SQL CASE STUDY
PIZZA NATION-JALGAON
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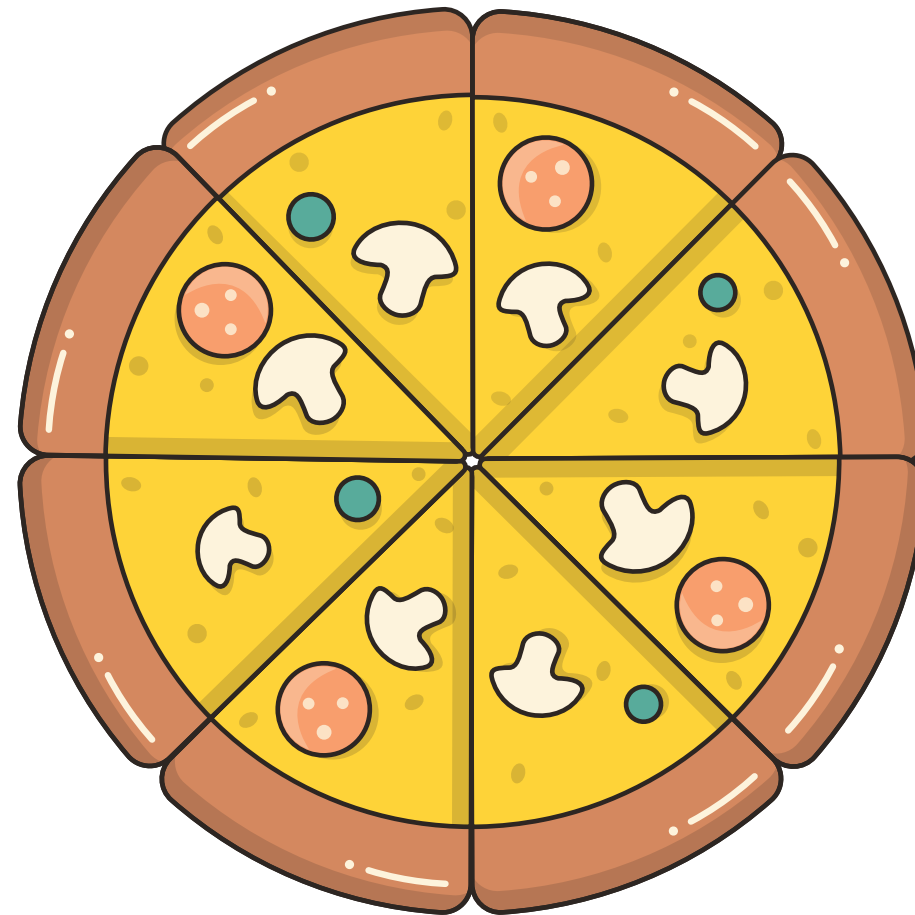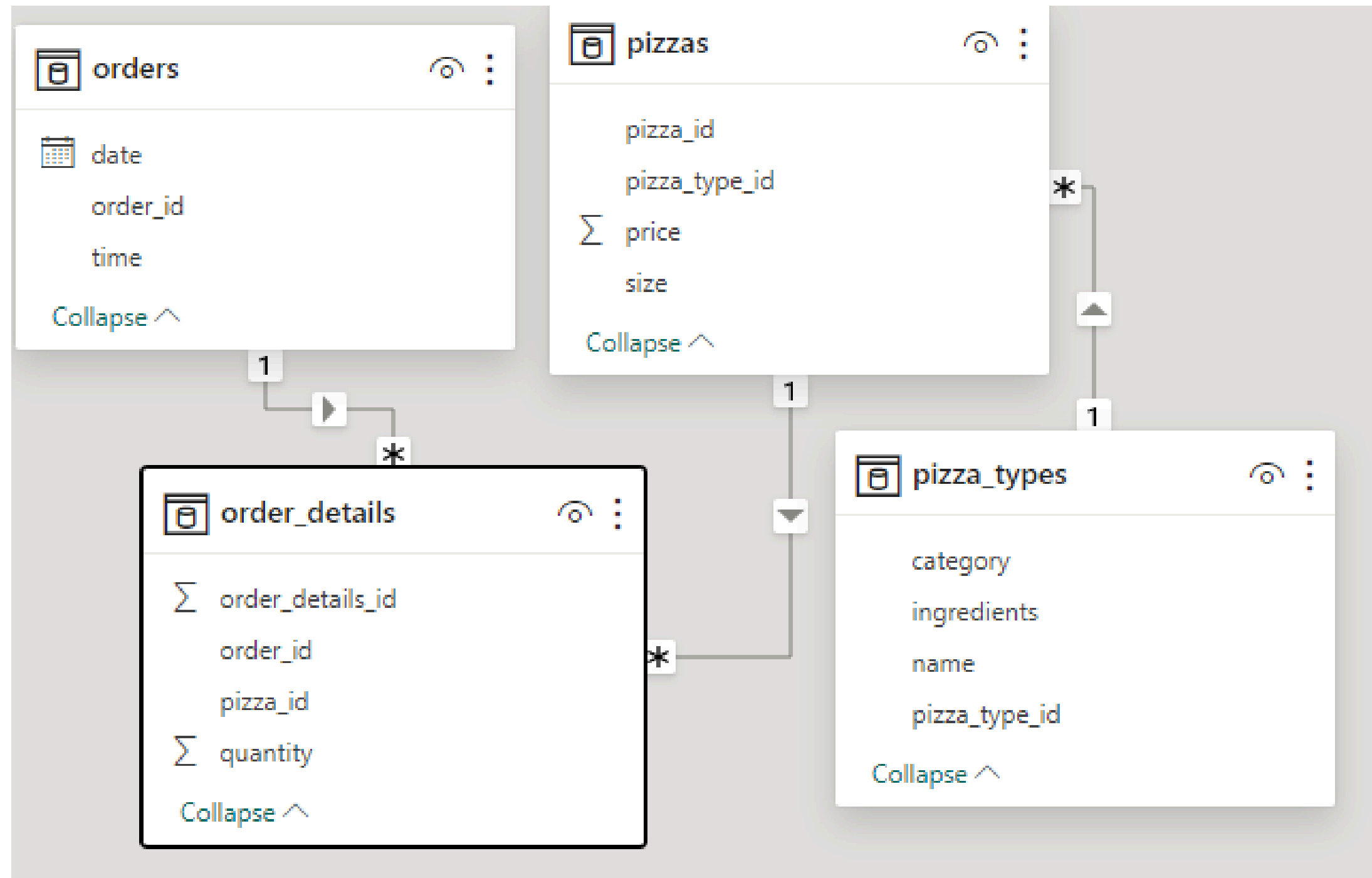
PIZZAS
Table-1

