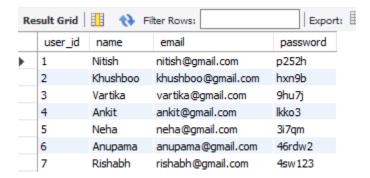
# Table 1

# <mark>Users</mark>



# Table 2

# **Orders**

Re	sult Grid	₩ ₩	Filter Ro	ws:		Export:	Wrap Cell Conte	nt: <u>‡A</u>	
	order_id	user_id	r_id	amount	date	partner_id	delivery_time	delivery_rating	restaurant_rating
•	1001	1	1	550	2022-05-10	1	25	5	3
	1002	1	2	415	2022-05-26	1	19	5	2
	1003	1	3	240	2022-06-15	5	29	4	
	1004	1	3	240	2022-06-29	4	42	3	5
	1005	1	3	220	2022-07-10	1	58	1	4
	1006	2	1	950	2022-06-10	2	16	5	
	1007	2	2	530	2022-06-23	3	60	1	5
	1008	2	3	240	2022-07-07	5	33	4	5
	1009	2	4	300	2022-07-17	4	41	1	
	1010	2	5	650	2022-07-31	1	67	1	4
	1011	3	1	450	2022-05-10	2	25	3	1
	1012	3	4	180	2022-05-20	5	33	4	1
	1013	3	2	230	2022-05-30	4	45	3	
	1014	3	2	230	2022-06-11	2	55	1	2
	1015	3	2	230	2022-06-22	3	21	5	
	1016	4	4	300	2022-05-15	3	31	5	5
	1017	4	4	300	2022-05-30	1	50	1	
	1018	4	4	400	2022-06-15	2	40	3	5
	1019	4	5	400	2022-06-30	1	70	2	4
	1020	4	5	400	2022-07-15	3	26	5	3
	1021	5	1	550	2022-07-01	5	22	2	
	1022	5	1	550	2022-07-08	1	34	5	1

Table 3

**Order\_details** 

Re	sult Grid		Filter Rows:
	id	order_id	f_id
•	1	1001	1
	2	1001	3
	3	1002	4 .
	4	1002	3
	5	1003	6
	6	1003	3
	7	1004	6
	8	1004	3
	9	1005	7
	10	1005	3
	11	1006	1
	12	1006	2
	13	1006	3
	14	1007	4
	15	1007	3
	16	1008	6
	17	1008	3
	18	1009	8
	19	1009	9
	20	1010	10
	21	1010	11
	22	1010	6

# Table 4

# **Food**

Re	Result Grid				
	f_id	f_name	type		
•	1	Non-veg Pizza	Non-veg		
	2	Veg Pizza	Veg		
	3	Choco Lava cake	Veg		
	4	Chicken Wings	Non-veg		
	5	Chicken Popcorn	Non-veg		
	6	Rice Meal	Veg		
	7	Roti meal	Veg		
	8	Masala Dosa	Veg		
	9	Rava Idli	Veg		
	10	Schezwan Noodles	Veg		
	11	Veg Manchurian	Veg		

# Table 5

**Restaurants** 

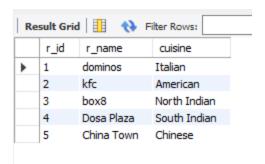


Table 6

# **Menu**

Result Grid				
	menu_id	r_id	f_id	price
•	1	1	1	450
	2	1	2	400
	3	1	3	100
	4	2	3	115
	5	2	4	230
	6	2	5	300
	7	3	3	80
	8	3	6	160
	9	3	7	140
	10	4	6	230
	11	4	8	180
	12	4	9	120
	13	5	6	250
	14	5	10	220
	15	5	11	180

### **QUESTIONS**

- 1. Find customers who have never ordered
- 2. Average Price/dish
- 3. Find the top restaurant in terms of the number of orders for a given month
- 4. restaurants with monthly sales greater than x for
- 5. Show all orders with order details for a particular customer in a particular date range
- 6. Find restaurants with max repeated customers
- 7. Month over month revenue growth of Swiggy
- 8. Customer favourite food
- 9. Find the most loyal customers for all restaurant
- 10. Month-over-month revenue growth of a restaurant
- 11. most order paired item

## **Solutions**

### -- find customers who never ordered

SELECT users.user\_id,name,email FROM users

LEFT JOIN orders ON users.user\_id = orders.user\_id

WHERE orders.user\_id IS NULL;

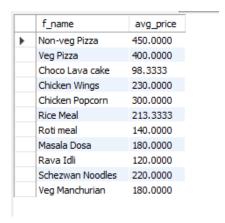


### -- find the avg price per dish

SELECT f name, avg(price) AS avg price FROM food

JOIN menu ON food.f\_id = menu.f\_id

GROUP BY f name;



### -- find top restaurant in terms of orders for a given month (assuming the month as June)

SELECT r name, most orders FROM

(SELECT MONTHNAME(date) AS months,r\_name,count(user\_id) AS most\_orders FROM restaurants

