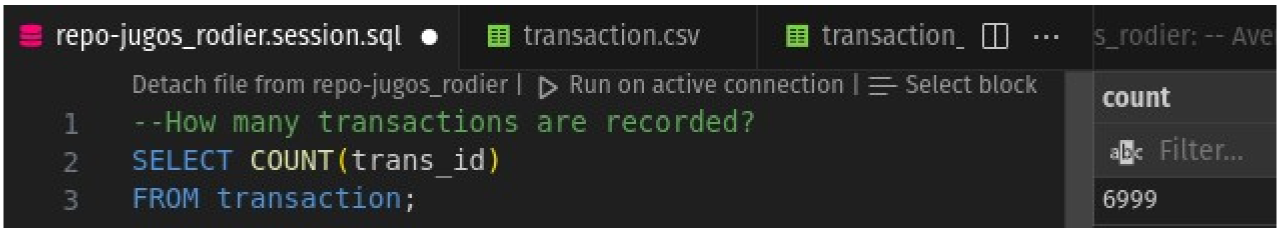
Jugos Rodier Queries

How many transactions are in the database?

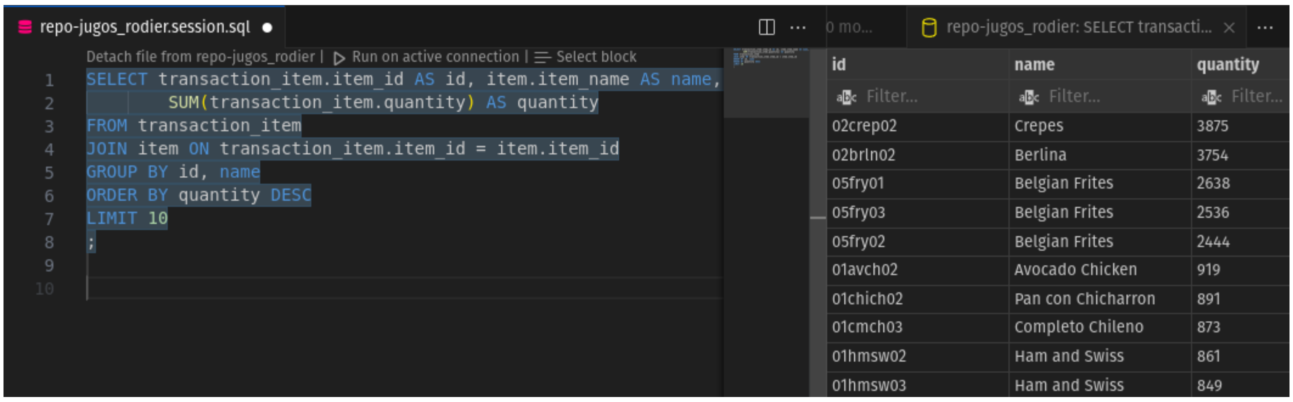

repo-jugos_rodier.session.sql
transaction.csv
transaction_
s_rodier: -- Ave
Detach file from repo-jugos_rodier | Run on active connection | Select block
Filter...

```sql
--How many transactions are recorded?
SELECT COUNT(trans_id)
FROM transaction;
```

count
6999

The database contains ~7000 transactions

What are our top 10 most popular items?


repo-jugos_rodier.session.sql
repo-jugos_rodier: SELECT transacti...
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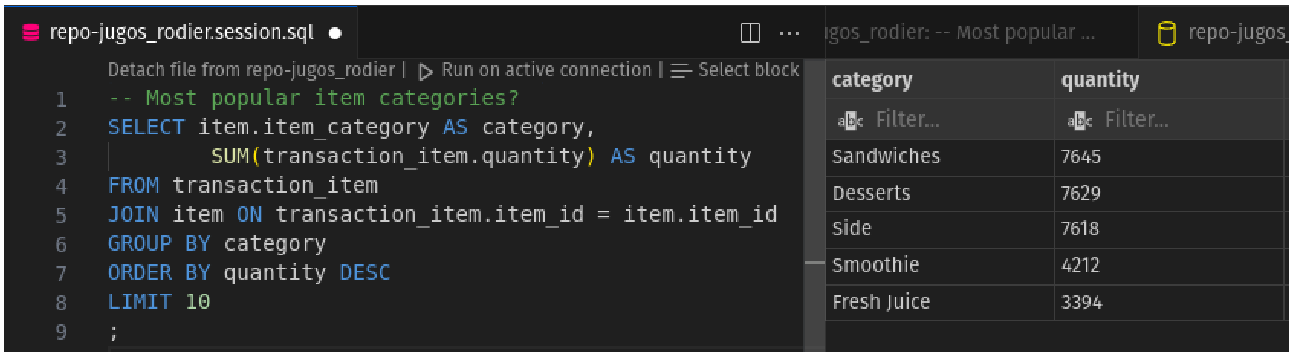
Filter...

```sql
SELECT transaction_item.item_id AS id, item.item_name AS name,
        SUM(transaction_item.quantity) AS quantity
FROM transaction_item
JOIN item ON transaction_item.item_id = item.item_id
GROUP BY id, name
ORDER BY quantity DESC
LIMIT 10
;
```

