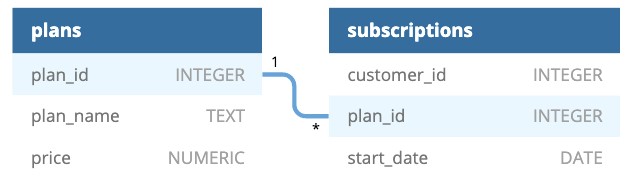
**SQL PORTFOLIO PROJECT**

**(FOODIE-FI)**

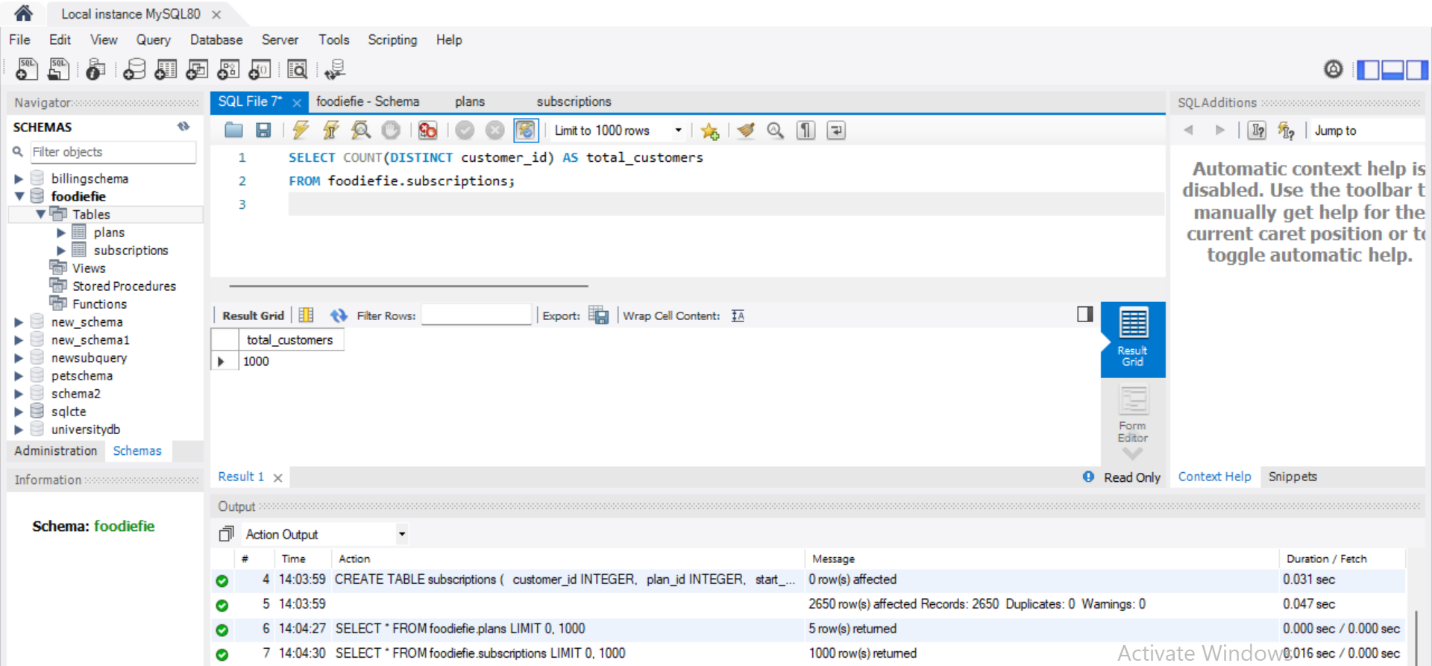
****

**Query 1:**

How many customers has Foodie-Fi ever had?

