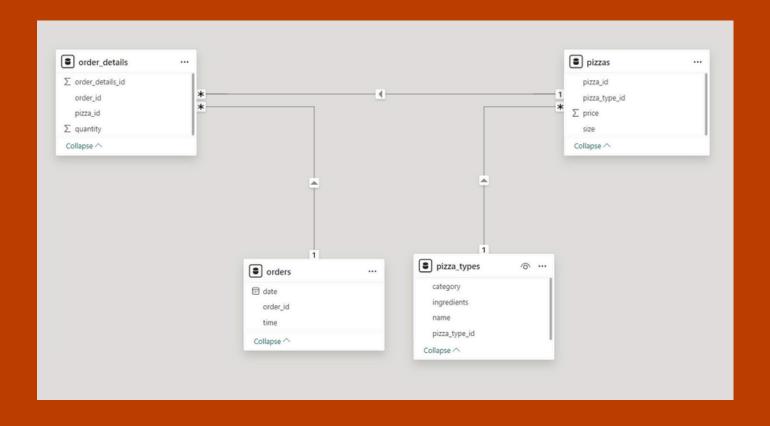


PRESENTED BY

VANSHIKA SACHDEVA

DATA MODELING



```
create database pizzahut;
 2
       create table orders (
       order_id int not null,
       order date date not null,
       order time time not null,
       primary key(order id) );
 7
 8
       create table order_details (
10
       order_details_id int not null,
       order id int not null,
11
       pizza_id text not null,
12
13
       quantity int not null,
14
       primary key(order_details_id) );
```

QUESTION 1.

- 1 -- Retrieve the total number of orders placed--
- select count(order_id) as total_orders from orders;



QUESTION 2.

```
-- Calculate the total revenue generated from pizza sales.--

SELECT

ROUND(SUM(order_details.quantity * pizzas.price),

2) AS total_sales

FROM

order_details

JOIN

pizzas ON pizzas.pizza_id = order_details.pizza_id
```



QUESTION 3.

```
-- Identify the highest-priced pizza.--

SELECT

pizza_types.name, pizzas.price

FROM

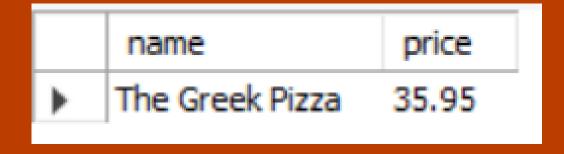
pizza_types

JOIN

pizzas ON pizza_types.pizza_type_id = pizzas.pizza_type_id

ORDER BY pizzas.price DESC

LIMIT 1;
```



QUESTION 4.

```
-- Identify the most common pizza size ordered.

SELECT

pizzas.size,

COUNT(order_details.order_details_id) AS order_count

FROM

pizzas

JOIN

order_details ON pizzas.pizza_id = order_details.pizza_id

GROUP BY pizzas.size

ORDER BY order_count DESC;
```

	size	order_count
•	L	18526
	M	15385
	S	14137
	XL	544
	XXL	28

QUESTION 5.

```
-- List the top 5 most ordered pizza types
-- along with their quantities.

SELECT
    pizza_types.name, SUM(order_details.quantity) AS quantity

FROM
    pizza_types
        JOIN
    pizzas ON pizza_types.pizza_type_id = pizzas.pizza_type_id
        JOIN
    order_details ON order_details.pizza_id = pizzas.pizza_id

GROUP BY pizza_types.name

ORDER BY quantity DESC

LIMIT 5;
```

	name	quantity
•	The Classic Deluxe Pizza	2453
	The Barbecue Chicken Pizza	2432
	The Hawaiian Pizza	2422
	The Pepperoni Pizza	2418
	The Thai Chicken Pizza	2371

