



**Hello my name is Deepanshu
I made a sql project in which I use
SQL Query to analyze the pizza
sales and solve the problem
Question by Question**

>>>

-- Retrieve the total number of order place.

```
select count(order_id) from orders;
```

| | |
|---|-----------------|
| | count(order_id) |
| ▶ | 21350 |

-- calculate the total revenue generated from the 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
```

| | total_sales |
|---|-------------|
| ▶ | 817860.05 |

-- identify the highest price 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;
```

| | name | price |
|---|-----------------|-------|
| ▶ | The Greek Pizza | 35.95 |

-- identify the most common pizza 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;
```

Result Grid | Filter

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

-- list the top 5 most ordered pizza types along with their quantity

• **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;
```

Result Grid



Filter Rows:

| | 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 |

-- join the necessary table to find the each pizza catagory 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;
```

| Result Grid |

| | category | quantity |
|---|----------|----------|
| ▶ | Classic | 14888 |
| | Supreme | 11987 |
| | Veggie | 11649 |
| | Chicken | 11050 |

-- 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);
```

Result Grid | Filter

| | hour | order_count |
|---|------|-------------|
| ▶ | 11 | 1231 |
| | 12 | 2520 |
| | 13 | 2455 |
| | 14 | 1472 |
| | 15 | 1468 |
| | 16 | 1920 |
| | 17 | 2336 |
| | 18 | 2399 |
| | 19 | 2009 |
| | 20 | 1642 |

-- join the relevant tables to find the category wise distribution of pizzas

```
select category, count(name) from pizza_types  
group by category;
```

Result Grid | Filter Row

| | category | count(name) |
|---|----------|-------------|
| ▶ | Chicken | 6 |
| | Classic | 8 |
| | Supreme | 9 |
| | Veggie | 9 |

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

```
select avg(quantity) 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;
```

| avg(quantity) |
|---------------|
| 138.4749 |

-- determine the top 3 most ordered pizzas types based on revenue

```
select pizza_types.name,  
sum(order_details.quantity * pizzas.price) as revenue  
from pizza_types join pizzas  
on pizzas.pizza_type_id = pizza_types.pizza_type_id  
join order_details  
on order_details.pizza_id = pizzas.pizza_id  
group by pizza_types.name order by revenue desc limit 3;
```

| name | revenue |
|------------------------------|----------|
| The Thai Chicken Pizza | 43434.25 |
| The Barbecue Chicken Pizza | 42768 |
| The California Chicken Pizza | 41409.5 |

-- calculate the percentage contribution of each pizza type to total revenue

```
select pizza_types.category,
    round((sum(order_details.quantity*pizzas.price) / (select sum(order_details.quantity * pizzas.price)
    from order_details
    join pizzas on pizzas.pizza_id = order_details.pizza_id)) * 100) 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 |
|---|----------|--------------------|
| 1 | Classic | 26.90596025566967 |
| 2 | Supreme | 25.45631126009862 |
| 3 | Chicken | 23.955137556847287 |
| 4 | Veggie | 23.682590927384577 |

-- 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 |

-- determine the top 3 most ordered pizza types based on revenue for each pizza delivery

```
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 j
```

| | 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 |
| | The Italian Supreme Pizza | 33476.75 |
| | The Sicilian Pizza | 30940.5 |
| | The Four Cheese Pizza | 32265.70000000065 |