| create schema casestudy; | | |
| --- | --- | --- |
| use casestudy; | |  |
| CREATE TABLE sales ( | |  |
| customer\_id VARCHAR(1), | | |
| order\_date DATE, | |  |
| product\_id INTEGER | |  |
| ); |  |  |
|  |  |  |
| INSERT INTO sales ( | |  |
| customer\_id, order\_date, product\_id | | |
| ) |  |  |
| VALUES |  |  |
| ('A', '2021-01-01', '1'), | |  |
| ('A', '2021-01-01', '2'), | |  |
| ('A', '2021-01-07', '2'), | |  |
| ('A', '2021-01-10', '3'), | |  |
| ('A', '2021-01-11', '3'), | |  |
| ('A', '2021-01-11', '3'), | |  |
| ('B', '2021-01-01', '2'), | |  |
| ('B', '2021-01-02', '2'), | |  |
| ('B', '2021-01-04', '1'), | |  |
| ('B', '2021-01-11', '1'), | |  |
| ('B', '2021-01-16', '3'), | |  |
| ('B', '2021-02-01', '3'), | |  |
| ('C', '2021-01-01', '3'), | |  |
| ('C', '2021-01-01', '3'), | |  |
| ('C', '2021-01-07', '3'); | |  |
|  |  |  |
| CREATE TABLE menu ( | |  |
| product\_id INTEGER, | |  |
| product\_name VARCHAR(5), | | |
| price INTEGER | |  |
| ); |  |  |
|  |  |  |
| INSERT INTO menu (product\_id, product\_name, price) | | |
| VALUES |  |  |
| (1, 'sushi', 10), | |  |
| (2, 'curry', 15), | |  |
| (3, 'ramen', 12); | |  |
|  |  |  |
|  |  |  |
| CREATE TABLE members ( | | |
| customer\_id VARCHAR(1), | | |
| join\_date DATE | |  |
| ); |  |  |
|  |  |  |
| INSERT INTO members (customer\_id, join\_date) | | |
| VALUES |  |  |
| ('A', '2021-01-07'), | |  |
| ('B', '2021-01-09'); | |  |
|  |  |  |
|  |  |  |
| 1. What is the total amount each customer spent at the restaurant? |  |  |
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| 2. How many days has each customer visited the restaurant? |  |  |
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| 3. What was the first item from the menu purchased by each customer? |  |  |
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| 4. What is the most purchased item on the menu and how many times was it purchased by all customers? |  |  |

-- 1. What is the total amount each customer spent at the restaurant?

SELECT customer\_id,

CONCAT('$', sum(price)) AS total\_sales

FROM menu

INNER JOIN sales ON menu.product\_id = sales.product\_id

GROUP BY customer\_id

ORDER BY customer\_id;

-- 2. How many days has each customer visited the restaurant?

SELECT customer\_id,

count(DISTINCT order\_date) AS visit\_count

FROM sales

GROUP BY customer\_id

ORDER BY customer\_id;

-- 3. What was the first item from the menu purchased

-- by each customer?

WITH order\_info\_cte AS

(SELECT customer\_id,

order\_date,

product\_name,

DENSE\_RANK() OVER(PARTITION BY s.customer\_id

ORDER BY s.order\_date) AS rank\_num

FROM sales AS s

JOIN menu AS m ON s.product\_id = m.product\_id)

SELECT customer\_id,

product\_name

FROM order\_info\_cte

WHERE rank\_num = 1

GROUP BY customer\_id,

product\_name;

-- 4. What is the most purchased item on the menu and

-- how many times was it purchased by all customers?

SELECT product\_name AS most\_purchased\_item,

count(sales.product\_id) AS order\_count

FROM menu

INNER JOIN sales ON menu.product\_id = sales.product\_id

GROUP BY product\_name

ORDER BY order\_count DESC

LIMIT 1;