SELECT COUNT(DISTINCT customer\_id) AS total\_customers

FROM foodiefie.subscriptions;



* **The total customers of Foodie-Fi are 1000.**

**QUERY 2**

What is the monthly distribution of trial plan start\_date values for our dataset - use the start of the month as the group by value

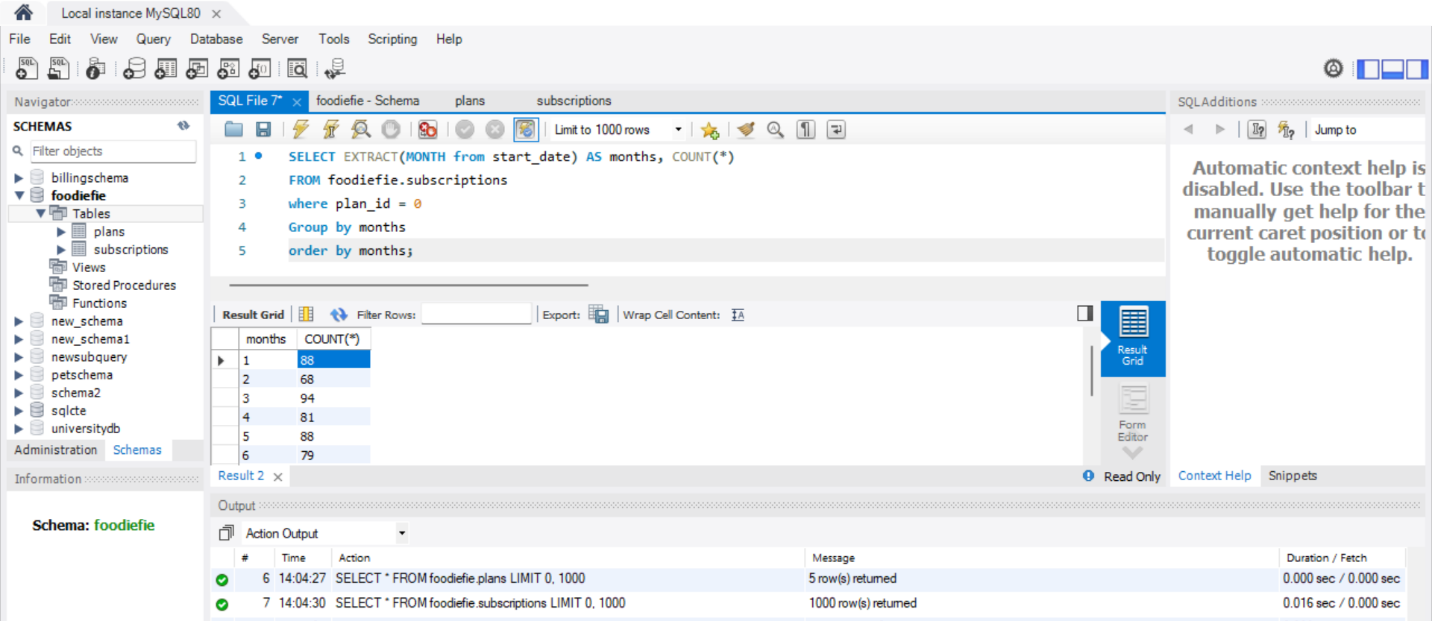
SELECT EXTRACT(MONTH from start\_date) AS months, COUNT(\*)

FROM foodiefie.subscriptions

where plan\_id = 0

Group by months

order by months;



* March (3) has the highest number of trial plans, while February (2) has the lowest number of trial plans.

**QUERY 3**

What plan start\_date values occur after the year 2020 for our dataset? Show the breakdown by count of events for each plan\_name

SELECT plan\_id, count(\*)

