**DANNY CASE STUDY**

**QUESTION**

CREATE database dannys\_diner;

CREATE SCHEMA dannys\_diner;

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');

**SELECT \* FROM SALES;**

**SELECT \* FROM MENU;**

**SELECT \* FROM MEMBERS;**

**SOLUTION**

--Q1 What is the total amount each customer spent at the restaurant?

SELECT s."customer\_id", SUM(m."price") AS TOTAL\_PRICE

FROM SALES AS s

JOIN MENU AS m ON s."product\_id" = m."product\_id"

GROUP BY 1

ORDER BY 1;

--Q2 How many days has each customer visited the restaurant?

SELECT "customer\_id", COUNT(DISTINCT "order\_date") AS days\_visited

FROM sales

GROUP BY 1

ORDER BY 1;

--Q3 What was the first item from the menu purchased by each customer?

SELECT "customer\_id", min("order\_date") as first\_item\_purchased

from sales

GROUP BY 1

ORDER BY 1;

--Q4 What is the most purchased item on the menu and how many times was it purchased by all customers?

SELECT

s."customer\_id",

m."product\_name",

COUNT(s."product\_id") As time\_purchased

FROM SALES AS s

JOIN MENU AS m ON s."product\_id" = m."product\_id"

GROUP BY 1,2

ORDER BY 1,2;

--Q5 Which item was the most popular for each customer?

SELECT

s."customer\_id",

m."product\_name",

COUNT(s."product\_id") As time\_purchased

FROM SALES AS s

JOIN MENU AS m ON s."product\_id" = m."product\_id"

GROUP BY 1,2

ORDER BY 3 DESC;

--Q6 Which item was purchased first by the customer after they became a member?

SELECT \* FROM SALES;

SELECT \* FROM MENU;

SELECT \* FROM MEMBERS;

SELECT

s."customer\_id",

s."product\_id",

FROM SALES AS s

JOIN MEMBERS AS m ON s."customer\_id" = m."customer\_id"

where s."order\_date"< m."join\_date"

GROUP BY 1,2

ORDER BY 1,2;

--Q8 What is the total items and amount spent for each member before they became a member?

SELECT

s."customer\_id",

COUNT(s."product\_id") AS total\_items,

SUM(me."price") AS total\_amount

FROM SALES AS s

JOIN MEMBERS AS m ON s."customer\_id" = m."customer\_id"

JOIN MENU AS me ON s."product\_id" = me."product\_id"

WHERE s."order\_date" > m."join\_date"

GROUP BY s."customer\_id"

ORDER BY s."customer\_id";

--Q9 If each $1 spent equates to 10 points and sushi has a 2x points multiplier - how many points would each customer have?

--Q10 In the first week after a customer joins the program (including their join date) they earn 2x points on all items, not just sushi - how many points do customer A and B have at the end of January? CREATE database dannys\_diner;