

PIZZA RESTAURANT

PIZZA SALES ANALYSIS USING SQL



TASTY
AND
YUMMY



I HAVE USED TOTAL 4 TABLES TO DETERMINE DIFFERENT MEASURES OF PIZZA SALES ;
NAMED --> PIZZAS, PIZZA_TYPES, ORDERS AND ORDER_DETAILS

```
SELECT * FROM pizza_db.pizzas;
```

	pizza_id	pizza_type_id	size	price
▶	bbq_ckn_s	bbq_ckn	S	12.75
	bbq_ckn_m	bbq_ckn	M	16.75
	bbq_ckn_l	bbq_ckn	L	20.75
	cali_ckn_s	cali_ckn	S	12.75
	cali_ckn_m	cali_ckn	M	16.75

```
SELECT * FROM pizza_db.pizza_types;
```

	pizza_type_id	name	category	ingredients
	bbq_ckn	The Barbecue Chicken Pizza	Chicken	Barbecued Chicken, Red Peppers
	cali_ckn	The California Chicken Pizza	Chicken	Chicken, Artichoke, Spinach, Garlic
	cfn_alfredo	The Chicken Alfredo Pizza	Chicken	Chicken, Red Onions, Red Pepper
	cfn_pesto	The Chicken Pesto Pizza	Chicken	Chicken, Tomatoes, Red Peppers
	southw_ckn	The Southwest Chicken Pizza	Chicken	Chicken, Tomatoes, Red Peppers



ORDERS AND ORDER_DETAILS TABLES :

```
SELECT * FROM pizza_db.orders;
```

	order_id	order_date	order_time
▶	1	2015-01-01	11:38:36
	2	2015-01-01	11:57:40
	3	2015-01-01	12:12:28
	4	2015-01-01	12:16:31
	5	2015-01-01	12:21:30

```
SELECT * FROM pizza_db.order_details;
```

	order_details_id	order_id	pizza_id	quantity
▶	1	1	hawaiian_m	1
	2	2	dassic_dlx_m	1
	3	2	five_cheese_l	1
	4	2	ital_supr_l	1
	5	2	mexicana_m	1

Q1

RETRIEVE THE TOTAL NUMBER OF ORDERS PLACED

```
select count(order_id) as TOTAL_ORDERS from orders;
```

Result Grid	
	TOTAL_ORDERS
▶	21350



Q2

RETRIEVE DISTINCT PIZZA TYPE ORDERED

```
select count(distinct(pizza_id)) TYPE_OF_PIZZA from order_details;
```

	TYPE_OF_PIZZA
▶	91



Q3

RETRIEVE NUMBER OF PIZZA ORDERED WHERE PIZZA_SIZE='XXL' . . . AND IT'S PIZZA_ID

```
select pizza_id, count(pizza_id) as PIZZA_COUNT  
from order_details  
where pizza_id like '%_xxl'  
group by pizza_id  
order by PIZZA_COUNT desc;
```

Result Grid | Filter Rows:

	pizza_id	PIZZA_COUNT
▶	the_greek_xxld	28



Q 4

CALCULATE THE TOTAL REVENUE GENERATED FROM PIZZA SALES--> ROUNDED UPTO
2 DECIMAL PLACES

```
select
round(sum(od.quantity*pz.price),2) as TOTAL_REVENUE_GENERATED
from order_details od
join pizzas pz
on pz.pizza_id=od.pizza_id;
```

Result Grid	
	Filter Rows:
	TOTAL_REVENUE_GENERATED
▶	817860.05



Q 5

RETRIEVE THE PIZZA TYPES WHERE SPECIAL INGREDIENTS-->'MUSHROOMS' AND 'PEPPERONI' USED

```
select pizza_type_id, name, ingredients from pizza_types  
where ingredients like '%Mushrooms%'  
and ingredients like '%Pepperoni%';
```

	pizza_type_id	name	ingredients
▶	classic_dlx	The Classic Deluxe Pizza	Pepperoni, Mushrooms, Red Onions, Red Pepe...
	pep_msh_pep	The Pepperoni, Mushroom, and Peppers Pizza	Pepperoni, Mushrooms, Green Peppers



Q 6

FIND THE NUMBER OF PIZZAS IN DIFFERENT CATEGORIES

```
select category, count(pizza_type_id) as PIZZA_COUNT  
from pizza_types  
group by category  
order by PIZZA_COUNT desc;
```

Result Grid | Filter Rows:

	category	PIZZA_COUNT
▶	Supreme	9
	Veggie	9
	Classic	8
	Chicken	6



Q 7

IDENTIFY THE HIGHEST-PRICED PIZZA

```
select pt.name, pz.price  
from pizza_types pt  
join pizzas pz  
on pt.pizza_type_id=pz.pizza_type_id  
order by pz.price desc  
limit 1;
```

