



Retrieve the total number of orders placed.

```
SELECT
     COUNT(order_id) AS Total_Orders
FROM
     orders;
```





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.

price

35.95

The Greek Pizza



Identify the most common pizza size ordered.

Re	sult Grid		43	Filte
	size	order	_coun	t
>	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
                                                                Result Grid Filter Rows:
ORDER BY quantity DESC
                                                                 The Classic Deluxe Pizza
                                                                               2453
                                                                               2432
LIMIT 5;
                                                                  The Barbecue Chicken Pizza
                                                                  The Hawaiian Pizza
                                                                               2422
                                                                               2418
                                                                 The Pepperoni Pizza
                                                                  The Thai Chicken Pizza
                                                                               2371
```



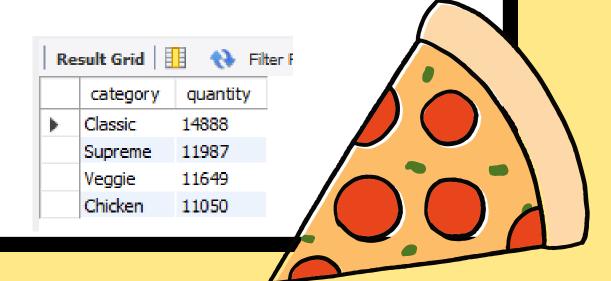
Join the necessary tables to find the total quantity of each pizza category ordered.

```
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
                                                               quantity
ORDER BY quantity DESC;
                                                               14888
                                                         Classic
                                                               11987
                                                          Supreme
                                                               11649
                                                          Chicken
                                                               11050
```



Determine the distribution of orders by hour of the day.

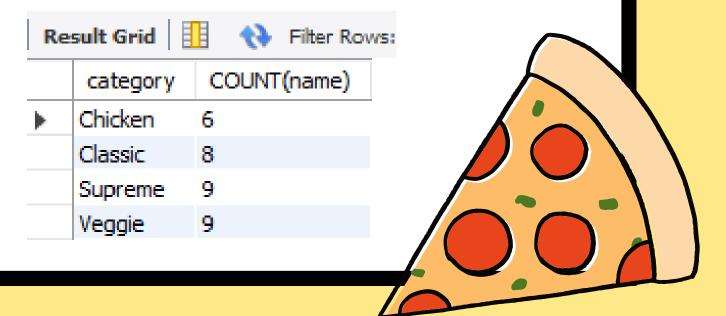
```
SELECT
   HOUR(order_time) AS Hour, COUNT(order_id) AS Order_Count
FROM
   orders
GROUP BY HOUR(order_time);
```





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

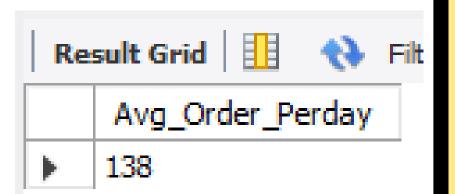
```
SELECT
    category, COUNT(name)
FROM
    pizza_types
GROUP BY category;
```

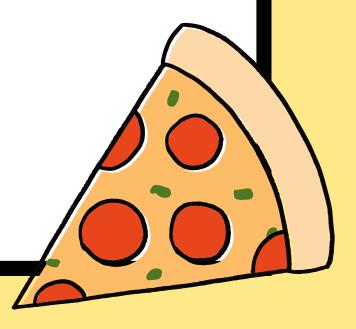




Group the orders by date and calculate the average number of pizzas ordered per day.

```
SELECT
    ROUND(AVG(quantity), 0) AS Avg_Order_Perday
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;
```

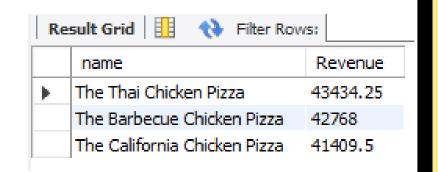


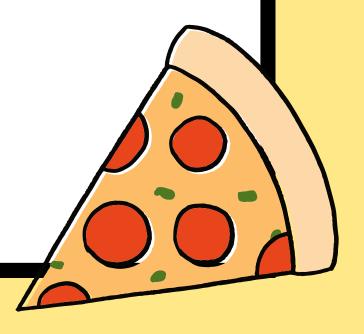




Determine the top 3 most ordered pizza types based on revenue.