pizza_id	pizza_type_id	size	price
bbq_ckn_s	bbq_ckn	S	12.75
bbq_ckn_m	bbq_ckn	M	16.75
bbq_ckn_l	bbq_ckn	L	20.75
cali_ckn_s	cali_ckn	S	12.75
cali_ckn_m	cali_ckn	M	16.75
cali_ckn_l	cali_ckn	L	20.75
ckn_alfredo_s	ckn_alfredo	S	12.75
ckn_alfredo_m	ckn_alfredo	M	16.75
ckn_alfredo_l	ckn_alfredo	L	20.75
ckn_pesto_s	ckn_pesto	S	12.75
ckn_pesto_m	ckn_pesto	M	16.75
ckn_pesto_l	ckn_pesto	L	20.75
southw_ckn_s	southw_ckn	S	12.75
southw_ckn_m	southw_ckn	M	16.75
southw_ckn_l	southw_ckn	L	20.75
thai_ckn_s	thai_ckn	S	12.75
thai_ckn_m	thai_ckn	M	16.75
thai_ckn_l	thai_ckn	L	20.75
big_meat_s	big_meat	S	12
big_meat_m	big_meat	M	16
big_meat_l	big_meat	L	20.5
classic_dlx_s	classic_dlx	S	12
classic_dlx_m	classic_dlx	M	16