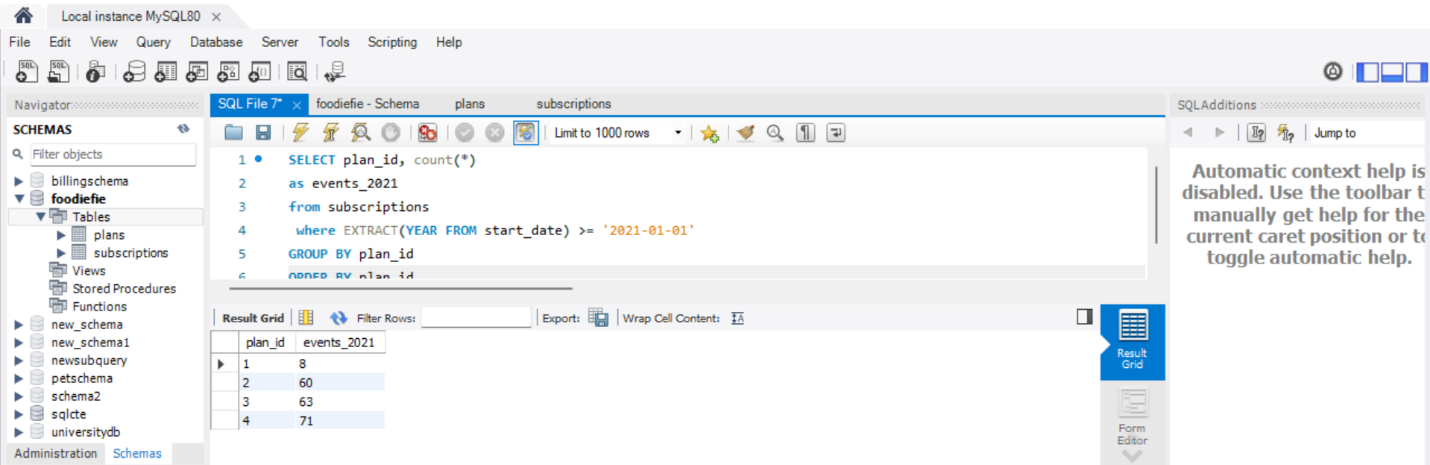
as events\_2021

from subscriptions

where EXTRACT(YEAR FROM start\_date) >= '2021-01-01'

GROUP BY plan\_id

ORDER BY plan\_id



* There was no trial plan recorded for 2021

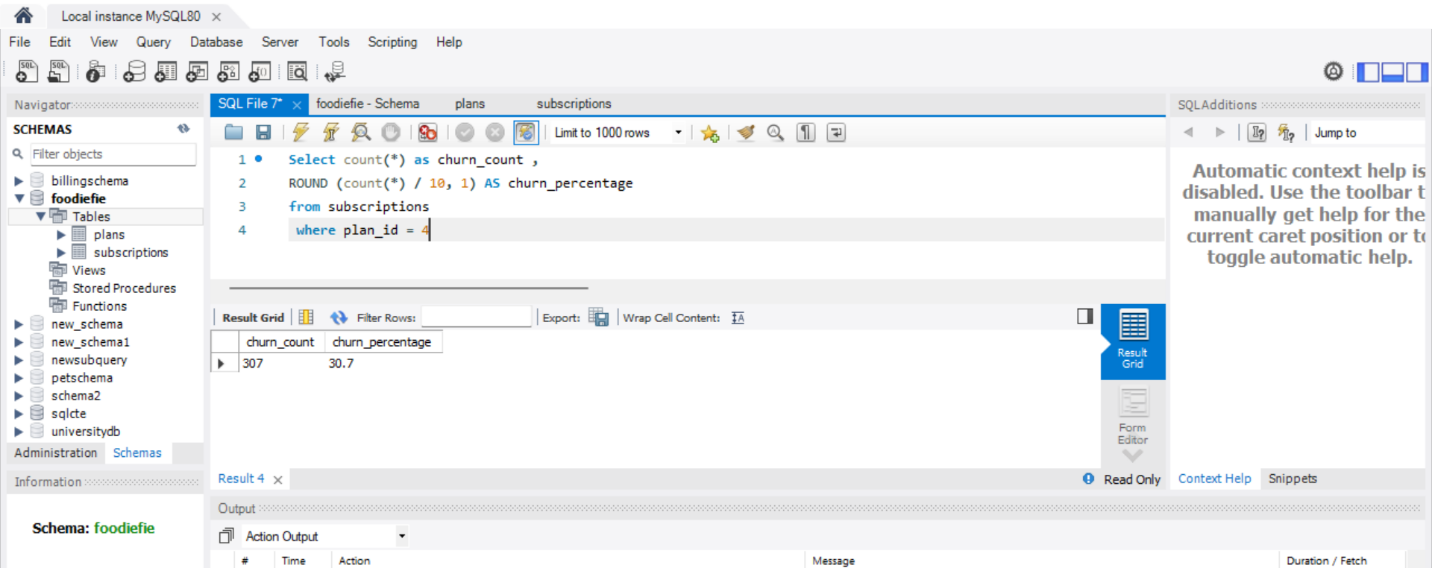
**QUERY 4:**

What is the customer count and percentage of customers who have churned rounded to 1 decimal place?

Select count(\*) as churn\_count ,

ROUND (count(\*) / 10, 1) AS churn\_percentage

from subscriptions

where plan\_id = 4

* 307 customers, or 30.7% of the total customers have churned from Foodie-fi.