id	name	quantity
02crep02	Crepes	3875
02brln02	Berlina	3754
05fry01	Belgian Frites	2638
05fry03	Belgian Frites	2536
05fry02	Belgian Frites	2444
01avch02	Avocado Chicken	919
01chich02	Pan con Chicharron	891
01cmch03	Completo Chileno	873
01hmsw02	Ham and Swiss	861
01hmsw03	Ham and Swiss	849

What are our most popular item_categories?


repo-jugos_rodier.session.sql
gos_rodier: -- Most popular ...
repo-jugos_
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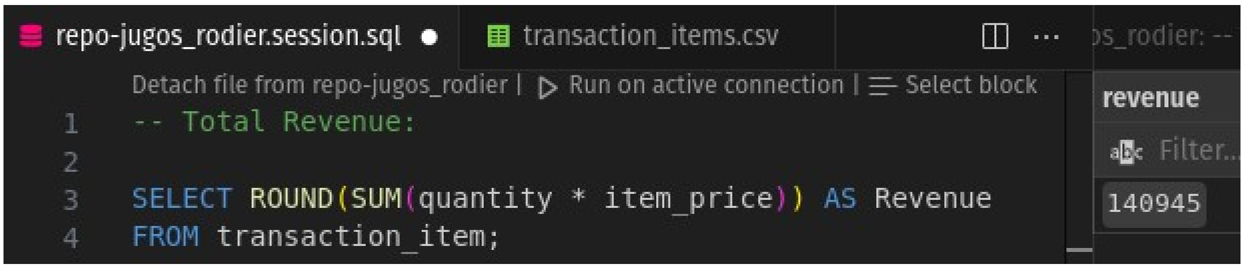
Filter...

```sql
-- Most popular item categories?
SELECT item.item_category AS category,
        SUM(transaction_item.quantity) AS quantity
FROM transaction_item
JOIN item ON transaction_item.item_id = item.item_id
GROUP BY category
ORDER BY quantity DESC
LIMIT 10
;
```

category	quantity
Sandwiches	7645
Desserts	7629
Side	7618
Smoothie	4212
Fresh Juice	3394

What is our Total Revenue?

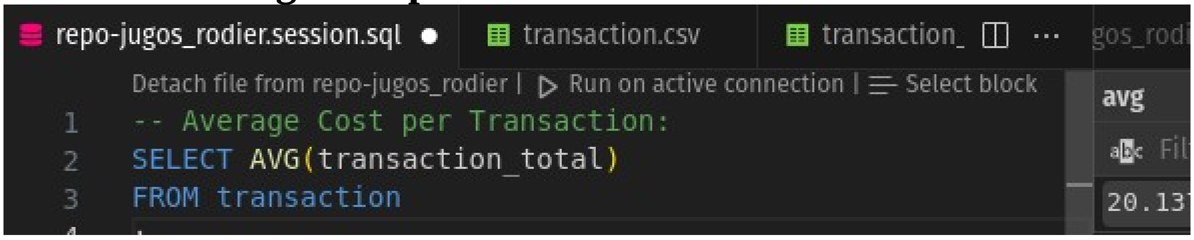

repo-jugos_rodier.session.sql
transaction_items.csv
Detach file from repo-jugos_rodier | Run on active connection | Select block

```sql
-- Total Revenue:

SELECT ROUND(SUM(quantity * item_price)) AS Revenue
FROM transaction_item;
```

revenue
140945

Total Revenue = $140,945

What is the average cost per transaction?

