SQL PROJECT

I have utilized SQL queries in this project to solve business problems related to Pizza Sales.

Import the data from CSV file:

```
use Excel_PowerBI_Projects_Database;

--BULK INSERT Pizzas
FROM 'C:\Users\Dell\Downloads\pizzas.csv'
WITH (
    FORMAT = 'CSV',
    FIRSTROW = 2,
    FIELDTERMINATOR = ',',
    ROWTERMINATOR = '\n',
       KEEPNULLS,
    TABLOCK
);
--Repeated same process for all other tables

select * from Pizzas;
select * from Pizza_types;
select * from Orders_timestamp;
select * from Order_Details;
```

Retrieve the total number of orders placed.

```
select COUNT(order_id) as 'Total Orders' from Orders_timestamp;
```

Calculate the total revenue generated from pizza sales.

```
select ROUND(SUM(O.quantity * P.price),0) as 'Total Revenue' from
Order_Details as O
left join Pizzas as P on O.pizza_id=P.pizza_id;
```

Identify the highest-priced pizza.

```
select Pizza_types.name,Pizzas.price from Pizza_types
inner join Pizzas on Pizza_types.pizza_type_id=Pizzas.pizza_type_id
where price in (select MAX(price) from Pizzas);
```

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Identify the order count by pizza size ordered.

```
select P.size,COUNT(O.order_details_id) as 'Order Count' from Order_Details
as O
inner join Pizzas as P on O.pizza_id=P.pizza_id
group by P.size order by 'Order Count' desc;
```

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

```
select TOP 5 PT.name,SUM(OD.quantity) as Quantity from Pizza_Types as PT
join Pizzas as P on PT.pizza_type_id=P.pizza_type_id
join Order_Details as OD on OD.pizza_id = P.pizza_id
group by PT.name order by Quantity desc;
```

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

```
select PT.category,SUM(OD.quantity) as Quantity from Pizza_Types as PT
join Pizzas as P on PT.pizza_type_id=P.pizza_type_id
join Order_Details as OD on P.pizza_id=OD.pizza_id
group by PT.category order by Quantity desc;
```

Determine the distribution of orders by hour of the day.

```
select Datename(hour,time) order_hour ,COUNT(order_id) as order_count from
Orders_timestamp
group by Datename(hour,time)  order by order_count desc
```

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

```
select category,COUNT(name) as pizza_count from Pizza_Types group by category
order by pizza_count desc;
```

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

```
select avg(Quantity) as avg_pizza_ordered_per_day
from
(select OT.date,sum(OD.quantity) as Quantity from Orders_timestamp as OT
join Order_Details as OD on OT.order_id=od.order_id
GROUP BY OT.date) as order_quantity;
```

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

```
select top 3 PT.name , SUM(OD.quantity * P.price) as Revenue from Pizza_types
as PT
join Pizzas as P on PT.pizza_type_id=P.pizza_type_id
join Order_Details as OD on P.pizza_id = OD.pizza_id
group by PT.name order by Revenue desc;
```

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

```
select PT.category,convert(nvarchar,round(SUM(OD.quantity * P.price) /(select
SUM(OD.quantity * P.price) as Total_Sales from Order_Details as OD
join Pizzas as P on OD.pizza_id=P.pizza_id)*100,2)) + ' %'  as
Revenue_Percentage from Pizza_types as PT
join Pizzas as P on PT.pizza_type_id=P.pizza_type_id
join Order_Details as OD on P.pizza_id = OD.pizza_id
group by PT.category order by Revenue_Percentage desc;
```

Analyze the cumulative revenue generated over time.

```
select date,sum(Revenue) over (order by date) as Cumulative_Revenue
from
(select OT.date,SUM(OD.quantity * P.price) as Revenue from Order_Details as
OD
join Pizzas as P on OD.pizza_id=P.pizza_id
join Orders_timestamp as OT on   OT.order_id=OD.order_id
group by OT.date) as Sales;
```

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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 rnk
from
(select PT.category,PT.name,Round(sum(OD.quantity * P.price),0) as Revenue
from Pizza_types as PT
join Pizzas as P on PT.pizza_type_id=P.pizza_type_id
join Order_Details as OD on P.pizza_id=OD.pizza_id
group by PT.category,PT.name) as A) as B
where rnk<=3;
```