JOIN orders ON orders.r\_id = restaurants.r\_id

GROUP BY MONTHNAME(date),r\_name) restaurants

WHERE months LIKE 'june'

### ORDER BY most\_orders DESC LIMIT 1

# -- restaurants with monthly sales > x(any threshold value) (lets assume the month as july and x value as 1000)

SELECT r\_name,total\_amount FROM

(SELECT r\_name, MONTHNAME (date) as months, SUM(amount) as total\_amount FROM restaurants

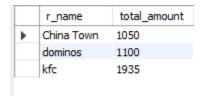
JOIN orders ON orders.r id = restaurants.r id

GROUP BY MONTHNAME(date), r\_name

HAVING total\_amount > 1000

)restaurants

### WHERE months LIKE 'july';



# -- show all orders with order details for a particular customer in a particular date range (HERE I AM SHOWING DETAILS OF USER "ANKIT" WHOSE USER\_ID IS 4)

select users.user\_id,orders.order\_id,name,f\_name,r\_name,amount,date from users

left join orders on users.user\_id = orders.user\_id

left join order\_details on orders.order\_id = order\_details.order\_id

left join food on order\_details.f\_id = food.f\_id

left join restaurants on restaurants.r id = orders.r id

where users.name = 'Ankit'

and (date between '2022-06-10'and'2022-07-10');



## -- restaurant with the max repeated customers or loyal customers

select restaurants.r\_name,count(\*) as loyal\_customers from

(select orders.r\_id,user\_id,count(user\_id)as cust\_count from orders

group by orders.r\_id,user\_id

having cust\_count > 1

order by r\_id) orders

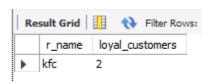
join restaurants on restaurants.r\_id= orders.r\_id

group by restaurants.r\_name

order by loyal customers desc limit 1;



#### LIMIT 1



#### -- restaurants with max customers

select r\_name,count(user\_id)as max\_customers from orders

join restaurants on orders.r id = restaurants.r id

group by r\_name

order by max customers desc limit 1;



#### LIMIT 1

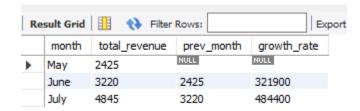


### -- month by month revenue of swiggy

select month,total\_revenue,prev\_month,((total\_revenue - prev\_month/prev\_month) \* 100) as growth\_rate from

(select monthname(date) as month ,sum(amount) total\_revenue,lag(sum(amount)) over(order by monthname(date) desc) as prev\_month from orders

group by monthname(date)) orders;



## -- customer favourite food (THE MOST ORDER ITEM BY USERS)

select name,f\_name from

(select name,f\_name, rank() over(partition by name order by count desc) as rnk from

(select name,f name,count(\*)as count from users u

join orders o on o.user id = u.user id

join order\_details od on o.order\_id = od.order\_id

join food f on od.f\_id = f.f\_id

group by 1,2

) users) users where rnk = 1

	name	f_name
•	Ankit	Schezwan Noodles
	Ankit	Veg Manchurian
	Khushboo	Choco Lava cake
	Neha	Choco Lava cake
	Nitish	Choco Lava cake
	Vartika	Chicken Wings

## -- most loyal customer of each restaurant

select r\_name,loyal\_customer from

(select rank() over(partition by r\_name order by count desc) as rnk,r\_name,name as loyal customer,count from

(select r\_name,name,count(orders.user\_id)as count from orders

join users on orders.user\_id = users.user\_id

join restaurants on restaurants.r\_id = orders.r\_id

group by 1,2) orders)orders

where rnk = 1;

	r_name	loyal_customer
•	box8	Nitish
	China Town	Ankit
	dominos	Neha
	Dosa Plaza	Ankit
	kfc	Vartika
	kfc	Neha

# -- month over month revenue growth of each restaurant (WE CAN USE WHERE STATEMENT TO CHECK FOR THE PARTICULAR MONTH)

select r\_name,revenue,month,((revenue-prev\_month/prev\_month) \* 100) as growth\_rate from (select r\_name,sum(amount)as revenue,monthname(date) as month,lag(sum(amount)) over(order by monthname(date)desc) as prev\_month from orders

join restaurants on restaurants.r id = orders.r id

group by r\_name,monthname(date))orders

where month like 'July';

	r_name	revenue	month	growth_rate
•	box8	460	July	45900.0000
	Dosa Plaza	300	July	29900.0000
	China Town	1050	July	104900.0000
	dominos	1100	July	109900.0000
	kfc	1935	July	193400.0000

## -- most ordered paired products

select f1.f\_name as pair1,f2.f\_name as pair2, count(\*) as order\_count from order\_details o1
join order\_details o2 on o1.order\_id = o2.order\_id and o1.f\_id < o2.f\_id
join food f1 on o1.f\_id = f1.f\_id
join food f2 on o2.f\_id = f2.f\_id
group by 1,2
order by order count desc limit 1;



### LIMIT 1

