

# CHALLENGE 3

## CUSTOMER INSIGHTS ANALYSIS

SQL CASE STUDY



Created  
By

**NITISH\_KUMAR**

# MY ROLE

I am going to act as a Customer Insights Analyst for 'The General Store' to find out crucial information about your customers to provide to your marketing team

**NITISH\_KUMAR**

# HERE ARE THE TABLES YOU WILL BE USING

## 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

## 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

## 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

# 1. WHAT ARE THE NAMES OF ALL THE COUNTRIES IN THE COUNTRY TABLE?

```
3 SELECT country_name  
4 FROM country;
```

# OUTPUT

country_name
UK
USA
China

**NITISH\_KUMAR**

## 2. WHAT IS THE TOTAL NUMBER OF CUSTOMERS IN THE CUSTOMERS TABLE?

```
8 SELECT COUNT(customer_id) AS TOTAL  
9 FROM customers;
```

# OUTPUT

Query #2	
Execution time: 1ms	
TOTAL	
	8

NITISH\_KUMAR

### 3. WHAT IS THE AVERAGE AGE OF CUSTOMERS WHO CAN RECEIVE MARKETING EMAILS (CAN\_EMAIL IS SET TO 'YES')?

```
--  
13 SELECT CEIL(AVG(age)) AS average_age  
14 FROM customers  
15 WHERE can_email = "yes";  
16
```

# OUTPUT

Query #3	Execution time: 0ms
<b>average_age</b>	
	37

**NITISH\_KUMAR**

## 4. HOW MANY ORDERS WERE MADE BY CUSTOMERS AGED 30 OR OLDER?

```
18  
19 SELECT C.age,COUNT(o.order_id) AS total  
20 FROM customers AS C  
21 JOIN orders AS o ON C.customer_id = o.customer_id  
22 WHERE C.age >= 30  
23 GROUP BY C.age ;
```

# OUTPUT

Query #4    Execution time: 0ms

age	total
32	2
49	1

**NITISH\_KUMAR**

## 5. WHAT IS THE TOTAL REVENUE GENERATED BY EACH PRODUCT CATEGORY?

```
27  
28 SELECT category,ROUND(SUM(price)) AS total_revenue  
29 FROM products  
30 JOIN baskets USING(product_id)  
31 GROUP BY product_id;
```

# OUTPUT

Query #5    Execution time: 0ms

category	total_revenue
food	24
sports	37
vitamins	35
food	2
vitamins	32

NITISH\_KUMAR

## 6. WHAT IS THE AVERAGE PRICE OF PRODUCTS IN THE 'FOOD' CATEGORY?

```
34  
35 SELECT ROUND(AVG(price),2) AS average_price  
36 FROM products  
37 WHERE category = "food";  
38
```

# OUTPUT

Query #6    Execution time: 1ms

average\_price

3.44

NITISH\_KUMAR

## 7. HOW MANY ORDERS WERE MADE IN EACH SALES CHANNEL (SALES\_CHANNEL COLUMN) IN THE ORDERS TABLE?

```
41 SELECT sales_channel, COUNT(order_id) AS TOTAL  
42 FROM orders  
43 GROUP BY sales_channel;  
44
```

# OUTPUT

Query #7    Execution time: 0ms

sales_channel	TOTAL
online	3
retail	5

**NITISH\_KUMAR**

## 8.WHAT IS THE DATE OF THE LATEST ORDER MADE BY A CUSTOMER WHO CAN RECEIVE MARKETING EMAILS?

```
48 SELECT o.date_shop,c.can_email  
49 FROM orders AS o  
50 JOIN customers AS c USING(customer_id)  
51 WHERE c.can_email = "yes"  
52 ORDER BY o.date_shop DESC  
53 LIMIT 1;
```

# OUTPUT

Query #8    **Execution time: 0ms**

date_shop	can_email
2023-02-02	yes

**NITISH\_KUMAR**

## 9. WHAT IS THE NAME OF THE COUNTRY WITH THE HIGHEST NUMBER OF ORDERS?

```
58 SELECT C.country_name,COUNT(O.country_id) AS TOTAL  
59 FROM orders AS O  
60 JOIN country AS C USING(country_id)  
61 GROUP BY O.country_id  
62 ORDER BY TOTAL DESC  
63 LIMIT 1;
```

# OUTPUT

Query #9    Execution time: 0ms

country_name	TOTAL
UK	5

**NITISH\_KUMAR**

## 10. WHAT IS THE AVERAGE AGE OF CUSTOMERS WHO MADE ORDERS IN THE 'VITAMINS' PRODUCT CATEGORY?

```
67 SELECT CEIL(AVG(c.age)) AS average_age,P.category  
68 FROM customers AS C  
69 JOIN orders AS O USING(customer_id)  
70 JOIN products AS P  
71 WHERE P.category = "vitamins";  
72
```

# OUTPUT

Query #10    Execution time: 0ms

average_age	category
30	vitamins

**NITISH\_KUMAR**



*Created  
By*

**NITISH\_KUMAR**