## SQL Pizza Analysis

## First 20 Rows of Pizza Table

## select \* from pizza\_sales

|    | _        |          |                |          |            |                  |            |             |            |                |   |                                  |
|----|----------|----------|----------------|----------|------------|------------------|------------|-------------|------------|----------------|---|----------------------------------|
|    | pizza_id | order_id | pizza_name_id  | quantity | order_date | order_time       | unit_price | total_price | pizza_size | pizza_category | pizza_ingredients                                     | pizza_name                       |
| 1  | 1        | 1        | hawaiian_m     | 1        | 2015-01-01 | 11:38:36.0000000 | 13.25      | 13.25       | M          | Classic        | Sliced Ham, Pineapple, Mozzarella Cheese              | The Hawaiian Pizza               |
| 2  | 2        | 2        | classic_dlx_m  | 1        | 2015-01-01 | 11:57:40.0000000 | 16         | 16          | M          | Classic        | Pepperoni, Mushrooms, Red Onions, Red Peppers, B      | The Classic Deluxe Pizza         |
| 3  | 3        | 2        | five_cheese_l  | 1        | 2015-01-01 | 11:57:40.0000000 | 18.5       | 18.5        | L          | Veggie         | Mozzarella Cheese, Provolone Cheese, Smoked Goud      | The Five Cheese Pizza            |
| 4  | 4        | 2        | ital_supr_l    | 1        | 2015-01-01 | 11:57:40.0000000 | 20.75      | 20.75       | L          | Supreme        | Calabrese Salami, Capocollo, Tomatoes, Red Onions,    | The Italian Supreme Pizza        |
| 5  | 5        | 2        | mexicana_m     | 1        | 2015-01-01 | 11:57:40.0000000 | 16         | 16          | M          | Veggie         | Tomatoes, Red Peppers, Jalapeno Peppers, Red Onio     | The Mexicana Pizza               |
| 6  | 6        | 2        | thai_ckn_l     | 1        | 2015-01-01 | 11:57:40.0000000 | 20.75      | 20.75       | L          | Chicken        | Chicken, Pineapple, Tomatoes, Red Peppers, Thai Sw    | The Thai Chicken Pizza           |
| 7  | 7        | 3        | ital_supr_m    | 1        | 2015-01-01 | 12:12:28.0000000 | 16.5       | 16.5        | M          | Supreme        | Calabrese Salami, Capocollo, Tomatoes, Red Onions,    | The Italian Supreme Pizza        |
| 8  | 8        | 3        | prsc_argla_l   | 1        | 2015-01-01 | 12:12:28.0000000 | 20.75      | 20.75       | L          | Supreme        | Prosciutto di San Daniele, Arugula, Mozzarella Cheese | The Prosciutto and Arugula Pizza |
| 9  | 9        | 4        | ital_supr_m    | 1        | 2015-01-01 | 12:16:31.0000000 | 16.5       | 16.5        | M          | Supreme        | Calabrese Salami, Capocollo, Tomatoes, Red Onions,    | The Italian Supreme Pizza        |
| 10 | 10       | 5        | ital_supr_m    | 1        | 2015-01-01 | 12:21:30.0000000 | 16.5       | 16.5        | M          | Supreme        | Calabrese Salami, Capocollo, Tomatoes, Red Onions,    | The Italian Supreme Pizza        |
| 11 | 11       | 6        | bbq_ckn_s      | 1        | 2015-01-01 | 12:29:36.0000000 | 12.75      | 12.75       | S          | Chicken        | Barbecued Chicken, Red Peppers, Green Peppers, To     | The Barbecue Chicken Pizza       |
| 12 | 12       | 6        | the_greek_s    | 1        | 2015-01-01 | 12:29:36.0000000 | 12         | 12          | S          | Classic        | Kalamata Olives, Feta Cheese, Tomatoes, Garlic, Beef  | The Greek Pizza                  |
| 13 | 13       | 7        | spinach_supr_s | 1        | 2015-01-01 | 12:50:37.0000000 | 12.5       | 12.5        | S          | Supreme        | Spinach, Red Onions, Pepperoni, Tomatoes, Artichoke   | The Spinach Supreme Pizza        |
| 14 | 14       | 8        | spinach_supr_s | 1        | 2015-01-01 | 12:51:37.0000000 | 12.5       | 12.5        | S          | Supreme        | Spinach, Red Onions, Pepperoni, Tomatoes, Artichoke   | The Spinach Supreme Pizza        |
| 15 | 15       | 9        | classic_dlx_s  | 1        | 2015-01-01 | 12:52:01.0000000 | 12         | 12          | S          | Classic        | Pepperoni, Mushrooms, Red Onions, Red Peppers, B      | The Classic Deluxe Pizza         |
| 16 | 16       | 9        | green_garden_s | 1        | 2015-01-01 | 12:52:01.0000000 | 12         | 12          | S          | Veggie         | Spinach, Mushrooms, Tomatoes, Green Olives, Feta C    | The Green Garden Pizza           |
| 17 | 17       | 9        | ital_cpcllo_l  | 1        | 2015-01-01 | 12:52:01.0000000 | 20.5       | 20.5        | L          | Classic        | Capocollo, Red Peppers, Tomatoes, Goat Cheese, Gar    | The Italian Capocollo Pizza      |
| 18 | 18       | 9        | ital_supr_l    | 1        | 2015-01-01 | 12:52:01.0000000 | 20.75      | 20.75       | L          | Supreme        | Calabrese Salami, Capocollo, Tomatoes, Red Onions,    | The Italian Supreme Pizza        |
| 19 | 19       | 9        | ital_supr_s    | 1        | 2015-01-01 | 12:52:01.0000000 | 12.5       | 12.5        | S          | Supreme        | Calabrese Salami, Capocollo, Tomatoes, Red Onions,    | The Italian Supreme Pizza        |
| 20 | 20       | 9        | mexicana_s     | 1        | 2015-01-01 | 12:52:01.0000000 | 12         | 12          | S          | Veggie         | Tomatoes, Red Peppers, Jalapeno Peppers, Red Onio     | The Mexicana Pizza               |