Result Grid | Filter Rows:

	name	price
▶	The Greek Pizza	35.95



Q 8

IDENTIFY THE TOP 3 HIGHEST-PRICED PIZZA AND REVENUE GENERATED FROM IT

```
select pt.name, pz.price, round(sum(odd.quantity*pz.price),2) as REVENUE_GENERATED  
from pizza_types pt  
join pizzas pz  
on pt.pizza_type_id=pz.pizza_type_id  
join order_details odd  
on pz.pizza_id=odd.pizza_id  
group by pt.name,pz.price  
order by pz.price desc  
limit 3;
```

	name	price	REVENUE_GENERATED
▶	The Greek Pizza	35.95	1006.6
▶	The Greek Pizza	25.5	14076
▶	The Brie Carre Pizza	23.65	11588.5



Q 9

IDENTIFY THE MOST COMMON PIZZA SIZE ORDERED

```
select pz.size, count(od.order_details_id) as NO_OF_ORDERS  
from pizzas pz  
join order_details od  
on pz.pizza_id=od.pizza_id  
group by pz.size  
order by NO_OF_ORDERS desc  
limit 1;
```

Result Grid | Filter Rows

	size	NO_OF_ORDERS
▶	L	18526



Q 10

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

```
select pt.name,sum(od.quantity) as COUNT_PIZZA  
from pizza_types pt  
join pizzas pz  
on pt.pizza_type_id=pz.pizza_type_id  
join order_details od  
on od.pizza_id=pz.pizza_id  
group by pt.name  
order by COUNT_PIZZA desc  
limit 5;
```

	name	COUNT_PIZZA
▶	The Classic Deluxe Pizza	2453
	The Barbecue Chicken Pizza	2432
	The Hawaiian Pizza	2422
	The Pepperoni Pizza	2418
	The Thai Chicken Pizza	2371



Q 11

FIND THE TOTAL QUANTITY OF EACH PIZZA CATEGORY ORDERED

```
select pt.category,sum(od.quantity) as NO_OF_PIZZAS  
from pizza_types pt  
join pizzas pz  
on pt.pizza_type_id=pz.pizza_type_id  
join order_details od  
on od.pizza_id=pz.pizza_id  
group by pt.category  
order by NO_OF_PIZZAS desc;
```

Result Grid | Filter Rows:

	category	NO_OF_PIZZAS
▶	Classic	14888
	Supreme	11987
	Veggie	11649
	Chicken	11050



Q 12

DETERMINE THE DISTRIBUTION OF ORDERS BY HOUR OF THE DAY

```
select hour(order_time) as HOUR_OF_DAY, count(order_id) as NO_OF_ORDERS  
from orders  
group by HOUR_OF_DAY  
order by HOUR_OF_DAY;
```

	HOUR_OF_DAY	NO_OF_ORDERS
▶	9	1
	10	8
	11	1231
	12	2520
	13	2455
	14	1472
	15	1468
	16	1920
	17	2336
	18	2399
	19	2009
	20	1642
	21	1198
	22	663
	23	28



Q 13

DETERMINE THE TOP 5 DISTRIBUTION OF ORDERS BY HOUR OF THE DAY

```
select hour(order_time) as HOUR_OF_DAY, count(order_id) as NO_OF_ORDERS  
from orders  
group by HOUR_OF_DAY  
order by NO_OF_ORDERS desc  
limit 5;
```

Result Grid | Filter Rows:

	HOUR_OF_DAY	NO_OF_ORDERS
▶	12	2520
	13	2455
	18	2399
	17	2336
	19	2009



Q14 GROUP THE ORDERS BY DATE AND CALCULATE THE AVERAGE NUMBER OF PIZZAS ORDERED PER DAY

```
select round(avg(COUNT_QUANTITY),0) as AVG_QT_PER_DAY from  
(select od.order_date,sum(odd.quantity) as COUNT_QUANTITY  
from orders od  
join order_details odd  
on od.Order_id=odd.order_id  
group by od.order_date) as odr_quantity;
```

	AVG_QT_PER_DAY
▶	138



Q 15

CALCULATE THE TOP 10 DAYS WHEN MAXIMUM PIZZA ORDERED

```
select od.order_date,sum(odd.quantity) as COUNT_QUANTITY  
from orders od  
join order_details odd  
on od.Order_id=odd.order_id  
group by od.order_date  
order by COUNT_QUANTITY desc limit 10;
```

	order_date	COUNT_QUANTITY
▶	2015-11-26	266
	2015-11-27	264
	2015-10-15	262
	2015-07-04	234
	2015-07-03	213
	2015-05-15	208
	2015-07-24	196
	2015-10-01	194
	2015-02-01	191
	2015-11-06	190

Q 16

FIND THE TOTAL PIZZA ORDERED AND REVENUE GENERATED MONTH WISE AND REVENUE EARNED >70000 .

```
select monthname(od.order_date) as MONTH,sum(odd.quantity) as NO_OF_PIZZA,  
round(sum(odd.quantity*pz.price),2) as REVENUE_EARNED  
from orders od  
join order_details odd  
on od.Order_id=odd.order_id  
join pizzas pz  
on pz.pizza_id=odd.pizza_id  
group by MONTH  
having REVENUE_EARNED>70000  
order by REVENUE_EARNED desc;
```

	MONTH	NO_OF_PIZZA	REVENUE_EARNED
▶	July	4392	72557.9
	May	4328	71402.75
	March	4261	70397.1
	November	4266	70395.35

