SQL Queries for Pizza Sales

A. KPI's

1. Total Revenue

```
SELECT ROUND((SUM(total_price)/1000),1) AS Total_revenue FROM pizza_sales;
```

Output 1:

	total_revenue numeric
1	817.9

2. Total Pizzas Sold

Output 2:

SELECT ROUND((SUM(quantity)/1000.0),1) AS Total_pizzas_sold FROM pizza_sales;

	total_pizzas_sold numeric
1	49.6

3. Total Orders

Output 3:

SELECT ROUND((COUNT(DISTINCT(order_id))/1000.0),1) AS Total_orders FROM pizza_sales;

	total_orders numeric
1	21.4

4. Average Pizzas Per Order

Output 4:

SELECT ROUND((SUM(quantity)*1.0/COUNT(DISTINCT(order_id))),2) AS Avg_Pizzas_Per_order FROM pizza_sales;

	avg_pizzas_per_order numeric
1	2.32

5. Average Order Value

Output 5:

SELECT ROUND((SUM(total_price)*1.0/COUNT(DISTINCT(order_id))),2) AS Avg_Order_Value FROM pizza_sales;

	avg_order_value numeric
1	38.31

B. Hourly Trend for Total Pizzas Sold

SELECT date_part('hour',order_time) AS Hour_in, ROUND(SUM(quantity)/1000.0,1) AS pizzas_sold FROM pizza_sales GROUP BY date_part('hour',order_time) ORDER BY 1;

Output:

	hour_in double precision	pizzas_sold numeric
1	9	0.0
2	10	0.0
3	11	2.7
4	12	6.8
5	13	6.4
6	14	3.6
7	15	3.2
8	16	4.2
9	17	5.2
10	18	5.4
11	19	4.4
12	20	3.5
13	21	2.5
14	22	1.4
15	23	0.1

C. Weekly Trend for Orders

```
SELECT date_part('week',order_date),date_part('year',order_date),COUNT(DISTINCT(order_id))
FROM pizza_sales  GROUP BY date_part('week',order_date),date_part('year',order_date);
```

Output :

	date_part double precision	date_part double precision	count bigint
1	1	2015	254
2	2	2015	427
3	3	2015	400
4	4	2015	415
5	5	2015	436
6	6	2015	422
7	7	2015	423
8	8	2015	393
9	9	2015	409
10	10	2015	420
11	11	2015	404
12	12	2015	416
13	13	2015	427
14	14	2015	433
15	15	2015	408
16	16	2015	414
17	17	2015	437
18	18	2015	423
19	19	2015	399
20	20	2015	458
21	21	2015	414
22	22	2015	390

WITH valuess(week,yr,ord) AS (SELECT date_part('week',order_date),date_part('year',order_date),COUNT(DISTINCT(order_id)) FROM pizza_sales GROUP BY date_part('week',order_date),date_part('year',order_date)) SELECT ROUND(SUM(ord)*1.0/count(week),1) AS avge,MAX(ord) AS max_ord,MIN(ord) AS min_ord FROM valuess;

Output :

	avge numeric	max_ord bigint	min_ord bigint
1	402.8	491	171

D. % of sales by Pizza Category

SELECT pizza_category,ROUND(SUM(total_price)/1000,2) AS Total_revenue, CAST(ROUND((SUM(total_price)/(SELECT SUM(total_price) FROM pizza_sales))*100,2)AS VARCHAR(10))||'%' AS percent_of_sales FROM pizza_sales GROUP BY pizza_category;

Output :

	pizza_category character varying (50)	total_revenue numeric	percent_of_sales text
1	Supreme	208.20	25.46%
2	Chicken	195.92	23.96%
3	Veggie	193.69	23.68%
4	Classic	220.05	26.91%

E. % of sales by Pizza Size

SELECT CASE WHEN pizza_size='M' THEN 'Medium' WHEN pizza_size='L' THEN 'Large' WHEN pizza_size='S' THEN 'Small' WHEN pizza_size='XL' THEN 'X - Large' WHEN pizza_size='XXL' THEN 'XX - Large' END AS pizza_size, CAST(ROUND((SUM(total_price)/(SELECT SUM(total_price) FROM pizza_sales))*100,1)AS VARCHAR(10))||'%' AS percent_of_revenue FROM pizza_sales GROUP BY pizza_size ORDER BY 2 DESC;

Output :

	pizza_size text	percent_of_revenue text
1	Large	45.9%
2	Medium	30.5%
3	Small	21.8%
4	X - Large	1.7%
5	XX - Large	0.1%