PIZZA_TYPES

Table-2

| pizza_type_id	name	category	ingredients
bbq_ckn	The Barbecue Chicken Pizza	Chicken	Barbecued Chicken, Red Peppers, Green Peppers, Tomatoes, Red Onions, Barbecue Sauce
cali_ckn	The California Chicken Pizza	Chicken	Chicken, Artichoke, Spinach, Garlic, Jalapeno Peppers, Fontina Cheese, Gouda Cheese
ckn_alfredo	The Chicken Alfredo Pizza	Chicken	Chicken, Red Onions, Red Peppers, Mushrooms, Asiago Cheese, Alfredo Sauce
ckn_pesto	The Chicken Pesto Pizza	Chicken	Chicken, Tomatoes, Red Peppers, Spinach, Garlic, Pesto Sauce
southw_ckn	The Southwest Chicken Pizza	Chicken	Chicken, Tomatoes, Red Peppers, Red Onions, Jalapeno Peppers, Corn, Cilantro, Chipotle Sauce
thai_ckn	The Thai Chicken Pizza	Chicken	Chicken, Pineapple, Tomatoes, Red Peppers, Thai Sweet Chilli Sauce
big_meat	The Big Meat Pizza	Classic	Bacon, Pepperoni, Italian Sausage, Chorizo Sausage
classic_dlx	The Classic Deluxe Pizza	Classic	Pepperoni, Mushrooms, Red Onions, Red Peppers, Bacon
hawaiian	The Hawaiian Pizza	Classic	Sliced Ham, Pineapple, Mozzarella Cheese
ital_cpcllo	The Italian Capocollo Pizza	Classic	Capocollo, Red Peppers, Tomatoes, Goat Cheese, Garlic, Oregano
napolitana	The Napolitana Pizza	Classic	Tomatoes, Anchovies, Green Olives, Red Onions, Garlic
pep_msh_pep	The Pepperoni, Mushroom, and Peppers Pizza	Classic	Pepperoni, Mushrooms, Green Peppers
pepperoni	The Pepperoni Pizza	Classic	Mozzarella Cheese, Pepperoni
the_greek	The Greek Pizza	Classic	Kalamata Olives, Feta Cheese, Tomatoes, Garlic, Beef Chuck Roast, Red Onions
brie_carre	The Brie Carre Pizza	Supreme	Brie Carre Cheese, Prosciutto, Caramelized Onions, Pears, Thyme, Garlic
calabrese	The Calabrese Pizza	Supreme	'Nduja Salami, Pancetta, Tomatoes, Red Onions, Friggitello Peppers, Garlic
ital_supr	The Italian Supreme Pizza	Supreme	Calabrese Salami, Capocollo, Tomatoes, Red Onions, Green Olives, Garlic
peppr_salami	The Pepper Salami Pizza	Supreme	Genoa Salami, Capocollo, Pepperoni, Tomatoes, Asiago Cheese, Garlic
prsc_argla	The Prosciutto and Arugula Pizza	Supreme	Prosciutto di San Daniele, Arugula, Mozzarella Cheese
sicilian	The Sicilian Pizza	Supreme	Coarse Sicilian Salami, Tomatoes, Green Olives, Luganega Sausage, Onions, Garlic
soppressata	The Soppressata Pizza	Supreme	Soppressata Salami, Fontina Cheese, Mozzarella Cheese, Mushrooms, Garlic
spicy_ital	The Spicy Italian Pizza	Supreme	Capocollo, Tomatoes, Goat Cheese, Artichokes, Peperoncini verdi, Garlic

ORDERS
Table-3

order_id	date	time
19402	27 November 2015	11:21:54
19403	27 November 2015	11:29:51
19404	27 November 2015	11:32:40
19405	27 November 2015	11:36:39
19406	27 November 2015	11:46:40
19407	27 November 2015	11:47:35
19408	27 November 2015	11:54:49
19409	27 November 2015	12:02:51
19410	27 November 2015	12:09:16
19411	27 November 2015	12:13:36
19412	27 November 2015	12:15:07
19413	27 November 2015	12:22:17
19414	27 November 2015	12:24:55
19415	27 November 2015	12:25:45
19416	27 November 2015	12:26:53
19417	27 November 2015	12:30:45
19418	27 November 2015	12:41:58
19419	27 November 2015	12:47:19
19420	27 November 2015	12:48:13
19421	27 November 2015	13:07:19
19422	27 November 2015	13:09:11
19423	27 November 2015	13:09:42
19424	27 November 2015	13:13:12

ORDER_DETAILS
Table-4

order_details_id	order_id	pizza_id	quantity
36	15	big_meat_s	1
56	20	big_meat_s	1
79	32	big_meat_s	1
101	42	big_meat_s	1
150	64	big_meat_s	1
174	76	big_meat_s	1
180	78	big_meat_s	1
192	82	big_meat_s	1
230	97	big_meat_s	1
262	110	big_meat_s	1
276	115	big_meat_s	1
302	129	big_meat_s	1
316	134	big_meat_s	1
343	144	big_meat_s	1
388	162	big_meat_s	1
399	168	big_meat_s	1
412	174	big_meat_s	1
455	193	big_meat_s	1
467	198	big_meat_s	1
611	271	big_meat_s	1
681	300	big_meat_s	1
687	303	big_meat_s	1
695	306	big_meat_s	1