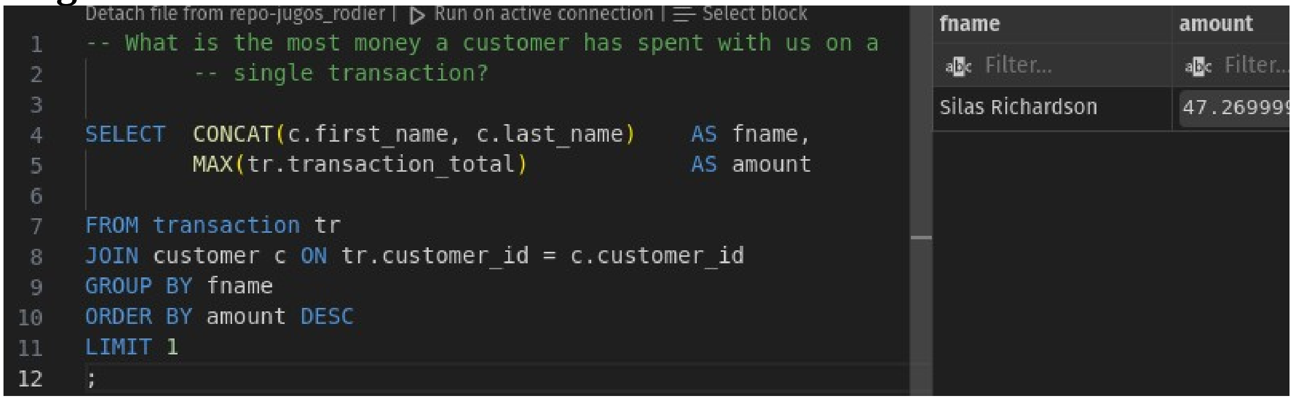

repo-jugos_rodier.session.sql
transaction.csv
transaction_
Detach file from repo-jugos_rodier | Run on active connection | Select block

```sql
-- Average Cost per Transaction:
SELECT AVG(transaction_total)
FROM transaction
```

avg
20.13

The average cost of a transaction is $20.13

What is the most amount of money a customer has spent with on a single transaction?

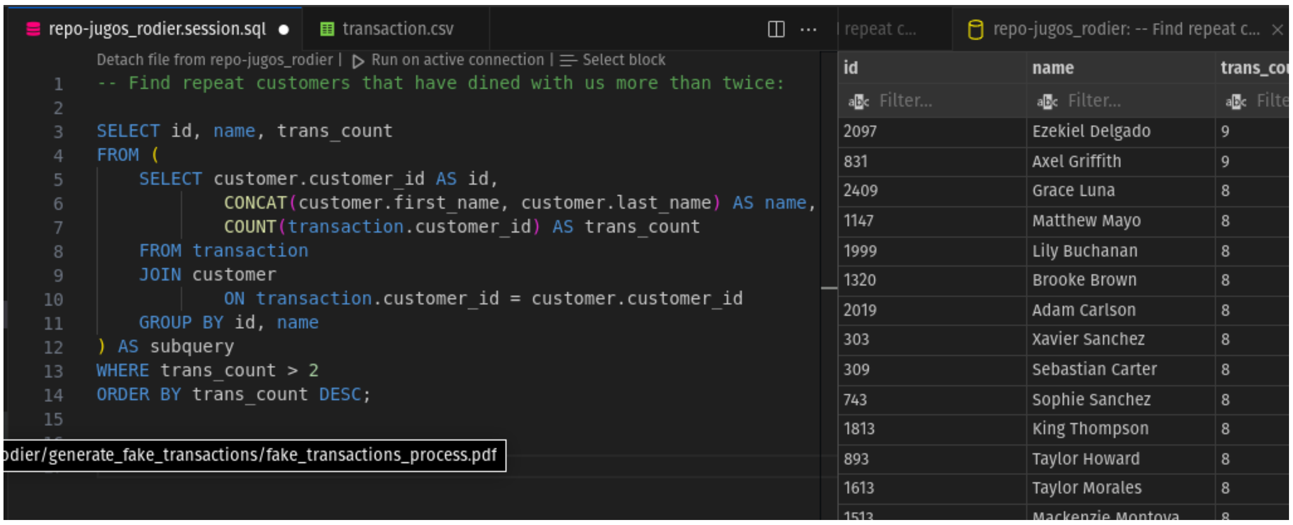

Detach file from repo-jugos_rodier | Run on active connection | Select block

```sql
-- What is the most money a customer has spent with us on a
        -- single transaction?

SELECT  CONCAT(c.first_name, c.last_name)     AS fname,
        MAX(tr.transaction_total)             AS amount

FROM transaction tr
JOIN customer c ON tr.customer_id = c.customer_id
GROUP BY fname
ORDER BY amount DESC
LIMIT 1
;
```