**Query 5:**

How many customers have churned straight after their initial free trial - what percentage is this rounded to the nearest whole number?

WITH CTE AS (

SELECT

customer\_id,

plan\_name,

ROW\_NUMBER() OVER(PARTITION BY customer\_id ORDER BY start\_date ASC) as rn

FROM subscriptions as S

INNER JOIN plans as P on S.plan\_id = P.plan\_id

)

SELECT

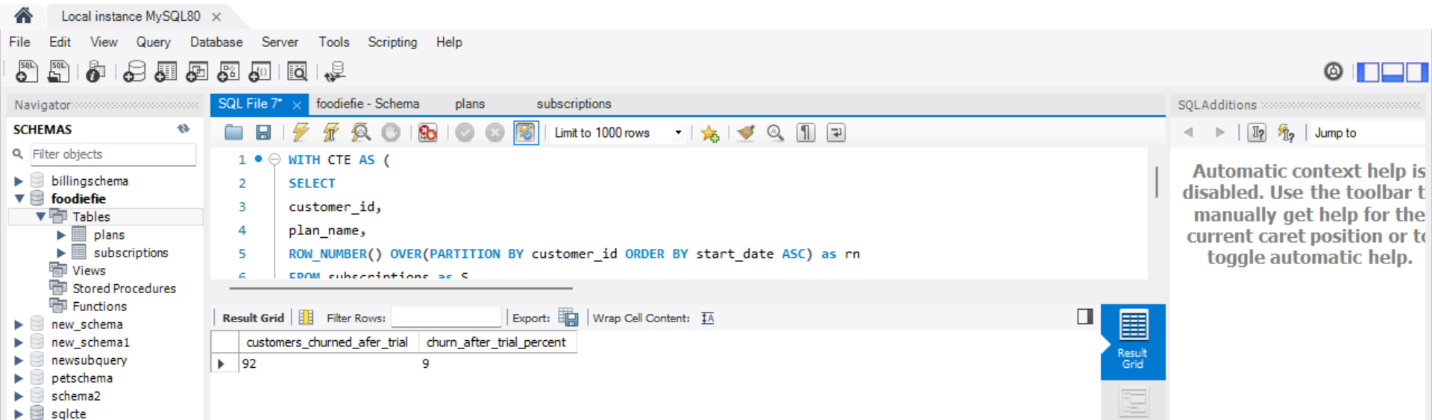
COUNT(DISTINCT customer\_id) as customers\_churned\_afer\_trial,

ROUND((COUNT(DISTINCT customer\_id) / (SELECT COUNT(DISTINCT customer\_id) FROM subscriptions))\*100,0) as churn\_after\_trial\_percent

FROM CTE

WHERE rn = 2

AND plan\_name = 'churn';



* 92 customers, or 9% of the total customers, have churned straight after their initial trial from Foodie-fi.

**QUERY 6:**

What is the number and percentage of customer plans after their initial free trial?

WITH CTE AS (

SELECT

customer\_id,

plan\_name,

ROW\_NUMBER() OVER(PARTITION BY customer\_id ORDER BY start\_date ASC) as rn

FROM subscriptions as S

INNER JOIN plans as P on P.plan\_id = S.plan\_id

)

