PIZZA SALES ANALYSIS

SURYAKANT RANJAN

1) RETRIEVE THE TOTAL NUMBER OF ORDERS PLACED.

QUERY :-

```
SELECT COUNT(*) AS "COUNT OF ORDERS" FROM ORDERS;
```

OUTPUT :-

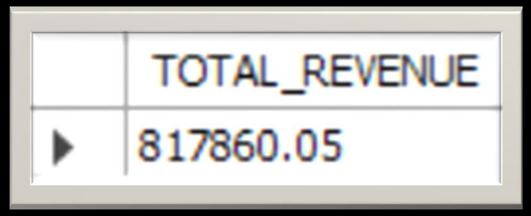
	COUNT OF ORDERS
▶	21350

2) CALCULATE THE TOTAL REVENUE GENERATED FROM PIZZA SALES.

QUERY :-

```
SELECT ROUND(SUM(ORDER_DETAILS.QUANTITY * PIZZAS.PRICE),2) AS TOTAL_REVENUE
FROM PIZZAS
INNER JOIN ORDER_DETAILS
ON ORDER_DETAILS.PIZZA_ID = PIZZAS.PIZZA_ID;
```

OUTPUT :-



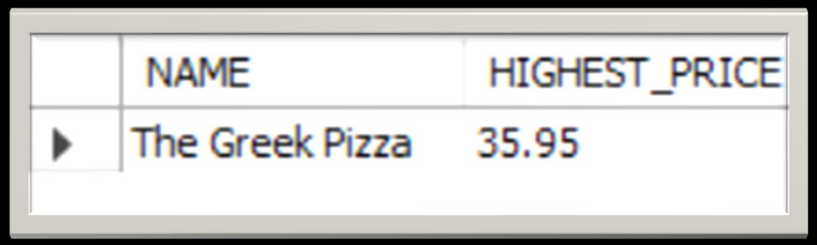
	TOTAL_REVENUE
▶	817860.05

3) IDENTIFY THE HIGHEST PRICED PIZZA.

QUERY :-

```
SELECT PIZZA_TYPES.NAME ,PIZZAS.PRICE AS HIGHEST_PRICE FROM PIZZAS
INNER JOIN PIZZA_TYPES
ON PIZZAS.PIZZA_TYPE_ID = PIZZA_TYPES.PIZZA_TYPE_ID
ORDER BY PRICE DESC
LIMIT 1;
```

OUTPUT :-



	NAME	HIGHEST_PRICE
▶	The Greek Pizza	35.95

4) IDENTIFY THE MOST COMMON PIZZA SIZE ORDERED.

QUERY :-

```
SELECT pizzas.SIZE ,COUNT(order_details.quantity) AS QUANTITY_ORDERED
FROM order_details
INNER JOIN pizzas
ON order_details.PIZZA_ID = PIZZAS.PIZZA_ID
GROUP BY SIZE
ORDER BY QUANTITY_ORDERED DESC
LIMIT 1;
```

OUTPUT :-

	SIZE	QUANTITY_ORDERED
▶	L	18526

5) LIST THE TOP 5 MOST ORDERED PIZZA TYPES ALONG WITH THEIR QUANTITIES.

QUERY :-

```sql
SELECT PIZZA_TYPES.NAME ,SUM(ORDER_details.quantity) AS COUNT_OF_QUANTITY
from PIZZA_TYPES
INNER JOIN  PIZZAS
ON PIZZAS.PIZZA_TYPE_ID = PIZZA_TYPES.PIZZA_TYPE_ID
INNER JOIN ORDER_details
ON ORDER_details.PIZZA_ID = PIZZAS.PIZZA_ID
GROUP BY PIZZA_TYPES.NAME
ORDER BY COUNT_OF_QUANTITY DESC
LIMIT 5;
```

OUTPUT :-

NAME	COUNT_OF_QUANTITY
The Classic Deluxe Pizza	2453
The Barbecue Chicken Pizza	2432
The Hawaiian Pizza	2422
The Pepperoni Pizza	2418
The Thai Chicken Pizza	2371

6) JOIN THE NECESSARY TABLES TO FIND THE TOTAL QUANTITY OF EACH PIZZA CATEGORY ORDERED.

QUERY :-

```
SELECT PIZZA_TYPES.CATEGORY ,SUM(ORDER_DETAILS.QUANTITY) AS "COUNT OF CATEGORY"
FROM  ORDER_DETAILS
INNER JOIN PIZZAS
ON PIZZAS.PIZZA_ID = ORDER_DETAILS.PIZZA_ID
INNER JOIN PIZZA_TYPES
ON PIZZAS.PIZZA_TYPE_ID  = PIZZA_TYPES.PIZZA_TYPE_ID
GROUP BY CATEGORY;
```

OUTPUT :-

CATEGORY	COUNT OF CATEGORY
Classic	14888
Veggie	11649
Supreme	11987
Chicken	11050

7) DETERMINE THE DISTRIBUTION OF ORDERS BY HOUR OF THE DAY.

QUERY :-

```
SELECT hour(TIME) ,SUM(ORDER_ID) FROM ORDERS
GROUP BY HOUR(TIME)
ORDER BY HOUR(TIME);
```

OUTPUT :-

hour(TIME)	SUM(ORDER_ID)
9	19176
10	73999
11	13336362
12	26929470
13	26615205
14	14867592
15	15634879
16	20551671

8) FIND THE CATEGORY-WISE DISTRIBUTION OF PIZZAS.

