





MySql is used here

MySQL is an open-source relational database management system (RDBMS) used to store and manage structured data. It uses SQL (Structured Query Language) to perform tasks like inserting, updating, querying, and deleting data. MySQL is widely used in analysis of data and use for cleaning the data by using queries.

Different questions to retrieve the useful information to taking the insights from the database and use in our pizza shop for making the shop more profitable.



RETRIEVE THE TOTAL NUMBER OF ORDERS PLACED? : : : : :

```
SELECT

COUNT(order_id) AS total_orders

FROM

orders;
```

total_orders

≥ 21350

CALCULATE THE TOTAL REVENUE GENERATED FROM 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
```





IDENTIFY THE HIGHEST-PRICED 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 SIZE 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;
```



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

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;
```

	name	quantity
Þ	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 TABLES TO FIND THE TOTAL QUANTITY OF EACH PIZZA CATEGORY 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;
```





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;
```



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

JOIN RELEVANT TABLES TO FIND THE CATEGORY-WISE DISTRIBUTION OF PIZZAS.

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

	category	count(name)
١	Chicken	6
	Classic	8
	Supreme	9
	Veggie	9

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

```
select round(avg(quantity),0) as average_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;
```



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
Þ	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.

```
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
>	Classic	26.91
	Supreme	25.46
	Chicken	23.96
	Veggie	23.68



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



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 rankk
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 rankk <=3;</pre>
```

	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



THANK YOU