

Queries for 10 questions from this data

select top 50 * from train (data contains more than 40k rows)

select * from meal_info

select * from fulfilment_center_info

1. What is the total number of orders (num_orders) for each week?

select sum(num_orders) as Total_Orders, week from train

group by week

order by week asc

	Total_Orders	week
1	792261	1
2	787084	2
3	695262	3
4	743529	4
5	1198675	5
6	947288	6
7	934803	7
8	670518	8
9	723243	9
10	811825	10
11	772225	11

2. What is the average checkout price (checkout_price) for each meal category?

select category, avg(checkout_price) as Average_Chkout_price from train t

join meal_info m

on m.meal_id=t.meal_id

group by category

	category	Average_Chkout_price
1	Beverages	213.264023
2	Biryani	450.405155
3	Desert	437.600166
4	Extras	173.193298
5	Fish	578.992080
6	Other Snacks	258.132368
7	Pasta	395.663210
8	Pizza	584.004146
9	Rice Bowl	317.532240
10	Salad	290.955439
11	Sandwich	289.988998

3. Which are the top 5 most expensive meals based on the checkout_price?

```
SELECT TOP 5 meal_id, checkout_price  
FROM train  
ORDER BY checkout_price DESC;
```

	meal_id	checkout_price
1	1445	866.27
2	2867	767.33
3	2867	767.33
4	1445	767.33
5	2444	767.33

4. What is the total number of orders (num_orders) by each fulfillment center (center_id)?

```
select sum(num_orders) as Total_Orders, center_id from train  
group by center_id  
order by center_id asc
```

	Total_Orders	center_id
10	2297698	27
11	1111585	29
12	1812167	30
13	1247195	32
14	1178897	34
15	1987250	36
16	1202982	39
17	497338	41
18	1028714	42
19	3920294	43
20	1404232	50

5. What is the total number of orders for each meal (meal_id) by city (city_code)?

```
select t.meal_id, f.city_code, sum(t.num_orders) as Total_Orders from train t  
join fulfillment_center_info f  
on t.center_id=f.center_id  
group by f.city_code, t.meal_id  
order by f.city_code, Total_Orders asc
```

	meal_id	city_code	Total_Orders
1	1770	456	2984
2	1902	456	3447
3	2139	456	3686
4	1247	456	4012
5	1847	456	4426
6	1571	456	5633
7	2492	456	5879
8	2494	456	5973
9	2956	456	6294
10	1216	456	6345
11	1438	456	6597

6. What is the total revenue for each week, calculated as num_orders * checkout_price?

```
select week, sum(num_orders * checkout_price) as Total_Revenue from train
group by week
order by week asc
```

	week	Total_Revenue
1	1	218516545.97
2	2	199914187.33
3	3	178035881.49
4	4	196135959.93
5	5	259644945.44
6	6	213397020.18
7	7	207710685.10
8	8	150098589.46
9	9	198132154.87
10	10	220687818.79
11	11	205549549.21

7. Which 3 regions (region_code) have the highest number of orders across all centers?

```
select top 3 f.region_code, sum(t.num_orders) as Total_Orders from train t
join fulfilment_center_info f
on f.center_id=t.center_id
group by f.region_code
order by Total_Orders desc
```

	region_code	Total_Orders
1	56	60520191
2	34	24051733
3	77	20529653

8. Which meals (meal_id) had the highest number of promotions, based on emailer_for_promotion (assuming it's a binary field: 1 for promoted)?

```
select meal_id, sum(cast(emailer_for_promotion as int)) as Total_Promotions from train
group by meal_id
order by Total_Promotions desc --Meal ID- 1962
```

```
select meal_id, count(emailer_for_promotion) as Total_promotions
from train t
where emailer_for_promotion = 1
group by meal_id
order by Total_promotions desc;
```

	meal_id	Total_Promotior
1	1962	3131
2	2581	3129
3	1558	3122
4	1971	1882
5	1445	1745
6	2444	1678
7	2867	1535
8	2306	1362
9	2826	1233
10	1754	1191
11	2490	1185

9. What is the average base_price for each cuisine type (cuisine)?

```
select m.cuisine, avg(t.base_price) Average_Price from train t
join meal_info m
on m.meal_id=t.meal_id
group by cuisine
order by Average_Price desc
```

	cuisine	Average_Price
1	Continental	557.630137
2	Indian	363.490585
3	Italian	300.520345
4	Thai	224.107097

10. What is the total number of orders for featured meals (homepage_featured = 1) by fulfillment center (center_id)?

```
select center_id, sum(num_orders) as Total_orders from train
where homepage_featured=1
group by center_id
order by Total_orders desc
```

	center_id	Total_orders
1	13	1141236
2	174	1048661
3	137	957666
4	43	889554
5	27	847139
6	104	819234
7	108	768921
8	51	691697
9	10	686406
10	67	666724
11	99	665174