## Basic Data Exploration

select count(\*) as total\_row from pizza\_sales;



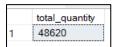
select distinct pizza\_size from pizza\_sales

|   | pizza_size |
|---|------------|
| 1 | S          |
| 2 | L          |
| 3 | XL         |
| 4 | XXL        |
| 5 | M          |

select distinct pizza\_category from pizza\_sales

|   | pizza_category |  |  |  |  |
|---|----------------|--|--|--|--|
| 1 | Chicken        |  |  |  |  |
| 2 | Supreme        |  |  |  |  |
| 3 | Classic        |  |  |  |  |
| 4 | Veggie         |  |  |  |  |
|   |                |  |  |  |  |

select count(quantity) as total\_quantity from pizza\_Sales



--Question\_1 --> Total Revenue
select round(sum(quantity\*unit\_price),2) as total\_Revenue from pizza\_Sales

```
total_Revenue
1 817860.05
```

--Question\_2 --> Average Order Value
Select round(sum(total\_price)/count(distinct order\_id),3) as avg\_order\_val from
pizza\_sales;



```
--Quesion_3 --> Total Pizza Sold select sum(quantity) as total_pizza_sold from pizza_sales

total_pizza_sold
1 49574
```

--Quesion\_4 --> Total Order Placed
select count(distinct order\_id) as total\_order\_paced from pizza\_sales

```
total_order_paced
1 21350
```

--Question\_5 --> Average Pizza's Per Order
select cast(cast(sum(quantity) as decimal (10,2))/count(distinct order\_id) as
decimal(10,2))
as average\_pizza\_order from pizza\_sales

```
total_order_paced
1 21350
```

- --select day(order\_date) as day, cast(count(order\_id) as decimal(10,2)) as  $daily\_Sales\_trend$
- --from pizza\_sales group by day(order\_date) order by day desc
- --Question\_6 --> Daily Trend for total sales
  select DATENAME(DW,order\_date) as order\_day, count(distinct order\_id) as order\_count
  from pizza\_sales group by DATENAME(DW,order\_date)
  - --Datename(DW, column\_name) --> days\_name

|   | order_day | order_count |
|---|-----------|-------------|
| 1 | Saturday  | 3158        |
| 2 | Wednesday | 3024        |
| 3 | Monday    | 2794        |
| 4 | Sunday    | 2624        |
| 5 | Friday    | 3538        |
| 6 | Thursday  | 3239        |
| 7 | Tuesday   | 2973        |
|   |           |             |

