

PIZZA PROJECT



RETRIEVE THE TOTAL NUMBER OF ORDERS PLACED.

```
SELECT  
COUNT(ORDER_ID) AS TOTAL_ORDERS  
FROM  
ORDERS;
```

Result Grid	
	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;
```

Result Grid	
	total_sales
▶	817860.05

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;
```

Result Grid		Filter Rows:
	name	price
▶	The Greek Pizza	35.95

Identify the most common pizza size ordered

```
select quantity, count(order_details_id)
from order_details
group by quantity;

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
limit 1;
```

	size	order_count
▶	L	18526

LIST THE TOP 5 MOST ORDERED PIZZA TYPES ALONG WITH THEIR QUANTITIES.

```
SELECT
    pizza_types.name, SUM(order_details.quantity) AS quanity
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 quanity DESC
LIMIT 5;
```

Result Grid		
	name	quanity
▶	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_ordered
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_ordered DESC;
```

Result Grid		
	category	quantity_ordered
▶	Classic	14888
	Supreme	11987
	Veggie	11649
	Chicken	11050

Determine the distribution of orders by hour of the day

```
SELECT  
    HOUR(order_time)  
FROM  
    orders  
ORDER BY order_date;  
  
SELECT  
    HOUR(order_time) AS hour, COUNT(order_id) AS order_count  
FROM  
    orders  
GROUP BY HOUR(order_time)  
ORDER BY order_count DESC;
```

hour	order_count
12	2520
13	2455
18	2399
17	2336
19	2009
16	1920
20	1642
14	1472
15	1468
11	1231
21	1198
22	663
23	28
10	8
9	1

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

```
SELECT  
    COUNT(name), category  
FROM  
    pizza_types  
GROUP BY category;
```

	COUNT(name)	category
▶	6	Chicken
	8	Classic
	9	Supreme
	9	Veggie

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

```
with cte as
  (select orders.order_date, sum(order_details.quantity) as quantity
   from order_details
   join orders
   on order_details.order_id= orders.order_id
   group by orders.order_date
   order by orders.order_date)
  select round(avg(quantity), 0) from cte;
```

Result Grid	
	Filter Rows:
round(avg(quantity), 0)	
▶	138



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 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 DESC
LIMIT 3;
```

Result Grid | Filter Rows:

	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(pizzas.price * order_details.quantity) / (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 pizza_types.pizza_type_id = pizzas.pizza_type_id
    JOIN
        order_details ON pizzas.pizza_id = order_details.pizza_id
GROUP BY pizza_types.category
ORDER BY revenue;
```

	category	revenue
▶	Veggie	23.68
	Chicken	23.96
	Supreme	25.46
	Classic	26.91

Analyze the cumulative revenue generated over time



```
select order_date,
       sum(revenue) over (order by order_date) as cum_rev
  from
    (select orders.order_date,
            sum(order_details.quantity * pizzas.price) as revenue
       from orders
      join order_details
        on order_details.order_id = orders.order_id
      join pizzas
        on pizzas.pizza_id = order_details.pizza_id
     group by orders.order_date) as sales;
```

order_date	cum_rev
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
2015-01-08	19399.05
2015-01-09	21526.4
2015-01-10	23990.35000000002
2015-01-11	25862.65
2015-01-12	27781.7
2015-01-13	29831.30000000003
2015-01-14	32358.70000000004
2015-01-15	34343.50000000001

DETERMINE THE TOP 3 MOST ORDERED PIZZA TYPES BASED ON REVENUE FOR EACH PIZZA CATEGORY

```
with total as
  (with cte as
    (select pizza_types.category, pizza_types.name, sum(pizzas.price*order_details.quantity) 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)
   select category, name, revenue,
   rank() over (partition by category order by revenue desc) as rn
  from cte)
 select category, name, revenue
   from total
  where rn<=3;
```

	category	name	revenue
▶	Chicken	The Thai Chicken Pizza	43434.25
	Chicken	The Barbecue Chicken Pizza	42768
	Chicken	The California Chicken Pizza	41409.5
	Classic	The Classic Deluxe Pizza	38180.5
	Classic	The Hawaiian Pizza	32273.25
	Classic	The Pepperoni Pizza	30161.75
	Supreme	The Spicy Italian Pizza	34831.25
	Supreme	The Italian Supreme Pizza	33476.75
	Supreme	The Sicilian Pizza	30940.5
	Veggie	The Four Cheese Pizza	32265.70000000065
	Veggie	The Mexicana Pizza	26780.75
	Veggie	The Five Cheese Pizza	26066.5