SQL PROJECT

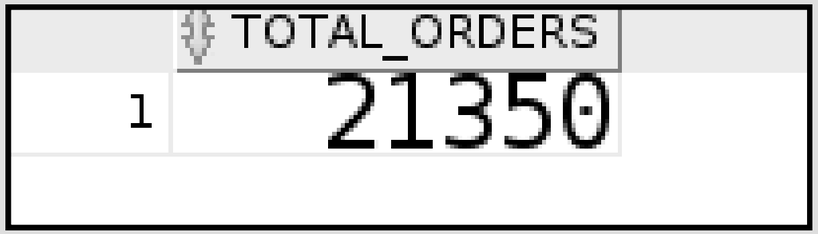
On Pizzas Sales

TABLES

1. order_details
2. orders
3. pizza_types
4. pizzas

Retrieve the total number of orders placed

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



	TOTAL_ORDERS
1	21350

Calculate the total revenue generated from pizza sales

```
SELECT
    SUM(a.quantity * b.price) AS total_sales
FROM
    order_details   a
    JOIN pizzas b ON b.pizza_id = a.pizza_id;
```

	TOTAL_SALES
1	817860.05

Identify the highest-priced pizza

```
SELECT
    a.name,
    b.price
FROM
    pizza_types   a
    JOIN pizzas       b ON a.pizza_type_id = b.pizza_type_id
ORDER BY
    b.price DESC
FETCH FIRST 1 ROW ONLY;
```

	NAME	PRICE
1	The Greek Pizza	35.95

Identify the most common pizza size ordered

```
SELECT
    a.pizza_size,
    COUNT(b.order_details_id) AS order_count
FROM
    pizzas          a
    JOIN order_details   b ON a.pizza_id = b.pizza_id
GROUP BY
    a.pizza_size
ORDER BY
    order_count DESC
FETCH FIRST 1 ROW ONLY;
```

	PIZZA_SIZE	ORDER_COUNT
1	L	18526

List the top 5 most ordered pizza types along with their quantities

```
SELECT
    a.name,
    SUM(c.quantity) AS quantity
FROM
    pizza_types     a
    JOIN pizzas         b ON a.pizza_type_id = b.pizza_type_id
    JOIN order_details   c ON c.pizza_id = b.pizza_id
GROUP BY
    a.name
ORDER BY
    quantity DESC
FETCH FIRST 5 ROWS ONLY;
```

	NAME	QUANTITY
1	The Classic Deluxe Pizza	2453
2	The Barbecue Chicken Pizza	2432
3	The Hawaiian Pizza	2422
4	The Pepperoni Pizza	2418
5	The Thai Chicken Pizza	2371

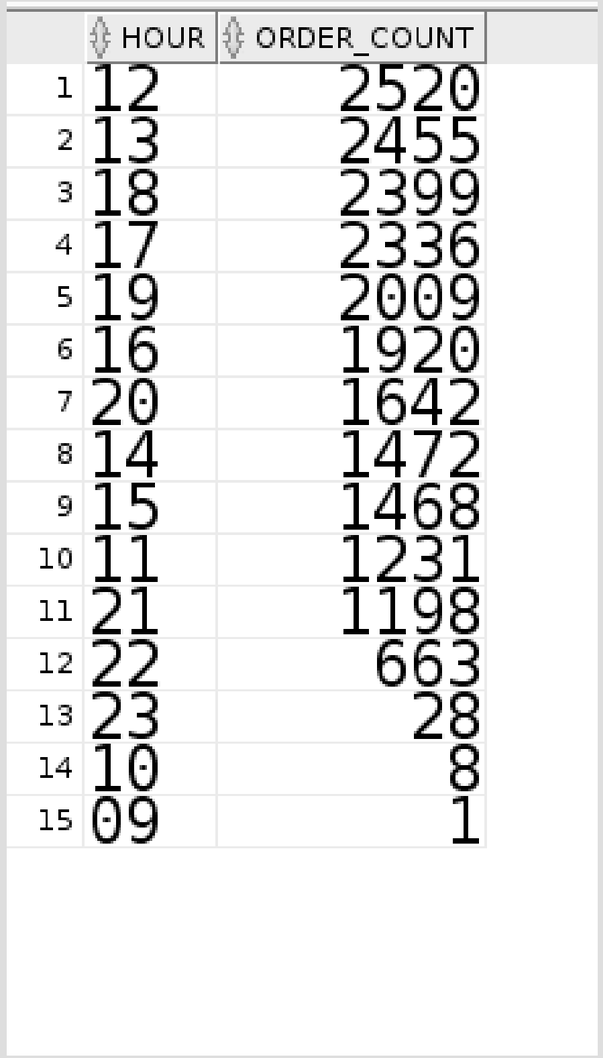
Join the necessary tables to find the total quantity of each pizza category ordered

```
SELECT
    a.category,
    SUM(c.quantity) AS quantity
FROM
    pizza_types     a
    JOIN pizzas         b ON a.pizza_type_id = b.pizza_type_id
    JOIN order_details   c ON c.pizza_id = b.pizza_id
GROUP BY
    a.category
ORDER BY
    quantity DESC;
```

