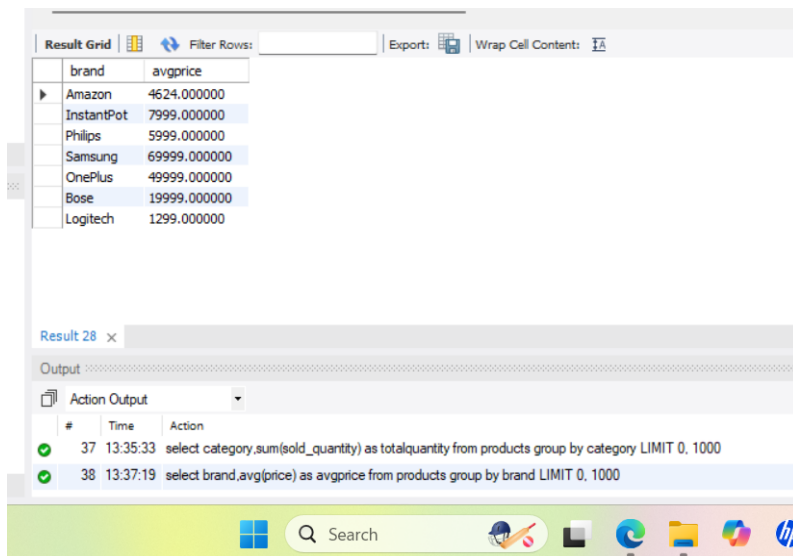
- 36 13:23:43 select * from products limit 5
- 37 13:35:33 select category,sum(sold_quantity) as totalquantity from products group by category LIMIT 1000

2. Find the average price of products for each brand.

select brand, avg(price) as avgprice

from products

group by brand;



The screenshot shows a database interface with a 'Result Grid' and an 'Action Output' log. The 'Result Grid' displays the following data:

brand	avgprice
Amazon	4624.000000
InstantPot	7999.000000
Philips	5999.000000
Samsung	69999.000000
OnePlus	49999.000000
Bose	19999.000000
Logitech	1299.000000

The 'Action Output' log shows the following queries:

- 37 13:35:33 select category,sum(sold_quantity) as totalquantity from products group by category LIMIT 0, 1000
- 38 13:37:19 select brand,avg(price) as avgprice from products group by brand LIMIT 0, 1000

3. Count how many products are available in each category.

33

34 • `select category, count(product_name) as product_count from products group by category;`

35

Result Grid	Filter Rows:	Export:	Wrap Cell Content:
category	product_count		
▶ Electronics	5		
Kitchen	2		
Mobiles	2		
Accessories	1		

4. Find the maximum rating of products for each category.

`select category, max(rating) as maxrating`

`from products`

`group by category;`

Result Grid	Filter Rows:	Export:	Wrap
category	maxrating		
▶ Electronics	4.8		
Kitchen	4.7		
Mobiles	4.8		
Accessories	4.3		

5. Find the minimum price of products for each brand.

`select brand, min(price) as minprice`

`from products`

`group by brand;`

34

33 • `select brand, min(price) as minprice from products group by brand;`

34

Result Grid	Filter Rows:	Export:	Wrap Cell Content:
brand	minprice		
▶ Amazon	999.00		
InstantPot	7999.00		
Philips	5999.00		
Samsung	69999.00		
OnePlus	49999.00		
Bose	19999.00		
Logitech	1299.00		

Questions on HAVING

1. Find all categories where the total sold_quantity is greater than 1000.

```
36
37 -- QUESTION ON HAVING
38 • select category from products group by category having sum(sold_quantity )>1000;
```

Result Grid		Filter Rows: <input type="text"/>	Export:	Wrap Cell Content:
	category			
	Electronics			

2. Find brands where the average price of products is more than 10000.

```
44
45
46 • select brand from products group by brand having avg(price) >10000;
47
48
```

Result Grid		Filter Rows: <input type="text"/>	Export:	Wrap Cell Content:
	brand			
	Samsung			
	OnePlus			
	Bose			

3. Find categories where the maximum rating is greater than 4.7.

```
46
47 • select category from products group by category having max(rating) > 4.7;
48
49
```