fname	amount
Silas Richardson	47.269999

Largest transaction $47.27

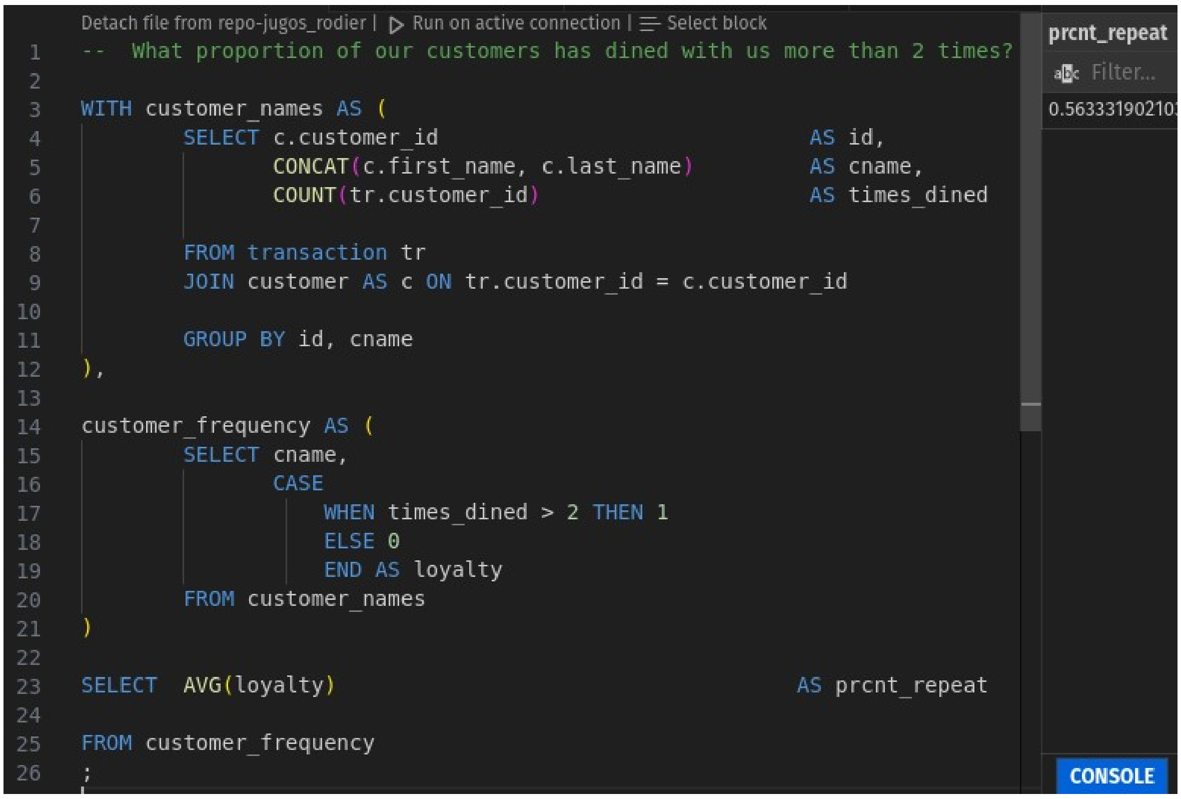
Find the names of customers that have dined at our restaurant more than twice


repo-jugos_rodier.session.sql
transaction.csv
repeat c...
repo-jugos_rodier: -- Find repeat c...
Detach file from repo-jugos_rodier | Run on active connection | Select block
odier/generate_fake_transactions/fake_transactions_process.pdf

```sql
-- Find repeat customers that have dined with us more than twice:

SELECT id, name, trans_count
FROM (
    SELECT customer.customer_id AS id,
           CONCAT(customer.first_name, customer.last_name) AS name,
           COUNT(transaction.customer_id) AS trans_count
    FROM transaction
    JOIN customer
           ON transaction.customer_id = customer.customer_id
    GROUP BY id, name
) AS subquery
WHERE trans_count > 2
ORDER BY trans_count DESC;
```

id	name	trans_co
Filter...	Filter...	Filte
2097	Ezekiel Delgado	9
831	Axel Griffith	9
2409	Grace Luna	8
1147	Matthew Mayo	8
1999	Lily Buchanan	8
1320	Brooke Brown	8
2019	Adam Carlson	8
303	Xavier Sanchez	8
309	Sebastian Carter	8
743	Sophie Sanchez	8
1813	King Thompson	8
893	Taylor Howard	8
1613	Taylor Morales	8
1513	Mackenzie Montoya	8

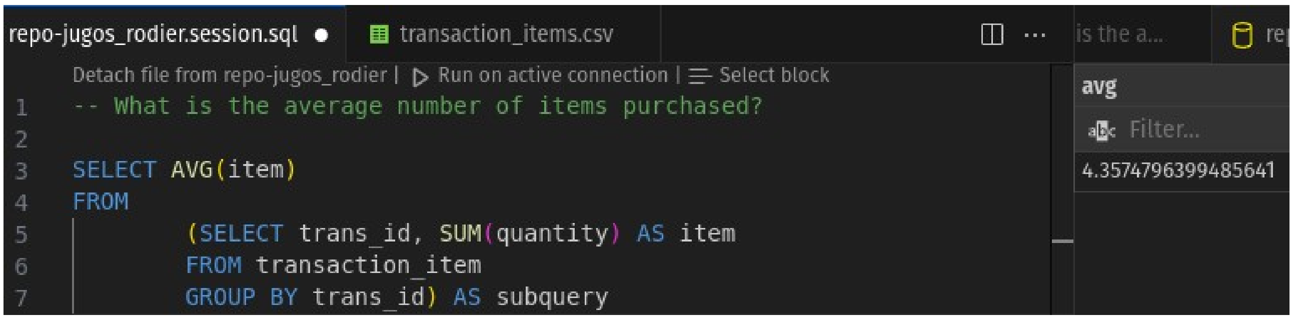
What proportion of our customers have dined with us more than twice?