Q 17

DETERMINE THE TOP 5 MOST ORDERED PIZZA TYPES BASED ON REVENUE

```
select pt.name,  
       sum(odd.quantity*pz.price) as REVENUE  
  from pizza_types pt  
  join pizzas pz  
  on pz.pizza_type_id=pt.pizza_type_id  
  join order_details odd  
  on odd.pizza_id=pz.pizza_id  
 group by pt.name  
 order by REVENUE desc  
 limit 5;
```

Result Grid | Filter Rows:

	name	REVENUE
▶	The Thai Chicken Pizza	43434.25
	The Barbecue Chicken Pizza	42768
	The California Chicken Pizza	41409.5
	The Classic Deluxe Pizza	38180.5
	The Spicy Italian Pizza	34831.25

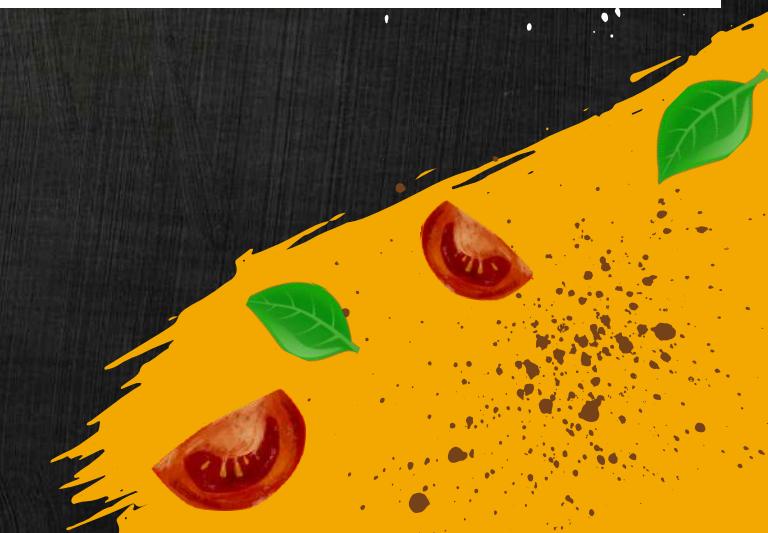


Q 18

CALCULATE THE PERCENTAGE CONTRIBUTION OF EACH PIZZA TYPE TO TOTAL REVENUE

```
select pt.category,  
round((sum(odd.quantity*pz.price)  
/(select round(sum(odd.quantity*pz.price),2) as total_sales  
from order_details odd  
join pizzas pz  
on pz.pizza_id=odd.pizza_id))*100,2) as REVENUE_PERCENTAGE  
from pizza_types pt  
join pizzas pz  
on pz.pizza_type_id=pt.pizza_type_id  
join order_details odd  
on odd.pizza_id=pz.pizza_id  
group by pt.category  
order by REVENUE_PERCENTAGE desc;
```

	category	REVENUE_PERCENTAGE
▶	Classic	26.91
	Supreme	25.46
	Chicken	23.96
	Veggie	23.68



Q19

CALCULATE THE PERCENTAGE CONTRIBUTION OF EACH PIZZA TYPE TO TOTAL REVENUE

```
select order_date,  
sum(REVENUE) over(order by order_date) as CUMULATIVE_REV  
from  
(select od.order_date,  
round(sum(odd.quantity*pz.price),2) as REVENUE  
from order_details odd  
join pizzas pz  
on odd.pizza_id=pz.pizza_id  
join orders od  
on od.order_id=odd.order_id  
group by od.order_date) as sales_table ;
```

Result Grid | Filter Rows:

	order_date	CUMULATIVE_REV
▶	2015-01-01	2713.85
	2015-01-02	5445.75
	2015-01-03	8108.15
	2015-01-04	9863.6
	2015-01-05	11929.55



Q20

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

```
select category, name, REVENUE, RNK
from
(select category, name, REVENUE,
rank() over(partition by category order by REVENUE desc) as RNK
from
(select pt.category, pt.name,
round(sum(odd.quantity*pz.price),2) as REVENUE
from pizza_types pt
join pizzas pz
on pt.pizza_type_id=pz.pizza_type_id
join order_details odd
on odd.pizza_id=pz.pizza_id
group by pt.category, pt.name) as a)
where RNK<=3;
```

		category	name	REVENUE	RNK
▶	Chicken	The Thai Chicken Pizza	43434.25	1	
	Chicken	The Barbecue Chicken Pizza	42768	2	
	Chicken	The California Chicken Pizza	41409.5	3	
	Classic	The Classic Deluxe Pizza	38180.5	1	
	Classic	The Hawaiian Pizza	32273.25	2	
	Classic	The Pepperoni Pizza	30161.75	3	
	Supreme	The Spicy Italian Pizza	34831.25	1	
	Supreme	The Italian Supreme Pizza	33476.75	2	
	Supreme	The Sicilian Pizza	30940.5	3	
	Veggie	The Four Cheese Pizza	32265.7	1	
	Veggie	The Mexicana Pizza	26780.75	2	
	Veggie	The Five Cheese Pizza	26066.5	3	