--Question\_7 --> Hourly Trend For Total Order
select datepart(hour,order\_time) as order\_hour, count(order\_id) as hourly\_trend
from pizza\_sales group by datepart(hour,order\_time) order by datepart(hour,order\_time)
asc

| order_hour | hourly_trend  |
|------------|---|
| 9          | 4   |
| 10         | 17  |
| 11         | 2672  |
| 12         | 6543  |
| 13         | 6203  |
| 14         | 3521  |
| 15         | 3170  |
| 16         | 4185  |
| 17         | 5143  |
| 18         | 5359  |
| 19         | 4350  |
| 20         | 3487  |
| 21         | 2528  |
| 22         | 1370  |
| 23         | 68  |
|            | 9<br>10<br>11<br>12<br>13<br>14<br>15<br>16<br>17<br>18<br>19<br>20<br>21 |

```
----Question_8 --> Percentage of Sales by Pizza Category

--select pizza_category, cast((sum(total_price)/count(pizza_category))/100 as decimal(10,2))

--as percentage_sales_by_category from pizza_sales

--group by pizza_category

select pizza_category, round(sum(total_price),2) as total_sales, round((sum(total_price) / (Select sum(total_price) from pizza_sales))* 100,2) as percentage_sales_by_category

from pizza_Sales group by pizza_category
```

|   | pizza_category | total_sales | percentage_sales_by_category |
|---|----------------|-------------|------------------------------|
| 1 | Chicken        | 195919.5    | 23.96                        |
| 2 | Supreme        | 208197      | 25.46                        |
| 3 | Classic        | 220053.1    | 26.91                        |
| 4 | Veggie         | 193690.45   | 23.68                        |

--Question\_9 --> Percentage of sales by pizza size
select pizza\_size, round((sum(total\_price)/(Select sum(total\_price)
from pizza\_sales))\*100,2) as precentage\_sales\_by\_pizza\_size
from pizza\_Sales group by pizza\_size

|   | pizza_size | precentage_sales_by_pizza_size |  |  |  |  |  |
|---|------------|--------------------------------|--|--|--|--|--|
| 1 | S          | 21.77                          |  |  |  |  |  |
| 2 | L          | 45.89                          |  |  |  |  |  |
| 3 | XL         | 1.72                           |  |  |  |  |  |
| 4 | XXL        | 0.12                           |  |  |  |  |  |
| 5 | M          | 30.49                          |  |  |  |  |  |

--Question\_10 --> Total Pizzas sold by pizza category
select pizza\_category, round(sum(total\_price),2) as pizza\_sold\_by\_category
from pizza\_sales
group by pizza\_category

|   | pizza_category | pizza_sold_by_category |
|---|----------------|------------------------|
| 1 | Chicken        | 195919.5               |
| 2 | Supreme        | 208197                 |
| 3 | Classic        | 220053.1               |
| 4 | Veggie         | 193690.45              |
|   |                |                        |

--Question\_11 --> Top 5 best sellers by total pizza sold
select Top 5 pizza\_name, sum(quantity)as Top\_5\_pizza\_sold from pizza\_sales
group by pizza\_name order by Top\_5\_pizza\_sold desc;

|   | pizza_name                 | Top_5_pizza_sold |
|---|----------------------------|------------------|
| 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             |

--Question\_12 --> bottom 5 worst sellers by total pizza sold select top 5 pizza\_name, sum(quantity) as Bottom\_5\_pizza\_sold from pizza\_sales group by pizza\_name order by Bottom\_5\_pizza\_sold asc;

|   | _                         |                     |
|---|---------------------------|---------------------|
|   | pizza_name                | Bottom_5_pizza_sold |
| 1 | The Brie Carre Pizza      | 490                 |
| 2 | The Mediterranean Pizza   | 934                 |
| 3 | The Calabrese Pizza       | 937                 |
| 4 | The Spinach Supreme Pizza | 950                 |
| 5 | The Soppressata Pizza     | 961                 |