SELECT

plan\_name,

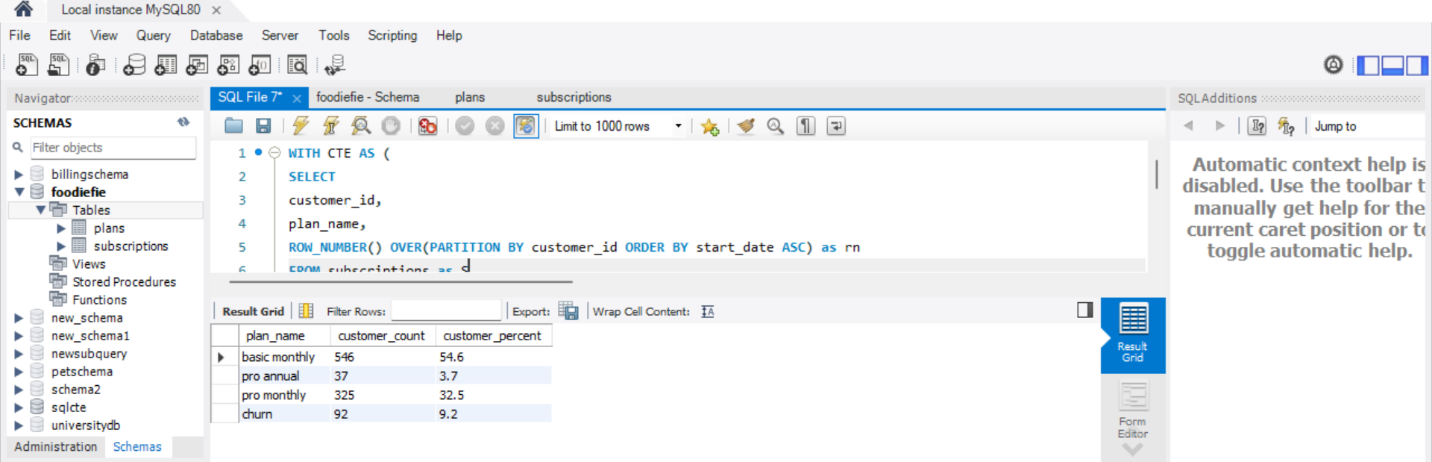
COUNT(customer\_id) as customer\_count,

ROUND((COUNT(customer\_id) / (SELECT COUNT(DISTINCT customer\_id) FROM CTE))\*100,1) as customer\_percent

FROM CTE

WHERE rn = 2

GROUP BY plan\_name;



* More than 80% of customers are on paid plans.

**QUERY 7**

What is the customer count and percentage breakdown of all 5 plan\_name values at 2020-12-31?

WITH CTE AS (

SELECT \*

,ROW\_NUMBER() OVER(PARTITION BY customer\_id ORDER BY start\_date DESC) as rn

FROM subscriptions

WHERE start\_date <= '2020-12-31'

)

SELECT

plan\_name,

COUNT(customer\_id) as customer\_count,

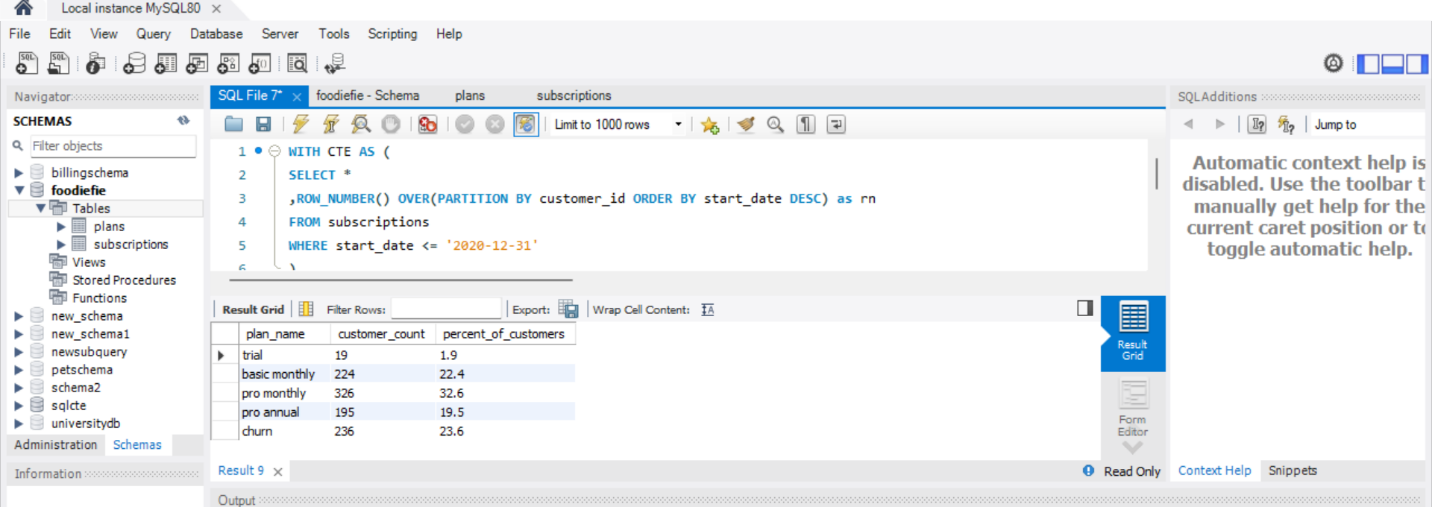
ROUND((COUNT(customer\_id)/(SELECT COUNT(DISTINCT customer\_id) FROM CTE))\*100,1) as percent\_of\_customers

FROM CTE

INNER JOIN plans as P on CTE.plan\_id = P.plan\_id

WHERE rn = 1

GROUP BY plan\_name;



* More people upgraded to the pro monthly plan, but fewer people signed up for the trial plan.