Result Grid		Filter Rows: <input type="text"/>	Export:	Wrap Cell Content:
	category			
	Electronics			
	Mobiles			

4. Find brands where the count of products is more than 2.

```
48  
49 • select brand from products group by brand having count(product_id)>2;  
50  
51  
52
```

Result Grid			Filter Rows: <input type="text"/>	Export:	Wrap Cell Content:
	brand				
▶	Amazon				

5. Find categories where the sum of stock is less than 200.

```
48  
49  
50 • select category from products group by category having sum(stock) < 200;  
51
```

Result Grid			Filter Rows: <input type="text"/>	Export:	Wrap Cell Content:
	category				
▶	Kitchen				
	Mobiles				

Questions on ORDER BY

1. List all products ordered by price ascending.

```
45 -- Questions on ORDER BY
46 • select * from products order by price asc;
47
```

[illegible]

2. Show all products ordered by sold_quantity descending.

```
57 • select * from products order by sold_quantity desc;
58
59
```

[illegible]

3. Display products ordered by rating descending and then price ascending.

58

```
59 • select * from products order by rating desc, price asc;
```

60

61

Result Grid								
Filter Rows:		Edit:		Export/Import:		Wrap Cell Content:		
product_id	product_name	category	price	rating	stock	brand	sold_quantity	
2	Kindle Paperwhite	Electronics	9999.00	4.8	80	Amazon	300	
6	Samsung Galaxy S23	Mobiles	69999.00	4.8	25	Samsung	100	
4	Instant Pot Duo	Kitchen	7999.00	4.7	30	InstantPot	200	
7	OnePlus 11	Mobiles	49999.00	4.7	20	OnePlus	90	
1	Echo Dot	Electronics	3499.00	4.6	120	Amazon	500	
5	Air Fryer	Kitchen	5999.00	4.6	40	Philips	150	
3	Fire TV Stick	Electronics	3999.00	4.5	50	Amazon	450	
8	Bose Headphones	Electronics	19999.00	4.5	15	Bose	80	
9	Logitech Mouse	Electronics	1299.00	4.4	200	Logitech	600	
10	Amazon Basics Bag	Accessories	999.00	4.3	300	Amazon	400	
NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	

4. List all products ordered by category ascending and sold_quantity descending.

67

```
68 • select * from products order by category asc,sold_quantity desc;
```

69









70

71

72

73

74

Result Grid		 Filter Rows:	<input type="text"/>	Edit:				Export/Import:			Wrap Cell Content:	
	product_id	product_name	category	price	rating	stock	brand	sold_quantity				
▶	10	Amazon Basics Bag	Accessories	999.00	4.3	300	Amazon	400				
	9	Logitech Mouse	Electronics	1299.00	4.4	200	Logitech	600				
	1	Echo Dot	Electronics	3499.00	4.6	120	Amazon	500				
	3	Fire TV Stick	Electronics	3999.00	4.5	50	Amazon	450				
	2	Kindle Paperwhite	Electronics	9999.00	4.8	80	Amazon	300				
	8	Bose Headphones	Electronics	19999.00	4.5	15	Bose	80				
	4	Instant Pot Duo	Kitchen	7999.00	4.7	30	InstantPot	200				
	5	Air Fryer	Kitchen	5999.00	4.6	40	Philips	150				
	6	Samsung Galaxy S23	Mobles	69999.00	4.8	25	Samsung	100				
	7	OnePlus 11	Mobles	49999.00	4.7	20	OnePlus	90				
✱	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL				

5. Show all products ordered by brand alphabetically.

```
76 • select * from products order by brand asc;
```

```
77
```

Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content: |

	product_id	product_name	category	price	rating	stock	brand	sold_quantity
▶	1	Echo Dot	Electronics	3499.00	4.6	120	Amazon	500
	2	Kindle Paperwhite	Electronics	9999.00	4.8	80	Amazon	300
	3	Fire TV Stick	Electronics	3999.00	4.5	50	Amazon	450
	10	Amazon Basics Bag	Accessories	999.00	4.3	300	Amazon	400
	8	Bose Headphones	Electronics	19999.00	4.5	15	Bose	80
	4	Instant Pot Duo	Kitchen	7999.00	4.7	30	InstantPot	200
	9	Logitech Mouse	Electronics	1299.00	4.4	200	Logitech	600
	7	OnePlus 11	Mobiles	49999.00	4.7	20	OnePlus	90
	5	Air Fryer	Kitchen	5999.00	4.6	40	Philips	150
	6	Samsung Galaxy S23	Mobiles	69999.00	4.8	25	Samsung	100
*	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL

products 45 x

Questions on LIMIT

1.Show the first 5 products in the table.

```
54
```

```
55 -- Questions on LIMIT
```

```
56 • select * from products limit 5;
```

```
57
```

Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content: |

	product_id	product_name	category	price	rating	stock	brand	sold_quantity
▶	1	Echo Dot	Electronics	3499.00	4.6	120	Amazon	500
	2	Kindle Paperwhite	Electronics	9999.00	4.8	80	Amazon	300
	3	Fire TV Stick	Electronics	3999.00	4.5	50	Amazon	450
	4	Instant Pot Duo	Kitchen	7999.00	4.7	30	InstantPot	200
	5	Air Fryer	Kitchen	5999.00	4.6	40	Philips	150
*	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL

products 10 x

Output

Action Output

#	Time	Action
✓ 15	15:05:36	select * from products order by price desc limit 3
✓ 16	15:06:54	select * from products limit 5

Windows Search | Taskbar icons: Edge, File Explorer, Teams, HP

2. Show the top 3 highest-priced products.

58

59 • `select * from products order by price desc limit 3;`

60

Result Grid

Filter Rows:

Edit:

Export/Import:

Wrap Cell Content:

	product_id	product_name	category	price	rating	stock	brand	sold_quantity
	6	Samsung Galaxy S23	Mobiles	69999.00	4.8	25	Samsung	100
	7	OnePlus 11	Mobiles	49999.00	4.7	20	OnePlus	90
	8	Bose Headphones	Electronics	19999.00	4.5	15	Bose	80
*	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL

3. Show the first 5 products when ordered by rating descending.

59

60 • `select * from products order by rating desc limit 5;`

61

Result Grid

Filter Rows:

Edit:

Export/Import:

Wrap Cell Content:

Fetch rows:

	product_id	product_name	category	price	rating	stock	brand	sold_quantity
	2	Kindle Paperwhite	Electronics	9999.00	4.8	80	Amazon	300
	6	Samsung Galaxy S23	Mobiles	69999.00	4.8	25	Samsung	100
	4	Instant Pot Duo	Kitchen	7999.00	4.7	30	InstantPot	200
	7	OnePlus 11	Mobiles	49999.00	4.7	20	OnePlus	90
	1	Echo Dot	Electronics	3499.00	4.6	120	Amazon	500
*	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL

products 12 x

Apply

Output

Action Output

Time Action

Message

4. Show 2 products after skipping the first 5 rows.

```
61
62 • select * from products limit 2 offset 5;
63
```

Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap

	product_id	product_name	category	price	rating	stock	brand	sold_quantity
▶	6	Samsung Galaxy S23	Mobiles	69999.00	4.8	25	Samsung	100
	7	OnePlus 11	Mobiles	49999.00	4.7	20	OnePlus	90
*	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL

5. Display the top 10 products with highest sold_quantity.

```
63
64 • select * from products order by sold_quantity desc limit 10;
65
66
67
68
```

Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content: | Fetch rows: |

	product_id	product_name	category	price	rating	stock	brand	sold_quantity
▶	9	Logitech Mouse	Electronics	1299.00	4.4	200	Logitech	600
	1	Echo Dot	Electronics	3499.00	4.6	120	Amazon	500
	3	Fire TV Stick	Electronics	3999.00	4.5	50	Amazon	450
	10	Amazon Basics Bag	Accessories	999.00	4.3	300	Amazon	400
	2	Kindle Paperwhite	Electronics	9999.00	4.8	80	Amazon	300
	4	Instant Pot Duo	Kitchen	7999.00	4.7	30	InstantPot	200
	5	Air Fryer	Kitchen	5999.00	4.6	40	Philips	150
	6	Samsung Galaxy S23	Mobiles	69999.00	4.8	25	Samsung	100
	7	OnePlus 11	Mobiles	49999.00	4.7	20	OnePlus	90
	8	Bose Headphones	Electronics	19999.00	4.5	15	Bose	80
*	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL

products 15 x Apply Re

Output

Questions on ASC / DESC

1. Show all products sorted by price ascending.

```
60      -- Questions on ASC / DESC
61      • select * from products order by price asc;
62
63
```

