

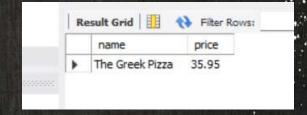




# **Basic:**

3) Identify the highest-priced pizza.

```
3 • SELECT
4     pizza_types.name, pizzas.price
5     FROM
6     pizza_types
7          JOIN
8     pizzas ON pizza_types.pizza_type_id = pizzas.pizza_type_id
9     ORDER BY pizzas.price DESC
10     LIMIT 1;
11
```



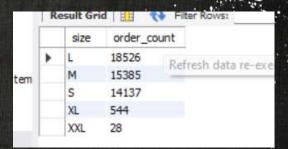




#### **Basic:**

4) Identify the most common pizza size ordered..

```
3 •
       SELECT
           quantity, COUNT(order_details_id)
       FROM
           order_details
       GROUP BY quantity;
       SELECT
           pizzas.size,
10
           COUNT(order_details.order_details_id) AS order_count
11
       FROM
12
           pizzas
13
14
               JOIN
           order_details ON pizzas.pizza_id = order_details.pizza_id
15
       GROUP BY pizzas.size
16
       ORDER BY order_count DESC;
17
```





### **Basic:**

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

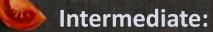
```
SELECT
pizza_types.name, SUM(order_details.quantity) AS quantity
FROM
pizza_types
JOIN
pizzas ON pizza_types.pizza_type_id = pizzas.pizza_type_id
JOIN
order_details ON order_details.pizza_id = pizzas.pizza_id
GROUP BY pizza_types.name
ORDER BY quantity DESC
LIMIT 5;
```

			-	
tem		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	









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

```
4 • select pizza_types.category,
5    sum(order_details.quantity) as quantity
6    from pizza_types join pizzas
7    on pizza_types.pizza_type_id = pizzas.pizza_type_id
8    join order_details
9    on order_details.pizza_id = pizzas.pizza_id
0    group by pizza_types.category order by quantity desc;
```

	category	quantity
١	Classic	14888
	Supreme	11987
	Veggie	11649
	Chicken	11050



# Intermediate:

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

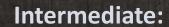
```
select * from orders;

select hour(order_time) as hour , count(order_id) as order_count from orders
group by hour(order_time);
```

	hour	order_count
١	11	1231
	12	2520
	13	2455
	14	1472
	15	1468







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

```
SELECT

ROUND(AVG(quantity), 0) as avg_pizza_ordered_per_day

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\_pizza\_ordered\_per\_day

138





# Intermediate:

10) Determine the top 3 most ordered pizza 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



### **Advanced:**

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 pizzas.pizza_type_id = pizza_types.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
<b>b</b>	Classic	26.91
	Supreme	25.46
	Chicken	23.96
	Veggie	23.68





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	2713.85000000000004
	2015-01-02	5445.75
	2015-01-03	8108.15
	2015-01-04	9863.6
	2015-01-05	11929.55









### **Advanced:**

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	
١	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	

Result 3 )