	CATEGORY	QUANTITY
1	Classic	14888
2	Supreme	11987
3	Veggie	11649
4	Chicken	11050

Determine the distribution of orders by hour of the day

```
SELECT
    substr(order_time, 1, 2) AS hour,
    COUNT(order_id) AS order_count
FROM
    orders
GROUP BY
    substr(order_time, 1, 2)
ORDER BY
    order_count DESC;
```



	HOUR	ORDER_COUNT
1	12	2520
2	13	2455
3	18	2399
4	17	2336
5	19	2009
6	16	1920
7	20	1642
8	14	1472
9	15	1468
10	11	1231
11	21	1198
12	22	663
13	23	28
14	10	8
15	09	1

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

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

	CATEGORY	COUNT
1	Veggie	9
2	Supreme	9
3	Classic	8
4	Chicken	6

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

```
SELECT
    round(AVG(quantity),0) avg_quantity
FROM
    (
        SELECT
            a.order_date,
            SUM(b.quantity) quantity
        FROM
            orders          a
            JOIN order_details   b ON a.order_id = b.order_id
        GROUP BY
            a.order_date
    );
```

	AVG_QUANTITY
1	138

Determine the top 3 most ordered pizza types based on revenue

```
SELECT
    a.name,
    round(SUM(c.quantity * b.price), 0) revenue
FROM
    pizza_types     a
    JOIN pizzas         b ON b.pizza_type_id = a.pizza_type_id
    JOIN order_details   c ON c.pizza_id = b.pizza_id
GROUP BY
    a.name
ORDER BY
    revenue DESC
FETCH FIRST 3 ROWS ONLY;
```

	NAME	REVENUE
1	The Thai Chicken Pizza	43434
2	The Barbecue Chicken Pizza	42768
3	The California Chicken Pizza	41410

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;
```

	CATEGORY	REVENUE
1	Classic	26.91
2	Supreme	25.46
3	Chicken	23.96
4	Veggie	23.68

Analyze the cumulative revenue generated over time

```
SELECT
    order_date,
    round(SUM(revenue) OVER(
    ORDER BY
        order_date
    ), 0) AS cum_revenue,
    round(revenue, 0)
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_details_id
        GROUP BY
            orders.order_date
    );
```

	ORDER_DATE	CUM_REVENUE	ROUND(REVENUE,0)
1	01-01-15	1171	1171
2	02-01-15	2316	1145
3	03-01-15	3434	1118
4	04-01-15	4342	908
5	05-01-15	5247	905
6	06-01-15	6300	1053
7	07-01-15	7285	985
8	08-01-15	8542	1258
9	09-01-15	9571	1028
10	10-01-15	10749	1178
11	11-01-15	11616	867
12	12-01-15	12484	868
13	13-01-15	13331	847
14	14-01-15	14359	1027
15	15-01-15	15374	1016
16	16-01-15	16504	1130
17	17-01-15	17431	927
18	18-01-15	18268	838

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)))
WHERE
   rn <= 3;
```

	NAME	REVENUE
1	The Thai Chicken Pizza	43434.25
2	The Barbecue Chicken Pizza	42768
3	The California Chicken Pizza	41409.5
4	The Classic Deluxe Pizza	38180.5
5	The Hawaiian Pizza	32273.25
6	The Pepperoni Pizza	30161.75
7	The Spicy Italian Pizza	34831.25
8	The Italian Supreme Pizza	33476.75
9	The Sicilian Pizza	30940.5
10	The Four Cheese Pizza	32265.7
11	The Mexicana Pizza	26780.75
12	The Five Cheese Pizza	26066.5

THANK YOU