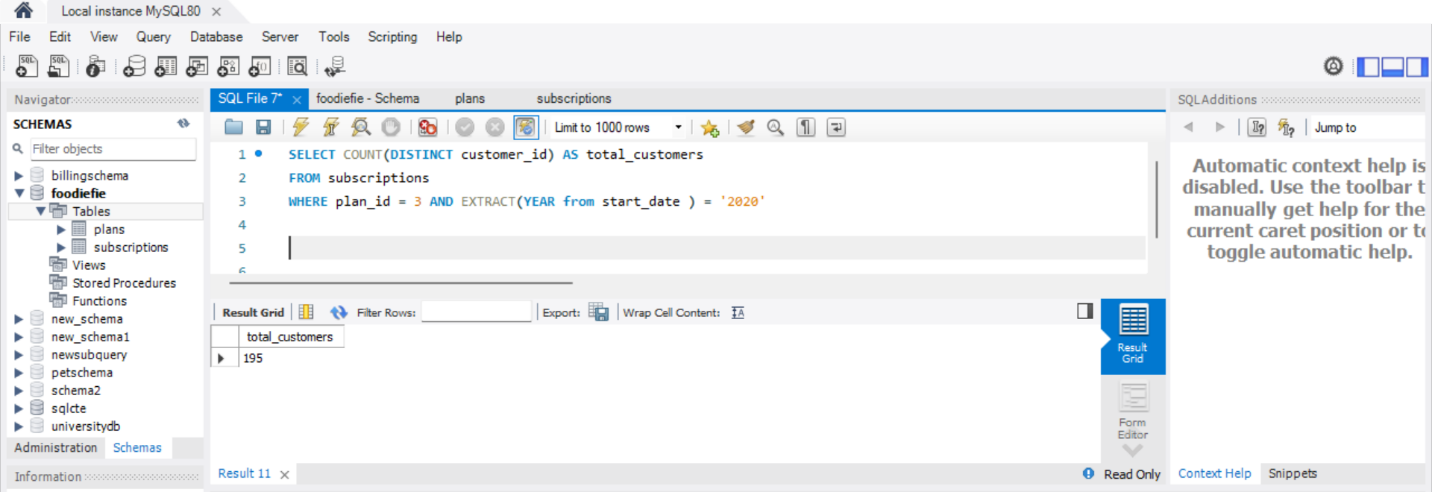
**QUERY 8 :**

How many customers have upgraded to an annual plan in 2020?

SELECT COUNT(DISTINCT customer\_id) AS total\_customers

FROM subscriptions

WHERE plan\_id = 3 AND EXTRACT(YEAR from start\_date ) = '2020'



* 195 customers upgraded to an annual plan in 2020.

**QUERY 9**

How many days on average does it take for a customer to an annual plan from the day they join Foodie-Fi?