Detach file from repo-jugos_rodier | ▷ Run on active connection | Select block
CONSOLE

```sql
--  What proportion of our customers has dined with us more than 2 times?

WITH customer_names AS (
        SELECT c.customer_id                                AS id,
               CONCAT(c.first_name, c.last_name)            AS cname,
               COUNT(tr.customer_id)                        AS times_dined

        FROM transaction tr
        JOIN customer AS c ON tr.customer_id = c.customer_id

        GROUP BY id, cname
),

customer_frequency AS (
        SELECT cname,
               CASE
                   WHEN times_dined > 2 THEN 1
                   ELSE 0
                   END AS loyalty
        FROM customer_names
)

SELECT  AVG(loyalty)                                       AS prcnt_repeat

FROM customer_frequency
;
```

```
prcnt_repeat
0.56333190210
```

What is the average number of items purchased per transaction?


repo-jugos_rodier.session.sql ●
transaction_items.csv
is the a...
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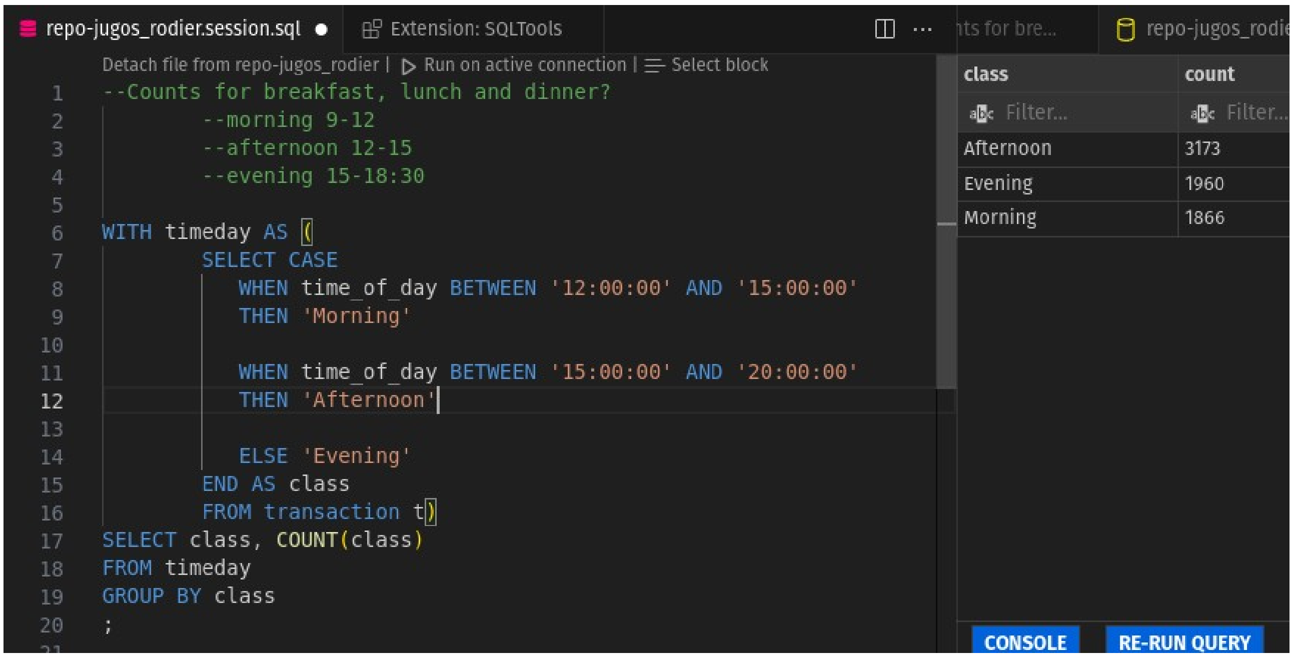
```sql
-- What is the average number of items purchased?

SELECT AVG(item)
FROM
        (SELECT trans_id, SUM(quantity) AS item
        FROM transaction_item
        GROUP BY trans_id) AS subquery
```

```
avg
4.3574796399485641
```

What is the busiest time of day (Morning, Afternoon, evening)?