QUERIES TO ADDRESS WITH SQL COMMANDS
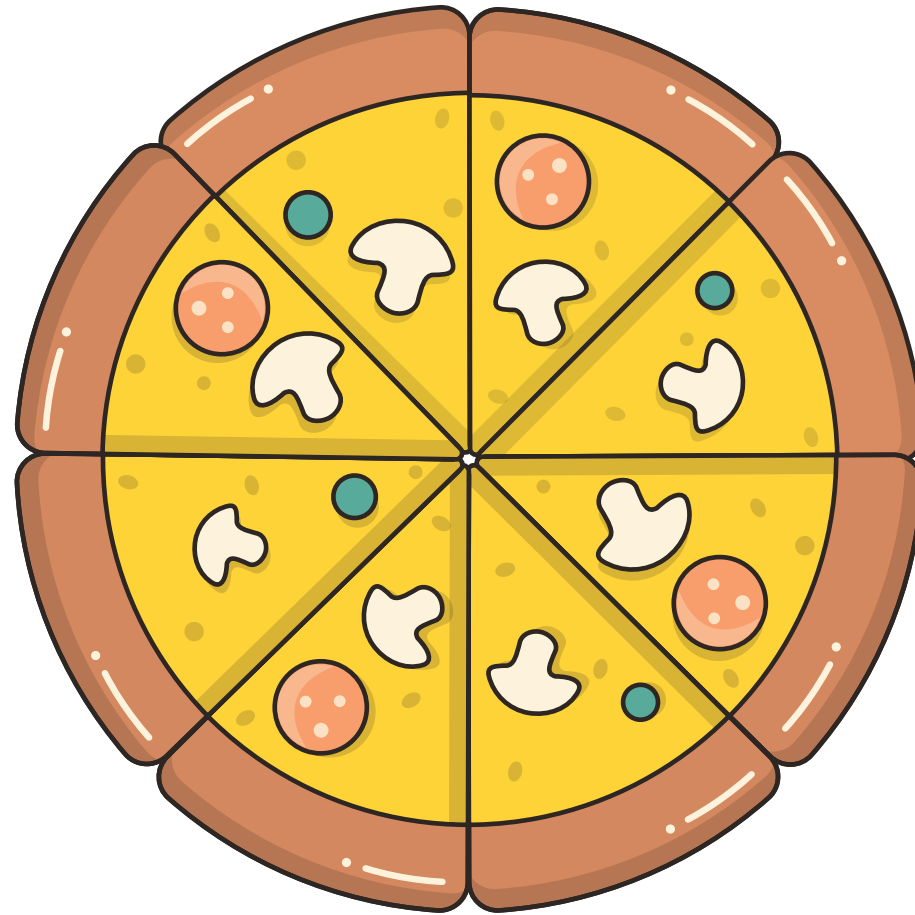
1. Retrive the total number of orders placed

```sql
select count(order_id) as Total_Orders
from orders;
```

Result Grid

	Total_Orders
▶	21350

2. Calculate the total revenue generated from pizza sales?

```sql
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

3.Identify the highest priced pizza.?

```sql
select pizza_types.name,pizzas.price
from pizza_types join pizzas
on pizzas.pizza_type_id = pizza_types.pizza_type_i
order by pizzas.price desc limit 1;
```

Result Grid | Filter Rows:

name	price
The Greek Pizza	35.95

4.Identify the most common pizza size orderd.?

```sql
select pizzas.size,count(order_details.order_details_id) as Total_Count
from pizzas join order_details
on pizzas.pizza_id = order_details.pizza_id
group by pizzas.size order by Total_Count desc limit 1;
```

Result Grid | Filter

size	Total_Count
L	18526

5.List the top 5 most orderd pizza types along with their quantities?

```sql
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

6.Join the necessary tables to find the total quantity of each pizza category orderd?

```sql
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 pizzas.pizza_id = order_details.pizza_id
group by pizza_types.category order by Quantity desc;
```

category	Quantity
Classic	14888
Supreme	11987
Veggie	11649
Chicken	11050

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

```sql
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
19	2009
20	1642

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

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

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

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
 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
▸	138

10.Determine the top 3 most orderd pizza types based on revenue?

```sql
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

11. Calculate the percentage contribution of each pizza type to total revenue.?

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

12. Analyze the cumulative revenue generated over time.?

```sql
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
2015-01-08	19399.05
2015-01-09	21526.4
2015-01-10	23990.350000000002

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
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