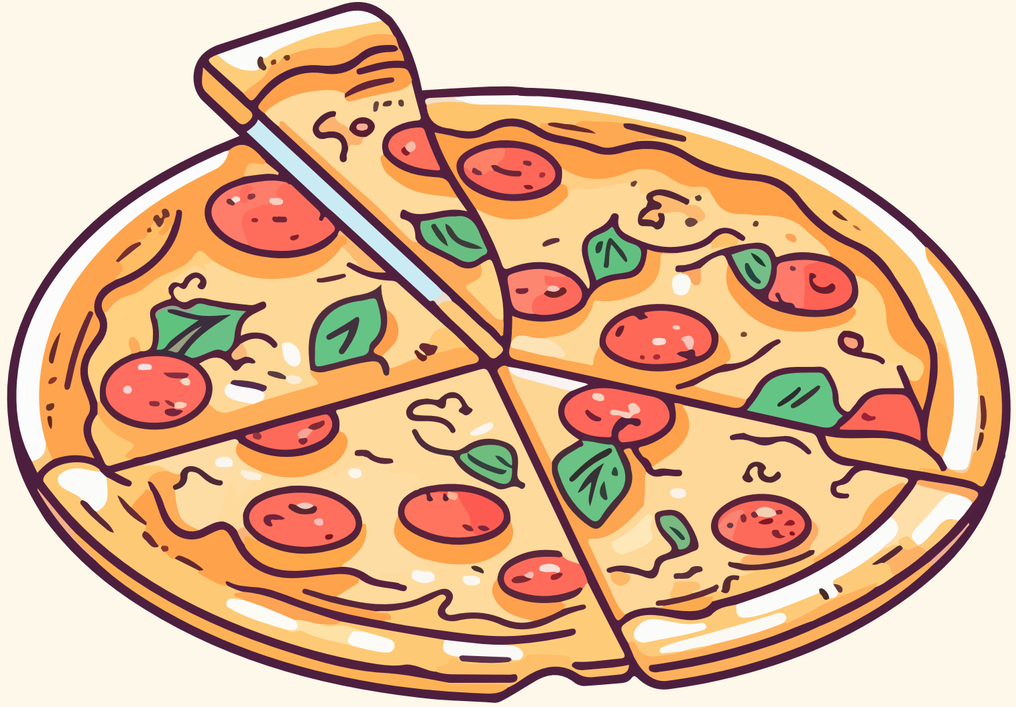
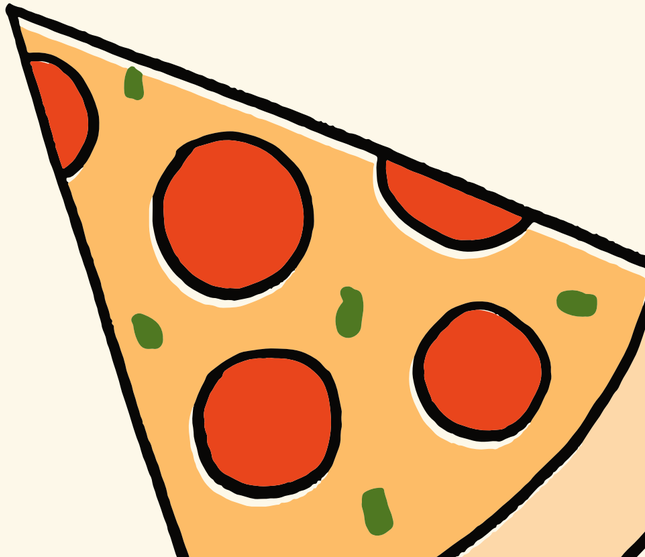
SQL PROJECT ON PIZZA SALES

