

Challenge-3

CUSTOMER INSIGHTS

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TABLES

baskets

order_id	product_id
1	1
1	2
1	5
2	4
3	3
4	2
4	1
5	3
5	5
6	4
6	3
6	1
7	2
7	1
8	3
8	3

products

product_id	category	price
1	food	5.99
2	sports	12.49
3	vitamins	6.99
4	food	0.89
5	vitamins	15.99

country

country_id	country_name	head_office
1	UK	London
2	USA	New York
3	China	Beijing

customers

customer_id	first_shop	age	rewards	can_email
1	2022-03-20	23	yes	no
2	2022-03-25	26	no	no
3	2022-04-06	32	no	no
4	2022-04-13	25	yes	yes
5	2022-04-22	49	yes	yes
6	2022-06-18	28	yes	no
7	2022-06-30	36	no	no
8	2022-07-04	37	yes	yes

orders

order_id	customer_id	date_shop	sales_channel	country_id
1	1	2023-01-16	retail	1
2	4	2023-01-20	retail	1
3	2	2023-01-25	retail	2
4	3	2023-01-25	online	1
5	1	2023-01-28	retail	3
6	5	2023-02-02	online	1
7	6	2023-02-05	retail	1
8	3	2023-02-11	online	3



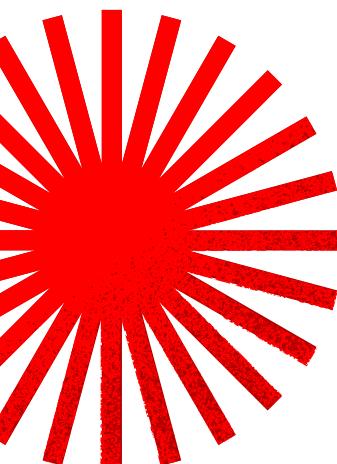
QUESTION-1 —————

What are the names of all the countries in the country table?

Query SQL •

```
1 SELECT country_name FROM country;
```

country_name
UK
USA
China



QUESTION-2

What is the total number of customers in the customers table?

Query SQL •

```
1 SELECT COUNT(*) as total_customers FROM customers;
```

total_customers
8



QUESTION-3

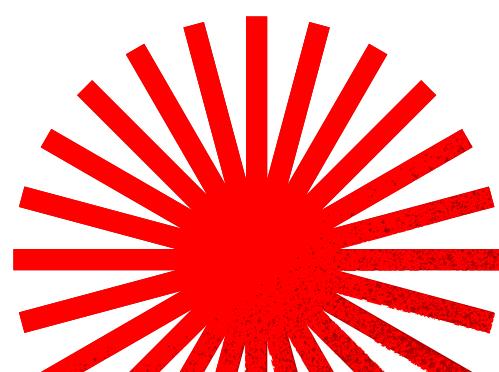
What is the average age of customers who can receive marketing emails (can_email is set to 'yes')?

Query SQL ●

```
1 SELECT AVG(age) as average_age FROM customers WHERE can_email = 'yes';
```

average_age

37.0000



QUESTION-4

How many orders were made by customers aged 30 or older?

Query SQL ●

```
1 SELECT COUNT(*) as order_count FROM orders o  
2 JOIN customers c ON o.customer_id = c.customer_id  
3 WHERE c.age >= 30;
```

order_count

3



QUESTION-5

What is the total revenue generated by each product category?

Query SQL •

```
1 SELECT p.category, SUM(p.price) as total_revenue  
2 FROM products p  
3 JOIN baskets b ON p.product_id = b.product_id  
4 GROUP BY p.category;
```

category	total_revenue
food	25.74
sports	37.47
vitamins	66.93

QUESTION-6

What is the average price of products in the 'food' category?

Query SQL •

```
1 SELECT AVG(price) as average_price FROM products WHERE category = 'food';
```

average_price
3.440000

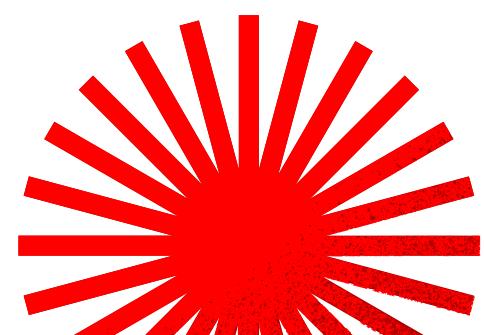
QUESTION-7

How many orders were made in each sales channel (sales_channel column) in the orders table?

Query SQL •

```
1 SELECT sales_channel, COUNT(*) as order_count FROM orders GROUP BY sales_channel;
```

sales_channel	order_count
online	3
retail	5



QUESTION-8

What is the date of the latest order made by a customer who can receive marketing emails?

Query SQL ●

```
1 SELECT MAX(o.date_shop) as latest_order_date  
2 FROM orders o  
3 JOIN customers c ON o.customer_id = c.customer_id  
4 WHERE c.can_email = 'yes';
```

latest_order_date

2023-02-02



QUESTION-9

What is the name of the country with the highest number of orders?

Query SQL •

```
1 SELECT c.country_name, COUNT(o.order_id) as order_count
2 FROM orders o
3 JOIN country c ON o.country_id = c.country_id
4 GROUP BY c.country_name
5 ORDER BY order_count DESC
6 LIMIT 1;
```

country_name	order_count
UK	5

QUESTION-10

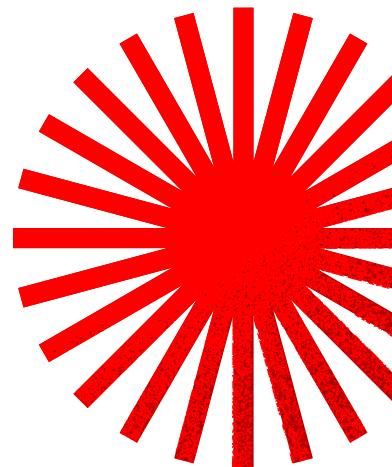
What is the average age of customers who made orders in the 'vitamins' product category?

Query SQL ●

```
1 SELECT AVG(c.age) as average_age
2 FROM customers c
3 JOIN orders o ON c.customer_id = o.customer_id
4 JOIN baskets b ON o.order_id = b.order_id
5 JOIN products p ON b.product_id = p.product_id
6 WHERE p.category = 'vitamins';
```

average_age

29.7143



**THANK
YOU**