F. Total Pizzas sold by Pizza category

SELECT pizza_category,SUM(quantity) AS Total_Pizzas_Sold, COUNT(DISTINCT(order_id)) AS Total_orders FROM pizza_sales GROUP BY pizza_category;

Output :

	pizza_category character varying (50)	total_pizzas_sold bigint	total_orders bigint
1	Chicken	11050	8536
2	Classic	14888	10859
3	Supreme	11987	9085
4	Veggie	11649	8941

G. Top 5 & Bottom 5 Pizzas by Revenue

SELECT pizza_name,ROUND(SUM(total_price)/1000.0,2) AS total_revenue FROM pizza_sales GROUP BY pizza_name ORDER BY total_revenue DESC LIMIT 5;

Output :

	pizza_name character varying (50)	total_revenue numeric
1	The Thai Chicken Pizza	43.43
2	The Barbecue Chicke...	42.77
3	The California Chicke...	41.41
4	The Classic Deluxe Pi...	38.18
5	The Spicy Italian Pizza	34.83

SELECT pizza_name,ROUND(SUM(total_price)/1000.0,2) AS total_revenue FROM pizza_sales GROUP BY pizza_name ORDER BY total_revenue ASC LIMIT 5;

Output :

	pizza_name character varying (50)	total_revenue numeric
1	The Brie Carre Pizza	11.59
2	The Green Garden Pizza	13.96
3	The Spinach Supreme Pizza	15.28
4	The Mediterranean Pizza	15.36
5	The Spinach Pesto Pizza	15.60

H. Top 5 & Bottom 5 Pizzas by Quantity

SELECT pizza_name,ROUND((SUM(quantity)/1000.0),2) AS total_quantity FROM pizza_sales GROUP BY pizza_name ORDER BY total_quantity DESC LIMIT 5;

Output :

	pizza_name character varying (50)	total_quantity numeric
1	The Classic Deluxe Pizza	2.45
2	The Barbecue Chicken Pi...	2.43
3	The Pepperoni Pizza	2.42
4	The Hawaiian Pizza	2.42
5	The Thai Chicken Pizza	2.37

SELECT pizza_name,SUM(quantity) AS total_quantity FROM pizza_sales GROUP BY pizza_name ORDER BY total_quantity ASC LIMIT 5;

Output :

	pizza_name character varying (50)	total_quantity bigint
1	The Brie Carre Pizza	490
2	The Mediterranean Pizza	934
3	The Calabrese Pizza	937
4	The Spinach Supreme Piz...	950
5	The Soppressata Pizza	961

I. Top 5 & Bottom 5 Pizzas by Total Orders

SELECT pizza_name,COUNT(DISTINCT(order_id)) AS total_orders FROM pizza_sales GROUP BY pizza_name ORDER BY total_orders DESC LIMIT 5;

Output :

	pizza_name character varying (50)	total_orders bigint
1	The Classic Deluxe Pizza	2329
2	The Hawaiian Pizza	2280
3	The Pepperoni Pizza	2278
4	The Barbecue Chicken Pi...	2273
5	The Thai Chicken Pizza	2225

SELECT pizza_name,COUNT(DISTINCT(order_id)) AS total_orders FROM pizza_sales GROUP BY pizza_name ORDER BY total_orders ASC LIMIT 5;

Output :

	pizza_name character varying (50)	total_orders bigint
1	The Brie Carre Pizza	480
2	The Mediterranean Pizza	912
3	The Calabrese Pizza	918
4	The Spinach Supreme Piz...	918
5	The Chicken Pesto Pizza	938

J. Filter_Check

SELECT ROUND(SUM(quantity)/1000.0,1) AS pizzas_sold

FROM pizza_sales WHERE date_part('hour',order_time)=18 AND pizza_category='Chicken';

Output :

	pizzas_sold numeric
1	1.2

Tableau Report :

WITH valuess(week,yr,ord) AS

(SELECT date_part('week',order_date),date_part('year',order_date),COUNT(DISTINCT(order_id)) FROM pizza_sales WHERE date_part('hour',order_time)=18 AND pizza_category='Chicken' GROUP BY date_part('week',order_date),date_part('year',order_date)) SELECT ROUND(SUM(ord)*1.0/count(week),1) AS avge,MAX(ord) AS max_ord,MIN(ord) AS min_ord FROM valuess;

Output :

	avge numeric	max_ord bigint	min_ord bigint
1	18.5	28	7

SELECT ROUND((SUM(total_price)/1000),2) AS Total_revenue FROM pizza_sales WHERE date_part('hour',order_time)=18 AND pizza_category='Chicken';

Output :

	total_revenue numeric
1	21.45