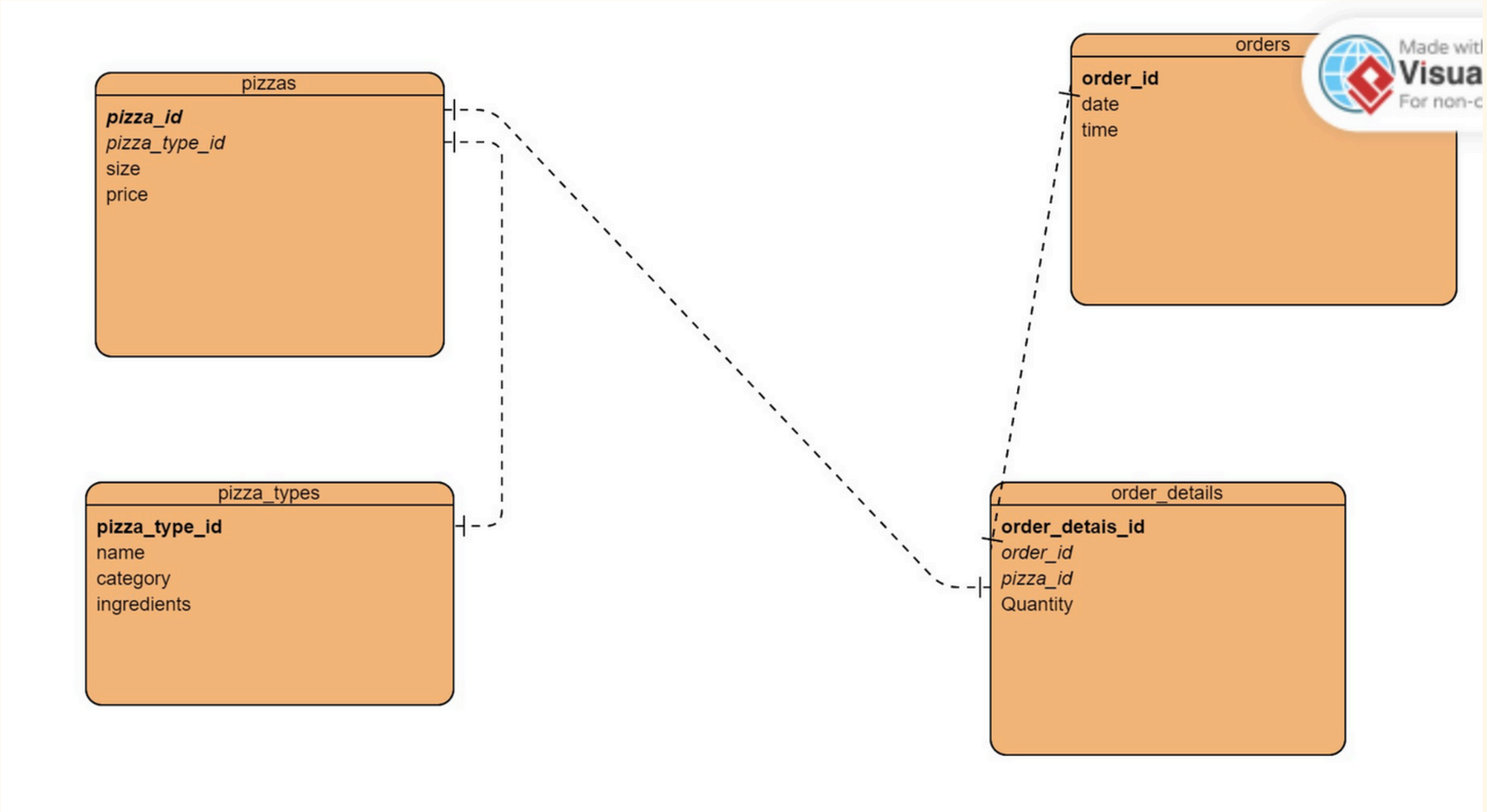




HELLO!

MY NAME IS HAMZA NAEEM, AND IN THIS PROJECT I UTILIZE THE SQL QUERIES TO SOLVE THE PIZZA SALES PROBLEMS.