[illegible]

2. Show all products sorted by rating descending.

```
65
66 • select * from products order by rating desc;
67
68
69
70
```

[illegible]

3. Display products sorted by sold_quantity descending, then price ascending.

68

69 • `select * from products order by sold_quantity desc,price asc;`

70

product_id	product_name	category	price	rating	stock	brand	sold_quantity
9	Logitech Mouse	Electronics	1299.00	4.4	200	Logitech	600
1	Echo Dot	Electronics	3499.00	4.6	120	Amazon	500
3	Fire TV Stick	Electronics	3999.00	4.5	50	Amazon	450
10	Amazon Basics Bag	Accessories	999.00	4.3	300	Amazon	400
2	Kindle Paperwhite	Electronics	9999.00	4.8	80	Amazon	300
4	Instant Pot Duo	Kitchen	7999.00	4.7	30	InstantPot	200
5	Air Fryer	Kitchen	5999.00	4.6	40	Philips	150
6	Samsung Galaxy S23	Mobiles	69999.00	4.8	25	Samsung	100
7	OnePlus 11	Mobiles	49999.00	4.7	20	OnePlus	90
8	Bose Headphones	Electronics	19999.00	4.5	15	Bose	80
NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL

products 4 ×

Output

4. List products sorted by category ascending, then sold_quantity descending.

70

71 • `select * from products order by category asc,sold_quantity desc;`

72

product_id	product_name	category	price	rating	stock	brand	sold_quantity
10	Amazon Basics Bag	Accessories	999.00	4.3	300	Amazon	400
9	Logitech Mouse	Electronics	1299.00	4.4	200	Logitech	600
1	Echo Dot	Electronics	3499.00	4.6	120	Amazon	500
3	Fire TV Stick	Electronics	3999.00	4.5	50	Amazon	450
2	Kindle Paperwhite	Electronics	9999.00	4.8	80	Amazon	300
8	Bose Headphones	Electronics	19999.00	4.5	15	Bose	80
4	Instant Pot Duo	Kitchen	7999.00	4.7	30	InstantPot	200
5	Air Fryer	Kitchen	5999.00	4.6	40	Philips	150
6	Samsung Galaxy S23	Mobiles	69999.00	4.8	25	Samsung	100
7	OnePlus 11	Mobiles	49999.00	4.7	20	OnePlus	90
NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL

products 5 ×

Output








Action Output

#	Time	Action
9	14:51:36	select * from products order by sold_quantity desc,price asc LIMIT 0, 1000
10	14:54:32	select * from products order by category asc,sold_quantity desc LIMIT 0, 1000

Windows Search

5. Show all products sorted by brand descending.

```
72
73 • select * from products order by brand desc;
74
```

Result Grid  Filter Rows: Edit:    Export/Import:   Wrap Cell Content: 

	product_id	product_name	category	price	rating	stock	brand	sold_quantity
▶	6	Samsung Galaxy S23	Mobiles	69999.00	4.8	25	Samsung	100
	5	Air Fryer	Kitchen	5999.00	4.6	40	Philips	150
	7	OnePlus 11	Mobiles	49999.00	4.7	20	OnePlus	90
	9	Logitech Mouse	Electronics	1299.00	4.4	200	Logitech	600
	4	Instant Pot Duo	Kitchen	7999.00	4.7	30	InstantPot	200
	8	Bose Headphones	Electronics	19999.00	4.5	15	Bose	80
	1	Echo Dot	Electronics	3499.00	4.6	120	Amazon	500
	2	Kindle Paperwhite	Electronics	9999.00	4.8	80	Amazon	300
	3	Fire TV Stick	Electronics	3999.00	4.5	50	Amazon	450
	10	Amazon Basics Bag	Accessories	999.00	4.3	300	Amazon	400
*	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL

products 6 ×

Output