WITH trial\_plan AS (

SELECT customer\_id,

start\_date AS trial\_date

FROM subscriptions

WHERE plan\_id = 0

),

annual\_plan AS (

SELECT customer\_id,

start\_date AS annual\_date

FROM subscriptions

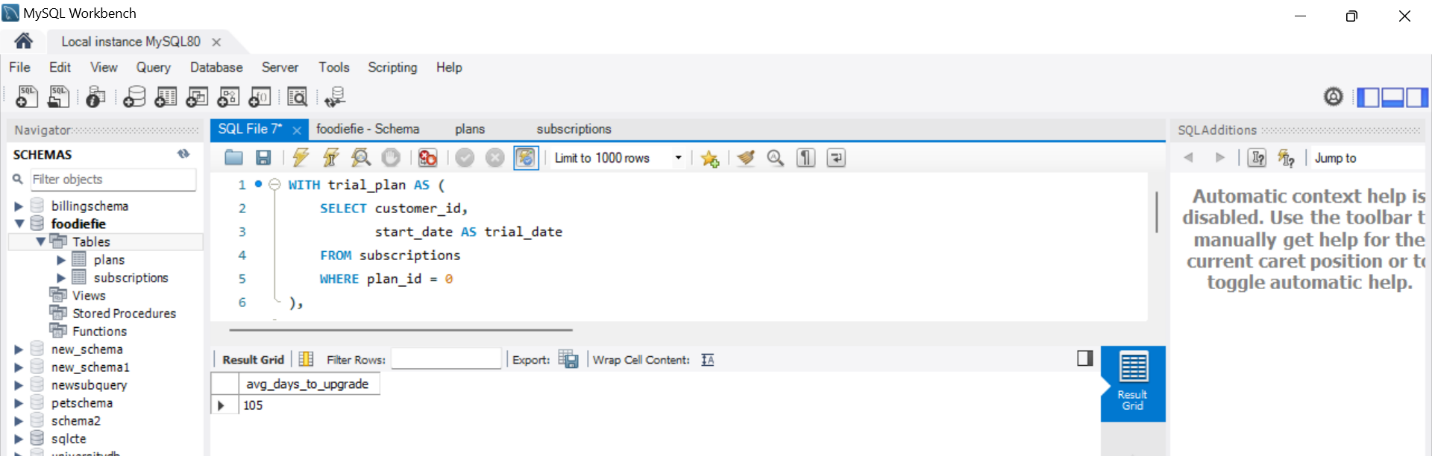
WHERE plan\_id = 3

)

SELECT ROUND(AVG(ABS(DATEDIFF(trial\_date, annual\_date))), 0) AS avg\_days\_to\_upgrade

FROM trial\_plan tp

JOIN annual\_plan ap ON tp.customer\_id = ap.customer\_id;



* On average, it takes 105 days for customers to upgrade to an annual plan after they join Foodie-Fi.

**QUERY 10 :**

Can you further breakdown this average value into 30 day periods (i.e. 0-30 days, 31-60 days etc)

WITH TRIAL AS (

SELECT customer\_id,

start\_date AS trial\_start

FROM subscriptions

WHERE plan\_id = 0

),

ANNUAL AS (

SELECT customer\_id,

start\_date AS annual\_start

FROM subscriptions

WHERE plan\_id = 3

)

SELECT

CASE

WHEN DATEDIFF(annual\_start, trial\_start) <= 30 THEN '0-30'

WHEN DATEDIFF(annual\_start, trial\_start) <= 60 THEN '31-60'

WHEN DATEDIFF(annual\_start, trial\_start) <= 90 THEN '61-90'

WHEN DATEDIFF(annual\_start, trial\_start) <= 120 THEN '91-120'

WHEN DATEDIFF(annual\_start, trial\_start) <= 150 THEN '121-150'

WHEN DATEDIFF(annual\_start, trial\_start) <= 180 THEN '151-180'

WHEN DATEDIFF(annual\_start, trial\_start) <= 210 THEN '181-210'

WHEN DATEDIFF(annual\_start, trial\_start) <= 240 THEN '211-240'

WHEN DATEDIFF(annual\_start, trial\_start) <= 270 THEN '241-270'

WHEN DATEDIFF(annual\_start, trial\_start) <= 300 THEN '271-300'

WHEN DATEDIFF(annual\_start, trial\_start) <= 330 THEN '301-330'

WHEN DATEDIFF(annual\_start, trial\_start) <= 360 THEN '331-360'