ER DIAGRAM OF DATASET



CALCULATE THE TOTAL REVENUE GENERATED FROM PIZZA SALES.

```sql
SELECT
    ROUND(SUM(order_details.quantity*pizzas.price),2) AS Revenue
FROM
    order_details
JOIN
    pizzas
    ON
    order_details.pizza_id=pizzas.pizza_id;
```

Results | Mes

	Revenue
1	817860.05

RETRIEVE THE TOTAL NUMBER OF ORDERS PLACED.

```sql
SELECT
    COUNT(order_id) as total_orders
FROM
    orders;
```

Results | Message

	total_orders
1	21350

IDENTIFY THE HIGHEST-PRICED PIZZA.

```sql
SELECT
    pizza_types.name,pizzas.price
FROM
    pizza_types
JOIN
    pizzas ON pizza_types.pizza_type_id=pizzas.pizza_type_id
WHERE
    pizzas.price in (select max(cast(pizzas.price as float)) from pizzas);
```

Results | Messages

	name	price
1	The Greek Pizza	35.95

IDENTIFY THE MOST COMMON PIZZA SIZE ORDERED.

```sql
SELECT
    p.size,COUNT(o.order_details_id) as order_count
FROM
    order_details as o
JOIN
    pizzas as p ON o.pizza_id=p.pizza_id
GROUP BY
    p.size
ORDER BY order_count DESC;
```

	size	order_count
1	L	18526
2	M	15385
3	S	14137
4	XL	544
5	XXL	28

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

```sql
SELECT
    TOP 5
    p_t.name,
    sum(o.quantity) AS Q
FROM
    pizzas as p
JOIN
    order_details as o ON p.pizza_id=o.pizza_id
JOIN
    pizza_types as p_t ON p_t.pizza_type_id=p.pizza_type_id
GROUP BY p_t.name
ORDER BY Q DESC;
```

	name	Q
1	The Classic Deluxe Pizza	2453
2	The Barbecue Chicken Pizza	2432
3	The Hawaiian Pizza	2422
4	The Pepperoni Pizza	2418
5	The Thai Chicken Pizza	2371

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

```sql
SELECT
    p_t.category,
    sum(o_d.quantity) As total_quantity
FROM
    pizza_types as p_t
JOIN
    pizzas as p ON p.pizza_type_id=p_t.pizza_type_id
JOIN
    order_details as o_d ON o_d.pizza_id=p.pizza_id
GROUP BY
p_t.category
order by total_quantity DESC;
```

	category	total_quantity
1	Classic	14888
2	Supreme	11987
3	Veggie	11649
4	Chicken	11050

DETERMINE THE DISTRIBUTION OF ORDERS BY HOUR OF THE DAY.

```sql
SELECT
    DATEPART(HOUR,orders.time) AS CurrentHour,
    COUNT(order_id) AS order_Count
FROM
    orders
GROUP BY
    DATEPART(HOUR,orders.time)
ORDER BY
    order_Count desc;
```

	CurrentHour	order_Count
1	12	2520
2	13	2455
3	18	2399
4	17	2336
5	19	2009
6	16	1920
7	20	1642
8	14	1472
9	15	1468

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

```sql
SELECT
    pizza_types.category,
    count(pizza_types.name) as quantity
FROM pizza_types
GROUP by pizza_types.category
```

	category	quantity
1	Chicken	6
2	Classic	8
3	Supreme	9
4	Veggie	9

GROUP THE ORDERS BY DATE AND CALCULATE THE AVERAGE NUMBER OF PIZZAS ORDERED PER DAY.

```sql
SELECT round(avg(sum_of_orders),0) AS Avg_pizza_orders_per_day FROM
(SELECT
    orders.date,
    sum(order_details.quantity) AS sum_of_orders
FROM
    orders
join
    order_details ON orders.order_id=order_details.order_id
GROUP BY orders.date) AS order_quantity
```

