

PIZZA SALES SQL QUERIES

1. Retrieve the total number of orders placed.

```
SELECT count (order_id)
FROM Pizza_Orders
```

Results		Messages
(No column name)		
1	21350	

2. Calculate the total revenue generated from pizza sales.

```
SELECT round(sum(p.price*d.quantity),
0) AS [Total Sales]
FROM pizzAS p
JOIN Order_Details d
ON p.pizza_id=d.pizza_id
```

Results		Messages
Total Sales		
1	817860	

3. Identify the highest-priced pizza.

```
SELECT top 1 t.name,
p.price
FROM pizzAS p
JOIN pizza_types t
ON p.pizza_type_id=t.pizza_type_id
ORDER BY price desc
```

Results		Messages
	name	price
1	The Greek Pizza	35.9500007629395

4. Identify the most common pizza size ordered.

```
SELECT distinct(size),
count(order_details_id)
FROM pizzAS p
JOIN Order_Details d
ON p.pizza_id=d.pizza_id
GROUP BY size
ORDER BY size
```

Results		Messages
	size	(No column name)
1	L	18526
2	M	15385
3	S	14137
4	XL	544
5	XXL	28

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

```
SELECT top 5 COUNT(d.order_details_id) AS [No. of Orders] ,
           name,
           SUM(d.quantity) AS [Sum of Quantity]
FROM Order_Details d
JOIN pizzAS p
  ON d.pizza_id = p.pizza_id
JOIN pizza_types t
  ON p.pizza_type_id = t.pizza_type_id
GROUP BY name
ORDER BY [No. of Orders] desc
```

Results Messages			
	No. of Orders	name	Sum of Quantity
1	2416	The Classic Deluxe Pizza	2453
2	2372	The Barbecue Chicken Pizza	2432
3	2370	The Hawaiian Pizza	2422
4	2369	The Pepperoni Pizza	2418
5	2315	The Thai Chicken Pizza	2371

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

```
SELECT category,
       sum(quantity) [Total Quatity]
FROM pizza_types t
JOIN pizzAS p
  ON t.pizza_type_id = p.pizza_type_id
JOIN Order_Details d
  ON p.pizza_id = d.pizza_id
GROUP BY category
ORDER BY [Total Quatity] desc
```

Results Messages		
	category	Total Quatity
1	Classic	14888
2	Supreme	11987
3	Veggie	11649
4	Chicken	11050

7. Determine the distribution of orders by hour of the day.

```
SELECT format(time,
              'hh') AS Hour,
       count(order_id) AS [Order Count]
FROM Pizza_Orders
GROUP BY format(time, 'hh')
ORDER BY format(time, 'hh')
```

	Hour	Order Count
1	09	1
2	10	8
3	11	1231
4	12	2520
5	13	2455
6	14	1472
7	15	1468
8	16	1920
9	17	2336
10	18	2399
11	19	2009

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

```
SELECT category,
       count(name) AS [No. of Pizza Types]
FROM pizza_types
GROUP BY category
```

	category	No. of Pizza Types
1	Chicken	6
2	Classic	8
3	Supreme	9
4	Veggie	9

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

```
SELECT Avg(Quantity) AS [Average Pizza ordered per Day]
FROM (SELECT date,
       (sum(quantity)) AS [Quantity]
FROM Pizza_Orders o
JOIN Order_Details d
ON o.order_id = d.order_id
GROUP BY date) AS [Order Quantity]
```

	Average Pizza ordered per Day
1	138

10. Determine the top 3 most ordered pizza types based on revenue.

```
SELECT top 3 [Revenue],
            name
FROM (SELECT sum(d.quantity*p.price) AS [Revenue], name
FROM pizzAS p
JOIN Order_Details d
ON p.pizza_id = d.pizza_id
JOIN pizza_types t
ON p.pizza_type_id = t.pizza_type_id
GROUP BY t.name) AS Revenue_Generated
ORDER BY Revenue desc
```

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

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

```
SELECT name,
       round(sum(p.price*d.quantity) / (SELECT round(sum(p.price*d.quantity),
2)
FROM Order_Details d
JOIN pizzAS p
ON d.pizza_id = p.pizza_id
JOIN pizza_types t
ON t.pizza_type_id = p.pizza_type_id) * 100,2) AS [% of Revenue]
FROM Order_Details d
JOIN pizzAS p
ON d.pizza_id = p.pizza_id
JOIN pizza_types t
ON t.pizza_type_id = p.pizza_type_id
GROUP BY name
```

	name	% of Revenue
1	The Napolitana Pizza	2.95
2	The Barbecue Chicken Pizza	5.23
3	The Pepper Salami Pizza	3.12
4	The Five Cheese Pizza	3.19
5	The Mexicana Pizza	3.27
6	The Brie Carne Pizza	1.42
7	The Classic Deluxe Pizza	4.67
8	The Italian Vegetables Pizza	1.96
9	The Pepperoni Pizza	3.69
10	The Thai Chicken Pizza	5.31
11	The Sicilian Pizza	3.78

Query executed successfully.

12. Analyze the cumulative revenue generated over time.

```
SELECT date,
       revenue,
       sum(revenue)
       OVER (ORDER BY date) AS Cum_Revenue
FROM (SELECT o.date,
            sum(d.quantity*p.price) AS revenue
      FROM Order_Details d
      JOIN pizzAS p
      ON d.pizza_id = p.pizza_id
      JOIN Pizza_Orders o
      ON d.order_id = o.order_id
      GROUP BY o.date) AS sales
```


	date	revenue	Cum_Revenue
1	2015-01-01	2713.85000228882	2713.85000228882
2	2015-01-02	2731.90000152588	5445.7500038147
3	2015-01-03	2662.40000343323	8108.15000724792
4	2015-01-04	1755.45000076294	9863.60000801086
5	2015-01-05	2065.95000076294	11929.5500087738
6	2015-01-06	2428.95000267029	14358.5000114441
7	2015-01-07	2202.20000076294	16560.700012207
8	2015-01-08	2838.35000610352	19399.0500183105
9	2015-01-09	2127.35000419617	21526.4000225067
10	2015-01-10	2463.95000267029	23990.350025177
11	2015-01-11	1872.30000114441	25862.6500263214

Query executed successfully.

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

```
SELECT category,
       name,
       revenue,
       Rank
FROM (SELECT category,
            name,
            revenue,
            rank ()
      OVER (partition by category
            ORDER BY revenue desc) AS Rank
      FROM (SELECT category,
            name,
            sum(p.price*d.quantity) AS Revenue
      FROM Order_Details d
      JOIN pizzAS p
      ON d.pizza_id = p.pizza_id
      JOIN pizza_types t
      ON p.pizza_type_id = t.pizza_type_id
      GROUP BY category, name) AS a) AS b
WHERE Rank <= 3
```

Results		Messages		
	category	name	revenue	Rank
1	Chicken	The Thai Chicken Pizza	43434.25	1
2	Chicken	The Barbecue Chicken Pizza	42768	2
3	Chicken	The California Chicken Pizza	41409.5	3
4	Classic	The Classic Deluxe Pizza	38180.5	1
5	Classic	The Hawaiian Pizza	32273.25	2
6	Classic	The Pepperoni Pizza	30161.75	3
7	Supreme	The Spicy Italian Pizza	34831.25	1
8	Supreme	The Italian Supreme Pizza	33476.75	2
9	Supreme	The Sicilian Pizza	30940.5	3
10	Veggie	The Four Cheese Pizza	32265.7010040283	1
11	Veggie	The Mexicana Pizza	26780.75	2

 Query executed successfully.