Part I

Query 1

```
with br_freq as (
  select distinct city, sum (orders_by_user_breakfast)over (partition by city order by city)/count
(user_id) over (partition by city order by city) as breakfast_freq,
  from(select distinct city , user_id ,count (order_id) over (partition by user_id,city) as orders_
by_user_breakfast

FROM `efood2022-376015.main_assessment.orders`
where  cuisine='Breakfast')

),
efood_freq as (select distinct city,  sum (orders_by_user)over (partition by city order by city)/co
unt (user_id) over (partition by city order by city)as efood_freq
from (select  distinct  city , user_id ,count (order_id) over (partition by user_id,city) as orders
_by_user

FROM `efood2022-376015.main_assessment.orders`)

),
all_br_users as (
  select distinct city, count (distinct user_id) over (partition by city ) as total
  FROM `efood2022-376015.main_assessment.orders`
where  cuisine='Breakfast'
),
b as(select distinct city,user_id,orders_per_user
from(
select distinct city, user_id,count (distinct order_id) over( partition by user_id, city) as orders
_per_user
FROM `efood2022-376015.main_assessment.orders`
where  cuisine='Breakfast') a
where orders_per_user >3),

freq_breakf as (
select distinct city ,total_users/total as breakfast_users3freq_perc from(
select distinct b.city ,count (user_id) over (partition by b.city order by b.city) as total_users,t
otal
from b

inner join all_br_users on b.city= all_br_users.city)),


all_total_users as (
  select distinct city, count (distinct user_id) over (partition by city ) as total
  FROM `efood2022-376015.main_assessment.orders`
),
c as(select distinct city,user_id,orders_per_user
from(
select distinct city, user_id,count (distinct order_id) over( partition by user_id, city) as orders
_per_user
FROM `efood2022-376015.main_assessment.orders`
)
where orders_per_user >3),

freq_ef as (
```

```
select distinct city ,total_users/total as efoodusers3freq_perc from(
select distinct c.city ,count (user_id) over (partition by c.city order by c.city) as total_users,t
otal
from c

inner join all_total_users on c.city= all_total_users.city))


select br.city,breakfast_basket,efood_basket,breakfast_freq,efood_freq.efood_freq,
 breakfast_users3freq_perc,efoodusers3freq_perc

from(
SELECT  city, sum(amount)/count(order_id) as breakfast_basket,
count(order_id) as breakfast_orders,
count (user_id) as breakfast_users



                  FROM `efood2022-376015.main_assessment.orders`
                  where cuisine='Breakfast'
                  group by city
                  having count(order_id)>=1000
                  order by count(order_id) desc
                  ) br

inner join   (SELECT distinct city, sum(amount)/count(order_id) as efood_basket,
             count (user_id) as efood_users
                  FROM `efood2022-376015.main_assessment.orders`
                  group by city
                  having count(order_id)>=1000
                  ) other on      br.city=other.city
inner join br_freq on br_freq.city=br.city
inner join efood_freq on efood_freq.city=other.city
inner join freq_breakf on freq_breakf.city=br.city
inner join freq_ef on freq_ef.city=other.city
order by  breakfast_orders desc    limit 5
```

From the query above we have the following results:

```
                group by city
                having count(order_id)>=1000
                order by count(order_id) desc
                ) br

inner join   (SELECT distinct city, sum(amount)/count(order_id) as efood_basket,
               count (user_id) as efood_users
                FROM `efood2022-376015.main_assessment.orders`
                group by city
                having count(order_id)>=1000
                ) other on      br.city=other.city
inner join br_freq on br_freq.city=br.city
inner join efood_freq on efood_freq.city=other.city
inner join freq_breakf on freq_breakf.city=br.city
inner join freq_ef on freq_ef.city=other.city
order by  breakfast_orders desc    limit 5
```

Processing location: EU

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Query results

SAVE RESULTS | EXPLORE DATA

JOB INFORMATION | RESULTS | JSON | EXECUTION DETAILS | EXECUTION GRAPH PREVIEW

Row	city	breakfast_baske	efood_basket	breakfast_freq	efood_freq	breakfast_users3freq_perc	efoodusers3freq_perc
1	Βόλος	5.12778625…	8.08416218…	3.73274626…	4.43048174…	0.30647143149703049	0.38847934167666726
2	Λάρισα	5.40447655…	8.90695207…	3.09607293…	3.84566280…	0.2391304347826087	0.33964143426294818
3	Ξάνθη	4.88713875…	7.23208254…	4.27141744…	5.35396120…	0.34559968847352024	0.43112604313427982
4	Ιωάννινα	5.75550806…	9.11796636…	3.11509025…	4.03131486…	0.25718411552346571	0.36433189016072592
5	Ρόδος	6.24868474…	10.3126104…	3.71517359…	4.54773644…	0.30561508786969566	0.391304347826087

In the result table are presented the top 5 cities with the most breakfast orders (more than 1000 orders). Although the breakfast basket is a little bit less than the total efood basket, the breakfast frequency is close to the total efood frequency. As for the users having more than 3 orders, it seems that the breakfast users have propencity to order again because the percentage of breakfast users has average difference near the 10% from the the total efood users over 3 orders. So, the final overview of the query result is that the breakfast orders in these top 5 cities play an important role on these 5 cities total efood orders.