QUERY :-

```
SELECT PIZZA_TYPES.CATEGORY ,COUNT(PIZZA_TYPES.NAME) AS COUNT_OF_NAME
FROM PIZZA_TYPES
GROUP BY CATEGORY;
```

OUTPUT :-

CATEGORY	COUNT_OF_NAME
Chicken	6
Classic	8
Supreme	9
Veggie	9

9) GROUP THE ORDERS BY DATE AND CALCULATE THE AVERAGE NUMBER OF PIZZAS ORDERED PER DAY.

QUERY :-

```
SELECT ROUND(AVG(ORDERS),0) AVG_QUANTIY FROM
(SELECT day(ORDERS.ORDER_DATE) ,ROUND(SUM(ORDER_DETAILS.QUANTITY),2) AS ORDERS FROM ORDERS
INNER JOIN ORDER_DETAILS
ON ORDERS.ORDER_ID = ORDER_DETAILS.ORDER_ID
GROUP BY day(ORDERS.ORDER_DATE)) AS ORDER_QUANTITY;
```

OUTPUT :-

	AVG_QUANTIY
▶	1599

10) DETERMINE THE TOP 3 MOST ORDERED PIZZA TYPES BASED ON REVENUE.

QUERY :-

```
SELECT PIZZA_TYPES.NAME , ROUND(SUM(ORDER_DETAILS.QUANTITY * PIZZAS.PRICE),2) AS REVENUE
FROM PIZZA_TYPES
INNER JOIN PIZZAS
ON PIZZA_TYPES.PIZZA_TYPE_ID = PIZZAS.PIZZA_TYPE_ID
INNER JOIN ORDER_DETAILS
ON ORDER_DETAILS.PIZZA_ID = PIZZAS.PIZZA_ID
GROUP BY NAME
ORDER BY REVENUE DESC
LIMIT 3;
```

OUTPUT :-

NAME	REVENUE
The Thai Chicken Pizza	43434.25
The Barbecue Chicken Pizza	42768
The California Chicken Pizza	41409.5

11) CALCULATE THE PERCENTAGE CONTRIBUTION OF EACH PIZZA TYPE TO TOTAL REVENUE.

QUERY :-

```
SELECT PIZZA_TYPES.CATEGORY ,ROUND(SUM(ORDER_DETAILS.QUANTITY * PIZZAS.PRICE) /
(SELECT ROUND(SUM(ORDER_DETAILS.QUANTITY * PIZZAS.PRICE),2) FROM PIZZAS
INNER JOIN ORDER_DETAILS
ON PIZZAS.PIZZA_ID = ORDER_DETAILS.PIZZA_ID) *100,2) AS REVENUE
FROM PIZZA_TYPES
INNER JOIN PIZZAS
ON PIZZA_TYPES.PIZZA_TYPE_ID = PIZZAS.PIZZA_TYPE_ID
INNER JOIN ORDER_DETAILS
ON PIZZAS.PIZZA_ID = ORDER_DETAILS.PIZZA_ID
GROUP BY CATEGORY;
```

OUTPUT :-

CATEGORY	REVENUE
Classic	26.91
Veggie	23.68
Supreme	25.46
Chicken	23.96

12) ANALYZE THE CUMULATIVE REVENUE GENERATED OVER TIME.

QUERY :-

```
SELECT ORDER_DATE ,SUM(REVENUE) OVER(ORDER BY ORDER_DATE) AS CUMULATIVE_REVENUE FROM
(SELECT ORDERS.ORDER_DATE ,ROUND(SUM(ORDER_DETAILS.QUANTITY * PIZZAS.PRICE)) AS REVENUE
FROM ORDERS
INNER JOIN ORDER_DETAILS
ON ORDERS.ORDER_ID = ORDER_DETAILS.ORDER_ID
INNER JOIN PIZZAS
ON ORDER_DETAILS.PIZZA_ID = PIZZAS.PIZZA_ID
GROUP BY ORDER_DATE) AS SALES;
```

OUTPUT :-

ORDER_DATE	CUMULATIVE_REVENUE
2015-01-01	2714
2015-01-02	5446
2015-01-03	8108
2015-01-04	9863
2015-01-05	11929
2015-01-06	14358
2015-01-07	16560
2015-01-08	19398

13) DETERMINE THE TOP 3 MOST ORDERED PIZZA TYPES BASED ON REVENUE FOR EACH PIZZA CATEGORY.

QUERY :-

```
select name ,ROUND(revenue) AS 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 ORDER_DETAILS
INNER JOIN PIZZAS
ON ORDER_DETAILS.PIZZA_ID = PIZZAS.PIZZA_ID
INNER JOIN PIZZA_TYPES
ON PIZZA_TYPES.PIZZA_TYPE_ID = PIZZAS.PIZZA_TYPE_ID
GROUP BY CATEGORY,NAME) AS A) AS B
WHERE RN <= 3;
```

OUTPUT :-

name	REVENUE
The Thai Chicken Pizza	43434
The Barbecue Chicken Pizza	42768
The California Chicken Pizza	41410
The Classic Deluxe Pizza	38180
The Hawaiian Pizza	32273
The Pepperoni Pizza	30162
The Spicy Italian Pizza	34831
The Italian Supreme Pizza	33477

THANK YOU

SURYAKANT RANJAN