```
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;
```







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 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;
```

Re	sult Grid	Filter
	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;
```

Re	sult Grid	N 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	23990.350000000002
	2015-01-11	25862.65
	2015-01-12	27781.7
	1	



WHERE rn<=3;

Question #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
```

	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
	l	



Table-1-2

Re	Result Grid 1				
	order_details_id	order_id	pizza_id	quantity	
Þ	1	1	hawaiian_m	1	
	2	2	classic_dlx_m	1	
	3	2	five_cheese_l	1	
	4	2	ital_supr_l	1	
	5	2	mexicana_m	1	
	6	2	thai_ckn_l	1	
	7	3	ital_supr_m	1	
	8	3	prsc_argla_l	1	
	9	4	ital_supr_m	1	
	10	5	ital_supr_m	1	
	11	6	bbq_ckn_s	1	
	12	6	the_greek_s	1	
	13	7	spinach_supr_s	1	
	14	8	spinach_supr_s	1	
	15	9	classic_dlx_s	1	
	16	9	green_garde	1	
	17	9	ital_cpcllo_l	1	
	18	9	ital_supr_l	1	
	19	9	ital_supr_s	1	
	20	9	mexicana_s	1	

Re	sult Grid	📙 🙌 Filter	Rows:
	order_id	order_date	order_time
•	1	2015-01-01	11:38:36
	2	2015-01-01	11:57:40
	3	2015-01-01	12:12:28
	4	2015-01-01	12:16:31
	5	2015-01-01	12:21:30
	6	2015-01-01	12:29:36
	7	2015-01-01	12:50:37
	8	2015-01-01	12:51:37
	9	2015-01-01	12:52:01
	10	2015-01-01	13:00:15
	11	2015-01-01	13:02:59
	12	2015-01-01	13:04:41
	13	2015-01-01	13:11:55
	14	2015-01-01	13:14:19

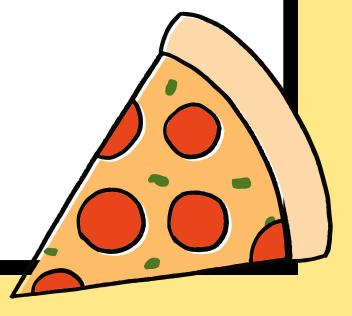




Table-3-4

pizza_type_id	name	category	ingredients
bbq_ckn	The Barbecue Chicken Pizza	Chicken	Barbecued Chicken, Red Peppers, Green Peppe
cali_ckn	The California Chicken Pizza	Chicken	Chicken, Artichoke, Spinach, Garlic, Jalapeno P
ckn_alfredo	The Chicken Alfredo Pizza	Chicken	Chicken, Red Onions, Red Peppers, Mushrooms
ckn_pesto	The Chicken Pesto Pizza	Chicken	Chicken, Tomatoes, Red Peppers, Spinach, Garl
southw_ckn	The Southwest Chicken Pizza	Chicken	Chicken, Tomatoes, Red Peppers, Red Onions,
thai_ckn	The Thai Chicken Pizza	Chicken	Chicken, Pineapple, Tomatoes, Red Peppers, T
big_meat	The Big Meat Pizza	Classic	Bacon, Pepperoni, Italian Sausage, Chorizo Sau.
classic_dlx	The Classic Deluxe Pizza	Classic	Pepperoni, Mushrooms, Red Onions, Red Peppe.
hawaiian	The Hawaiian Pizza	Classic	Sliced Ham, Pineapple, Mozzarella Cheese
ital_cpcllo	The Italian Capocollo Pizza	Classic	Capocollo, Red Peppers, Tomatoes, Goat Chee
napolitana	The Napolitana Pizza	Classic	Tomatoes, Anchovies, Green Olives, Red Onion.
pep_msh_pep	The Pepperoni, Mushroom,	Classic	Pepperoni, Mushrooms, Green Peppers
pepperoni	The Pepperoni Pizza	Classic	Mozzarella Cheese, Pepperoni
the_greek	The Greek Pizza	Classic	Kalamata Olives, Feta Cheese, Tomatoes, Garli
brie_carre	The Brie Carre Pizza	Supreme	Brie Carre Cheese, Prosciutto, Caramelized Oni
calabrese	The Calabrese Pizza	Supreme	'Nduja Salami, Pancetta, Tomatoes, Red Onions.
ital_supr	The Italian Supreme Pizza	Supreme	Calabrese Salami, Capocollo, Tomatoes, Red O
peppr_salami	The Pepper Salami Pizza	Supreme	Genoa Salami, Capocollo, Pepperoni, Tomatoes,
prsc_argla	The Prosciutto and Arugula	Supreme	Prosciutto di San Daniele, Arugula, Mozzarella C.
sicilian	The Sicilian Pizza	Supreme	Coarse Sicilian Salami, Tomatoes, Green Olives, .

Result Grid						
	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		



SQL Constraints

Table: pizzas

Columns:

pizza_id text
pizza_type_id text
size text
price double

Table: orders

Columns:

order_id int PK order_date date order_time time Table: pizza_types

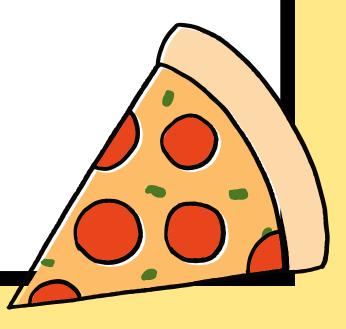
Columns:

pizza_type_id text name text category text ingredients text

Table: order_details

Columns:

order_details_id int PK order_id int pizza_id text quantity int





CONTRACT

Shakibul hasan Shakib



Shakib2002



in/shakib12



shakibul2002



shakib123.org@gmail.com



+8801627053233