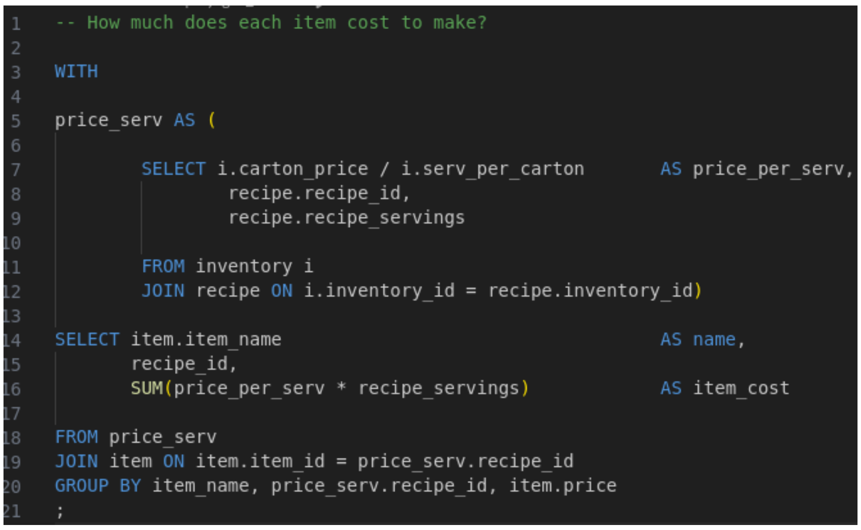

repo-jugos_rodier.session.sql
Extension: SQLTools
Detach file from repo-jugos_rodier | Run on active connection | Select block
CONSOLE
RE-RUN QUERY

```
--Counts for breakfast, lunch and dinner?
        --morning 9-12
        --afternoon 12-15
        --evening 15-18:30

WITH timeday AS (
        SELECT CASE
           WHEN time_of_day BETWEEN '12:00:00' AND '15:00:00'
           THEN 'Morning'

           WHEN time_of_day BETWEEN '15:00:00' AND '20:00:00'
           THEN 'Afternoon'

           ELSE 'Evening'
        END AS class
        FROM transaction t)
SELECT class, COUNT(class)
FROM timeday
GROUP BY class
;
```

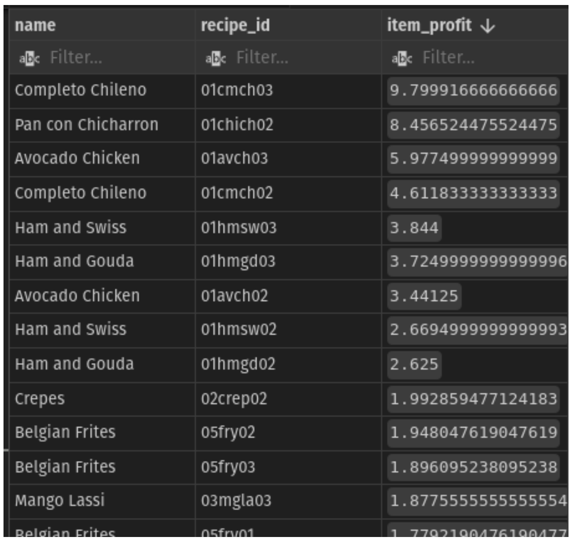
class	count
Afternoon	3173
Evening	1960
Morning	1866

Afternoons are our most popular time by far. This is most likely due to the “lunch rush”.

How much does each item cost to make?

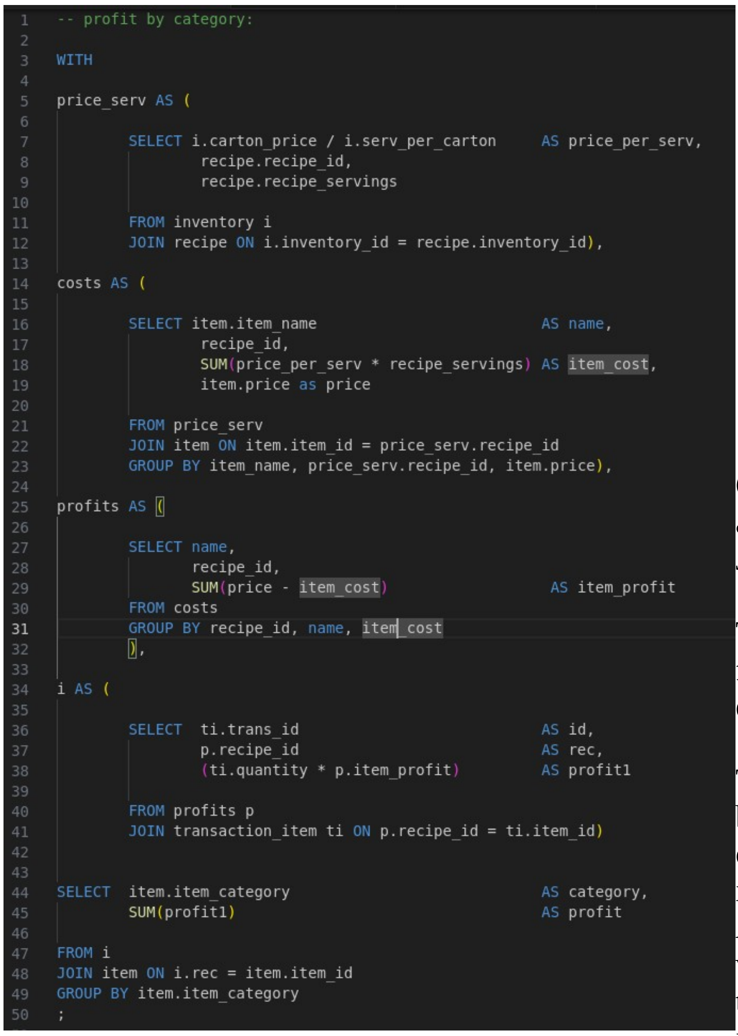


```
-- How much does each item cost to make?

WITH

price_serv AS (

       SELECT i.carton_price / i.serv_per_carton       AS price_per_serv,
              recipe.recipe_id,
              recipe.recipe_servings

       FROM inventory i
       JOIN recipe ON i.inventory_id = recipe.inventory_id)

SELECT item.item_name                                  AS name,
      recipe_id,
      SUM(price_per_serv * recipe_servings)            AS item_cost

FROM price_serv
JOIN item ON item.item_id = price_serv.recipe_id
GROUP BY item_name, price_serv.recipe_id, item.price
;
```