	Avg_pizza_orders_per_day
1	138

DETERMINE THE TOP 3 MOST ORDERED PIZZA TYPES BASED ON REVENUE.

```sql
select
    top 3
    p_t.name,
    sum(p.price*o_d.quantity) as revenue
from
    pizzas as p
join
    order_details as o_d ON p.pizza_id=o_d.pizza_id
join
    pizza_types as p_t ON p.pizza_type_id=p_t.pizza_type_id
group by p_t.name
order by revenue desc;
```

	name	revenue
1	The Thai Chicken Pizza	43434.25
2	The Barbecue Chicken Pizza	42768
3	The California Chicken Pizza	41409.5

Calculate the percentage contribution of each pizza type to total revenue.

```sql
select
    p_t.category,
    round(sum(p.price*o_d.quantity)
    /
    (select sum(pizzas.price*order_details.quantity)
    from
    pizzas join order_details on pizzas.pizza_id=order_details.pizza_id)*100,2) as revenue
from
    pizzas as p
join
    order_details as o_d ON p.pizza_id=o_d.pizza_id
join
    pizza_types as p_t ON p.pizza_type_id=p_t.pizza_type_id
group by p_t.category
order by revenue desc;
```

	category	revenue
1	Classic	26.91
2	Supreme	25.46
3	Chicken	23.96
4	Veggie	23.68

Analyze the cumulative revenue generated over time.

```sql
select
    sales.date,
    sum(revenue) over(order by sales.date) as cum_revenue
from
(select
    o.date,
    sum(p.price*o_d.quantity) as revenue
from
    pizzas as p
join
    order_details as o_d ON p.pizza_id=o_d.pizza_id
join
    orders as o on o.order_id=o_d.order_id
group by o.date) as sales
```

	date	cum_revenue
1	2015-01-01 00:00:00.000	2713.85
2	2015-01-02 00:00:00.000	5445.75
3	2015-01-03 00:00:00.000	8108.15
4	2015-01-04 00:00:00.000	9863.6
5	2015-01-05 00:00:00.000	11929.55
6	2015-01-06 00:00:00.000	14358.5
7	2015-01-07 00:00:00.000	16560.7
8	2015-01-08 00:00:00.000	19399.05
9	2015-01-09 00:00:00.000	21526.4
10	2015-01-10 00:00:00.000	23990.35
11	2015-01-11 00:00:00.000	25862.65
12	2015-01-12 00:00:00.000	27781.7
13	2015-01-13 00:00:00.000	29831.3
14	2015-01-14 00:00:00.000	32358.7
15	2015-01-15 00:00:00.000	34343.5
16	2015-01-16 00:00:00.000	36937.65
17	2015-01-17 00:00:00.000	39001.75
18	2015-01-18 00:00:00.000	40978.6
19	2015-01-19 00:00:00.000	43365.75

Determine the top 3 most ordered pizza types based on revenue for each pizza category.

```sql
select
    name,
    revenue
from
(select
    category,
    name,
    a.revenue,
    rank() over(partition by category order by a.revenue) as rn
from
(select
    p_t.category,
    p_t.name,
    sum(p.price*o_d.quantity) as revenue
from
    pizzas as p
join
    pizza_types as p_t ON p.pizza_type_id=p_t.pizza_type_id
join
    order_details o_d ON p.pizza_id=o_d.pizza_id
group by p_t.category,p_t.name) as a) as b
where rn<=3
order by category desc;
```

	name	revenue
1	The Green Garden Pizza	13955.75
2	The Mediterranean Pizza	15360.5
3	The Spinach Pesto Pizza	15596
4	The Brie Carre Pizza	11588.4999999999
5	The Spinach Supreme Pizza	15277.75
6	The Calabrese Pizza	15934.25
7	The Pepperoni, Mushroom, and Peppers Pizza	18834.5
8	The Big Meat Pizza	22968
9	The Napolitana Pizza	24087
10	The Chicken Pesto Pizza	16701.75
11	The Chicken Alfredo Pizza	16900.25
12	The Southwest Chicken Pizza	34705.75

THANK YOU!

IF YOU ENJOYED THIS SLICE OF INFORMATION, FEEL FREE TO PASS IT AROUND— SHARING IS LIKE EXTRA CHEESE, ALWAYS A GOOD IDEA!