```sql
## Basic:
-- 1. Retrieve the total number of orders placed.
 select count(order_id) as Total_Order_Count from orders;

```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

Total_Order_Count
21350

Result 12 x

Read Only

```sql
-- 2. Calculate the total revenue generated from pizza sales.
select round(sum(ODS.quantity * PZ.price)) as Total_Revenue
from order_details as ODS
join pizzas as PZ
on ODS.pizza_id = PZ.pizza_id;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

Total_Revenue
817860

Result 13 x

Read Only

```sql
-- 3. Identify the highest-priced pizza.
select pizza_types.name as Name, pizzas.price as Price from pizza_types
join pizzas on pizza_types.pizza_type_id = pizzas.pizza_type_id
order by pizzas.price desc limit 1;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content: | Fetch rows:

Name	Price
The Greek Pizza	35.95

Result 14 | Read Only

```sql
-- 4. Identify the most common pizza size ordered.
select sum(quantity) as Order_Count, size as Size from order_details
join pizzas on order_details.pizza_id = pizzas.pizza_id
group by size order by Order_count desc limit 1;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content: | Fetch rows:

Order_Count	Size
18956	L

Result 16 | Read Only

```sql
-- 5. List the top 5 most ordered pizza types along with their quantities.
select name as Name, sum(quantity) as Order_Count
from order_details
join pizzas on order_details.pizza_id = pizzas.pizza_id
join pizza_types on pizzas.pizza_type_id = Pizza_types.pizza_type_id
group by name order by Order_Count desc limit 5;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content: | Fetch rows:

Name	Order_Count
The Classic Deluxe Pizza	2453
The Barbecue Chicken Pizza	2432
The Hawaiian Pizza	2422
The Pepperoni Pizza	2418
The Thai Chicken Pizza	2371

Result 17 | Read Only

```sql
## Intermediate:
-- 6. Join the necessary tables to find the total quantity of each pizza category ordered
select category as Category, sum(quantity) as Quantity from order_details
join pizzas on order_details.pizza_id = pizzas.pizza_id
join pizza_types on pizzas.pizza_type_id = pizza_types.pizza_type_id
 group by category order by Quantity desc;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

Category	Quantity
Classic	14888
Supreme	11987
Veggie	11649
Chicken	11050

Result 18 | Read Only

```sql
-- 7. Determine the distribution of orders by hour of the day.
Select hour(time) as Hour, count(order_details.order_id) as Order_Count from order_details
join orders on order_details.order_id = orders.order_id
group by Hour order by Hour;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

Hour	Order_Count
9	4
10	17
11	2672
12	6543
13	6203
14	3521
15	3170
16	4185
17	5143
18	5359
19	4350
20	3487

Result 19 | Read Only

```sql
-- 8.  Join relevant tables to find the category-wise distribution of pizzas.
select category as Category, count(pizza_type_id) as Count from pizza_types
group by Category;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

Category	Count
Chicken	6
Classic	8
Supreme	9
Veggie	9

Result 20 | Read Only

```sql
-- 9. Group the orders by date and calculate the average number of pizzas ordered per day.
select date as Date, round(avg(order_id)) as Average_Orders
from orders
group by Date;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

Date	Average_Orders
2015-01-01	35
2015-01-02	103
2015-01-03	170
2015-01-04	229
2015-01-05	282
2015-01-06	341
2015-01-07	402
2015-01-08	467
2015-01-09	534
2015-01-10	597
2015-01-11	656
2015-01-12	709

Result 22 | Read Only

```sql
-- 10. Determine the top 3 most ordered pizza types based on revenue.
select name as Name, round(sum(quantity * price)) as Revenue
from order_details
join pizzas on order_details.pizza_id = pizzas.pizza_id
join pizza_types on pizzas.pizza_type_id = pizza_types.pizza_type_id
group by Name
order by Revenue limit 3;

```

Result Grid | Filter Rows: | Export: | Wrap Cell Content: | Fetch rows:

Name	Revenue
The Brie Carre Pizza	11588
The Green Garden Pizza	13956
The Spinach Supreme Pizza	15278

Result 23 x

Read Only

```sql
## Advanced:
-- 11. Calculate the percentage contribution of each pizza type to total revenue.
select pizza_types.name as Name,
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_Percentage
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 Revenue_Percentage desc;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

Name	Revenue_Percentage
The Thai Chicken Pizza	5.31
The Barbecue Chicken Pizza	5.23
The California Chicken Pizza	5.06
The Classic Deluxe Pizza	4.67
The Spicy Italian Pizza	4.26

Result Grid

Result 24

Read Only

```sql
-- 12. Analyze the cumulative revenue generated over time.
select date as Date,
round(sum(revenue) over(order by date)) as Cumulative_Revenue
from
(select orders.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.date) as sales;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

Date	Cumulative_Revenue
2015-01-01	2714
2015-01-02	5446
2015-01-03	8108
2015-01-04	9864
2015-01-05	11930
2015-01-06	14358
2015-01-07	16561
2015-01-08	19399
2015-01-09	21526

Result 25 | Read Only

```sql
-- 13. Determine the top 3 most ordered pizza types based on revenue for each pizza category.
select name as Name, revenue as 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,
round(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 tbl1) as tbl2
where rn <= 3;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

Name	Revenue
The Thai Chicken Pizza	43434
The Barbecue Chicken Pizza	42768
The California Chicken Pizza	41410
The Classic Deluxe Pizza	38180
The Hawaiian Pizza	32273
The Pepperoni Pizza	30162
The Spicy Italian Pizza	34831
The Italian Supreme Pizza	33477
The Sicilian Pizza	30940

Result 26

Read Only