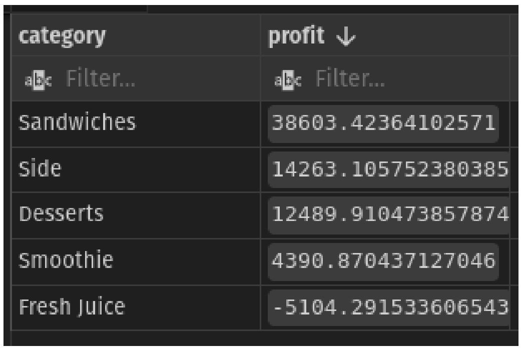


name	recipe_id	item_profit
Completo Chileno	01cmch03	9.799916666666666
Pan con Chicharron	01chich02	8.456524475524475
Avocado Chicken	01avch03	5.977499999999999
Completo Chileno	01cmch02	4.611833333333333
Ham and Swiss	01hmsw03	3.844
Ham and Gouda	01hmgd03	3.7249999999999996
Avocado Chicken	01avch02	3.44125
Ham and Swiss	01hmsw02	2.6694999999999993
Ham and Gouda	01hmgd02	2.625
Crepes	02crep02	1.992859477124183
Belgian Frites	05fry02	1.948047619047619
Belgian Frites	05fry03	1.896095238095238
Mango Lassi	03mgla03	1.8775555555555554
Belgian Frites	05fry01	1.7792190476190477

Find profit by category:



```sql
-- profit by category:

WITH

price_serv AS (

        SELECT i.carton_price / i.serv_per_carton     AS price_per_serv,
                recipe.recipe_id,
                recipe.recipe_servings

        FROM inventory i
        JOIN recipe ON i.inventory_id = recipe.inventory_id),

costs AS (

        SELECT item.item_name                          AS name,
                recipe_id,
                SUM(price_per_serv * recipe_servings) AS item_cost,
                item.price as price

        FROM price_serv
        JOIN item ON item.item_id = price_serv.recipe_id
        GROUP BY item_name, price_serv.recipe_id, item.price),

profits AS (

        SELECT name,
               recipe_id,
               SUM(price - item_cost)                   AS item_profit
        FROM costs
        GROUP BY recipe_id, name, item_cost
        ),

i AS (

        SELECT  ti.trans_id                            AS id,
                p.recipe_id                            AS rec,
                (ti.quantity * p.item_profit)          AS profit1

        FROM profits p
        JOIN transaction_item ti ON p.recipe_id = ti.item_id)


SELECT  item.item_category                             AS category,
        SUM(profit1)                                   AS profit

FROM i
JOIN item ON i.rec = item.item_id
GROUP BY item.item_category
;
```