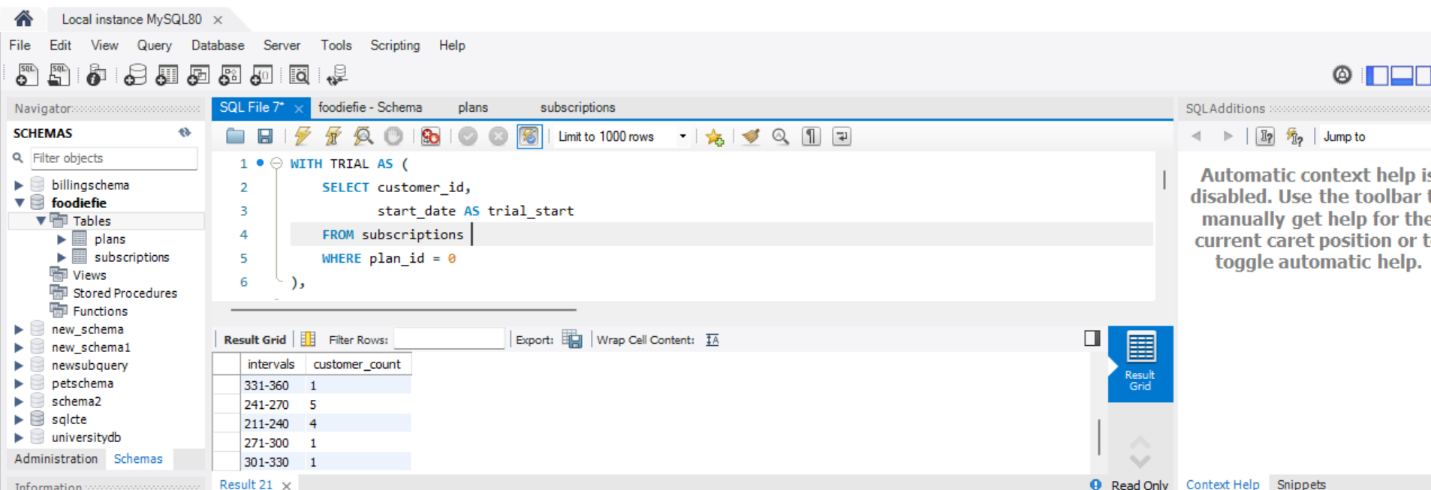
END AS intervals,

COUNT(T.customer\_id) AS customer\_count

FROM TRIAL AS T

INNER JOIN ANNUAL AS A ON T.customer\_id = A.customer\_id

GROUP BY intervals;



* The majority of customers tend to subscribe or upgrade to an annual plan within the first 30 days.

**Query 11:**

How many customers downgraded from a pro monthly to a basic monthly plan in 2020?

WITH next\_plan\_cte AS (

SELECT customer\_id,

plan\_id,

start\_date,

LEAD(plan\_id) OVER(PARTITION BY customer\_id ORDER BY plan\_id) AS next\_plan

FROM subscriptions

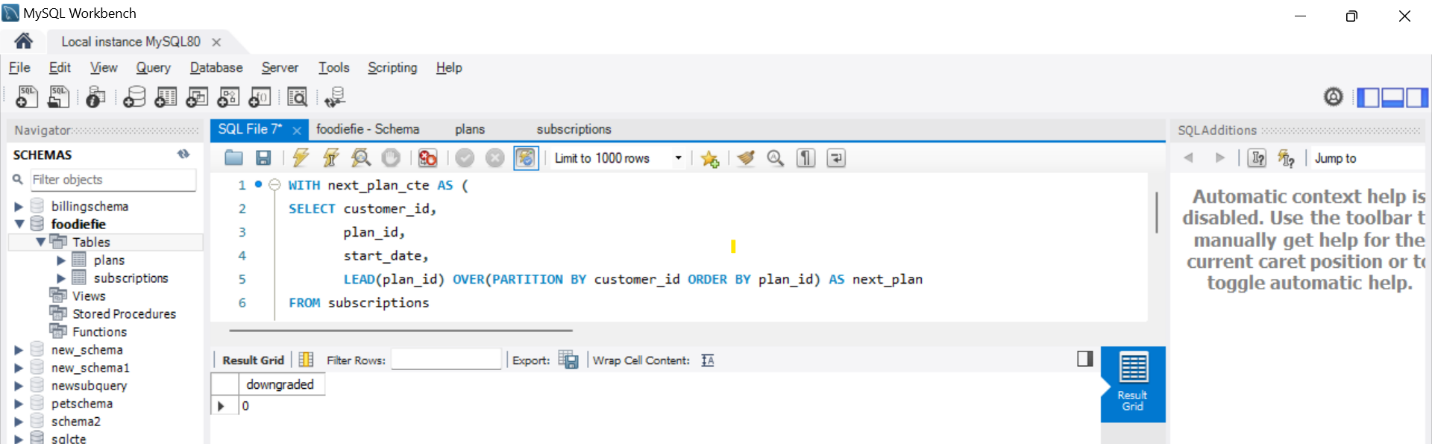
)

SELECT COUNT(\*) AS downgraded

FROM next\_plan\_cte

WHERE start\_date <= '2020-12-31'

AND plan\_id = 2 AND next\_plan = 1;



* No customer has downgraded from pro monthly to basic monthly in 2020.