QUESTION 6.

```
-- Join the necessary tables to find the
-- total quantity of each pizza category ordered.

SELECT
    pizza_types.category,
    SUM(order_details.quantity) AS quantity

FROM
    pizza_types
        JOIN
    pizzas ON pizza_types.pizza_type_id = pizzas.pizza_type_id
        JOIN
    order_details ON order_details.pizza_id = pizzas.pizza_id

GROUP BY pizza_types.category

ORDER BY quantity DESC;
```

	category	quantity
•	Classic	14888
	Supreme	11987
	Veggie	11649
	Chicken	11050

QUESTION 7.

```
-- Determine the distribution of orders by hour of the day.

SELECT

HOUR(order_time) AS hour, COUNT(order_id) AS order_count

FROM

orders

GROUP BY HOUR(order_time);
```

	hour	order_count
•	11	1231
	12	2520
	13	2455
	14	1472
	15	1468
	16	1920
	17	2336

QUESTION 8.

```
-- Join relevant tables to find the
-- category-wise distribution of pizzas.

SELECT
    category, COUNT(name)

FROM
    pizza_types

GROUP BY category;
```

	category	COUNT(name)
•	Chicken	6
	Classic	8
	Supreme	9
	Veggie	9

QUESTION 9.

```
-- Group the orders by date and
-- calculate the average number of pizzas ordered per day.

SELECT

ROUND(AVG(quantity), 0)

FROM

(SELECT

orders.order_date, SUM(order_details.quantity) AS quantity

FROM

orders

JOIN order_details ON orders.order_id = order_details.order_id

GROUP BY orders.order_date) AS order_quantity;
```

ROUND(AVG(quantity), 0)

>

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QUESTION 10.

	name	revenue
•	The Thai Chicken Pizza	43434.25
	The Barbecue Chicken Pizza	42768
	The California Chicken Pizza	41409.5

QUESTION 11.

```
-- Calculate the percentage contribution of
-- each pizza type to total revenue.
SELECT
   pizza types.category,
   round(SUM(order details.quantity * pizzas.price) / (select
   round(sum(order_details.quantity*pizzas.price), 2) as total_sales
   from
   order details
    Join
   pizzas on pizzas.pizza_id = order_details.pizza_id) *100,2) as revenue
FROM
   pizza_types
        JOIN
   pizzas ON pizza_types.pizza_type_id = pizzas.pizza_type_id
        JOIN
   order_details ON order_details.pizza_id = pizzas.pizza_id
GROUP BY pizza_types.category
ORDER BY revenue DESC;
```

	category	revenue
•	Classic	26.91
	Supreme	25.46
	Chicken	23.96
	Veggie	23.68

QUESTION 12.

```
-- Analyze the cumulative revenue generated over time.
select order_date,
sum(revenue) over(order by order_date) as cum_revenue
from
(select orders.order_date,
sum(order_details.quantity * pizzas.price) as revenue
from order_details join pizzas
on order_details.pizza_id = pizzas.pizza_id
join orders
on orders.order_id = order_details.order_id
group by orders.order_date) as sales;
```

	order_date	cum_revenue
•	2015-01-01	2713.8500000000004
	2015-01-02	5445.75
	2015-01-03	8108.15
	2015-01-04	9863.6
	2015-01-05	11929.55
	2015-01-06	14358.5
	2015-01-07	16560.7

QUESTION 13.

```
-- Determine the top 3 most ordered pizza types
-- based on revenue for each pizza category.
select name, revenue from
(select category, name, revenue,
rank() over(partition by category order by revenue desc) as rn
from
(select pizza_types.category, pizza_types.name,
sum((order_details.quantity) * (pizzas.price)) as revenue
from pizza_types join pizzas
on pizza_types.pizza_type_id = pizzas.pizza_type_id
join order details
on order_details.pizza_id = pizzas.pizza_id
group by pizza_types.category, pizza_types.name) as a) as b
where rn <= 3;
```

_		
	name	revenue
•	The Thai Chicken Pizza	43434.25
	The Barbecue Chicken Pizza	42768
	The California Chicken Pizza	41409.5
	The Classic Deluxe Pizza	38180.5
	The Hawaiian Pizza	32273.25
	The Pepperoni Pizza	30161.75
	The Spicy Italian Pizza	34831.25