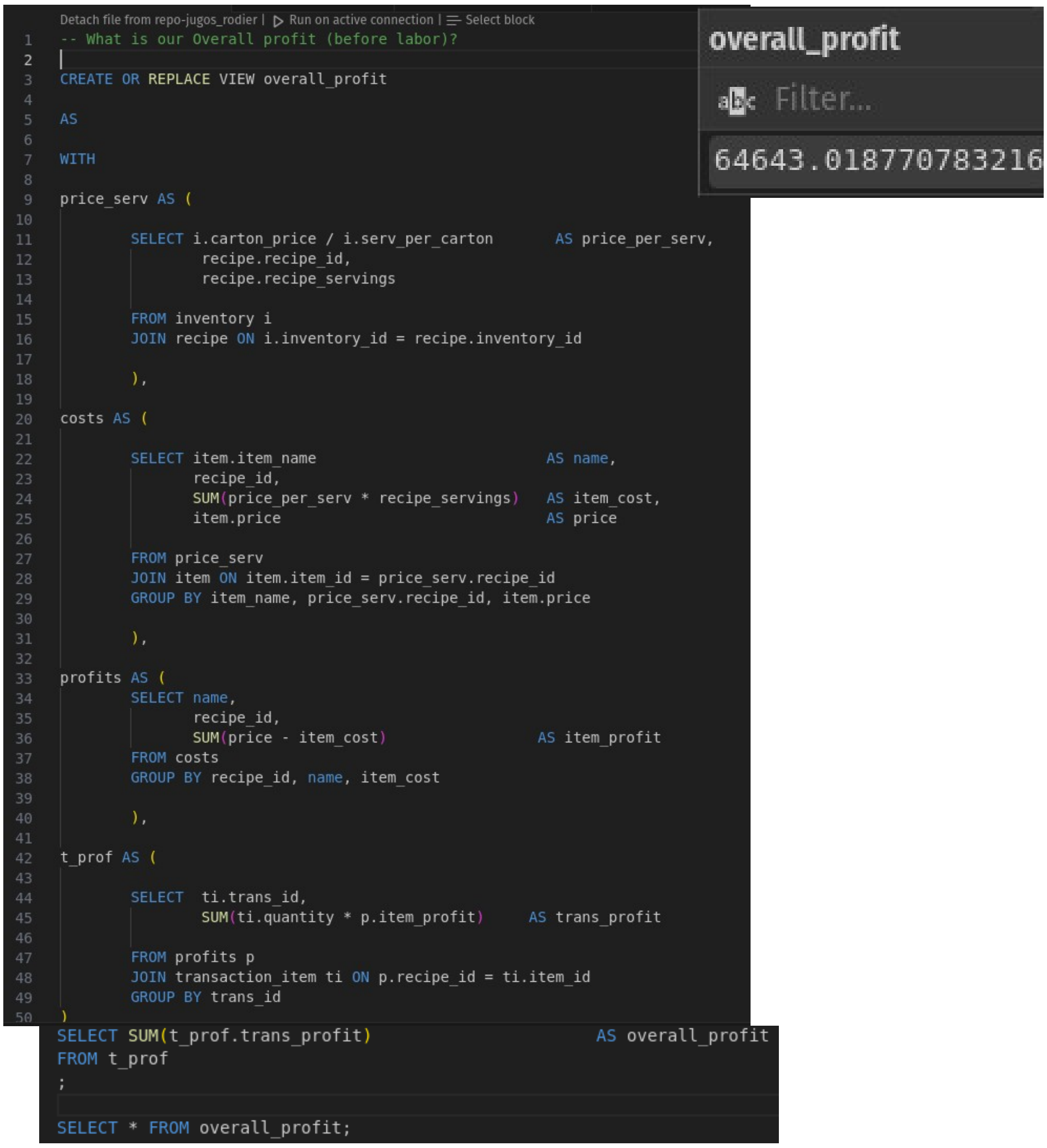
category	profit ↓
Filter...	Filter...
Sandwiches	38603.42364102571
Side	14263.105752380385
Desserts	12489.910473857874
Smoothie	4390.870437127046
Fresh Juice	-5104.291533606543

Our most profitable group is sandwiches, and our least profitable group is our Fresh Juice.

The sandwich profit is explained by the fact that sandwiches are the most expensive menu item.

The loss of juice profit is likely explained by the low juice price and the higher cost of the ingredients. Many of the ingredients are imported from South America, which increases the cost. I would recommend that we either switch to concentrate OR offer fresh squeezed juice only as a promotion with a side and higher profit sandwiches.

Find total profit (before labor):


Detach file from repo-jugos_rodier | Run on active connection | Select block
Filter...

```sql
-- What is our Overall profit (before labor)?

CREATE OR REPLACE VIEW overall_profit

AS

WITH

price_serv AS (

        SELECT i.carton_price / i.serv_per_carton       AS price_per_serv,
                recipe.recipe_id,
                recipe.recipe_servings

        FROM inventory i
        JOIN recipe ON i.inventory_id = recipe.inventory_id

        ),

costs AS (

        SELECT item.item_name                            AS name,
               recipe_id,
               SUM(price_per_serv * recipe_servings)    AS item_cost,
               item.price                               AS price

        FROM price_serv
        JOIN item ON item.item_id = price_serv.recipe_id
        GROUP BY item_name, price_serv.recipe_id, item.price

        ),

profits AS (
        SELECT name,
               recipe_id,
               SUM(price - item_cost)                  AS item_profit
        FROM costs
        GROUP BY recipe_id, name, item_cost

        ),

t_prof AS (

        SELECT  ti.trans_id,
                SUM(ti.quantity * p.item_profit)     AS trans_profit

        FROM profits p
        JOIN transaction_item ti ON p.recipe_id = ti.item_id
        GROUP BY trans_id
)
SELECT SUM(t_prof.trans_profit)                     AS overall_profit
FROM t_prof
;

SELECT * FROM overall_profit;
```

```
overall_profit
64643.018770783216
```