



Special Delicious

SQL PROJECT PIZZA SALES ANALYSIS





PIZZAHUT DATABASE

I HAVE SET UP A PIZZAHUT DATABASE WITH TWO TABLES: ORDERS AND ORDER_DETAILS. THE ORDERS TABLE RECORDS EACH ORDER'S ID, DATE, AND TIME, WHILE THE ORDER_DETAILS TABLE CAPTURES SPECIFICS LIKE ORDER DETAILS ID, ASSOCIATED ORDER ID, PIZZA ID, AND QUANTITY.

```
create table orders (
    order_id int not null,
    order_date date not null,
    order_time time not null,
    primary key (order_id) );
```

```
create table order_details (
    order_details_id int not null,
    order_id int not null,
    pizza_id text not null,
    quantity int not null,
    primary key (order_details_id) );
```



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_slaes
```

FROM

```
order_details
```

```
INNER JOIN
```

```
pizzas ON pizzas.pizza_id = order_details.pizza_id;
```

| Result Grid | |
|-------------|-------------|
| | total_slaes |
| ▶ | 817860.05 |





IDENTIFY THE HIGHEST-PRICED PIZZA.

SELECT

```
    pizza_types.name, pizzas.price
```

FROM

```
    pizza_types
```

```
        INNER JOIN
```

```
    pizzas ON pizzas.pizza_type_id = pizza_types.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
    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

| | 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 |
|---|----------------------------|----------|
| ▶ | 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;
```

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);



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



JOIN 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  
    ROUND(AVG(quantity), 0)  
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;
```

| | 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 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  
                                         ROUND(SUM(order_details.quantity * pizzas.price),  
                                               2)AS total_sales  
FROM  
      order_details  
      INNER 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 order_details.pizza_id = pizzas.pizza_id  
group by pizza_types.category order by revenue Desc;
```

Result Grid

| | 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;
```

| Result Grid | | Filter Rows: |
|-------------|------------|--------------------|
| | 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 |
| | 2015-01-08 | 19399.05 |
| | 2015-01-09 | 21526.4 |
| | 2015-01-10 | 23299.25000000003 |





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;
```

Result Grid | Filter Rows:

| 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 |





THANKS



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[HTTPS://GITHUB.COM/PRAKASH-GORAIN.](https://github.com/PRAKASH-GORAIN)