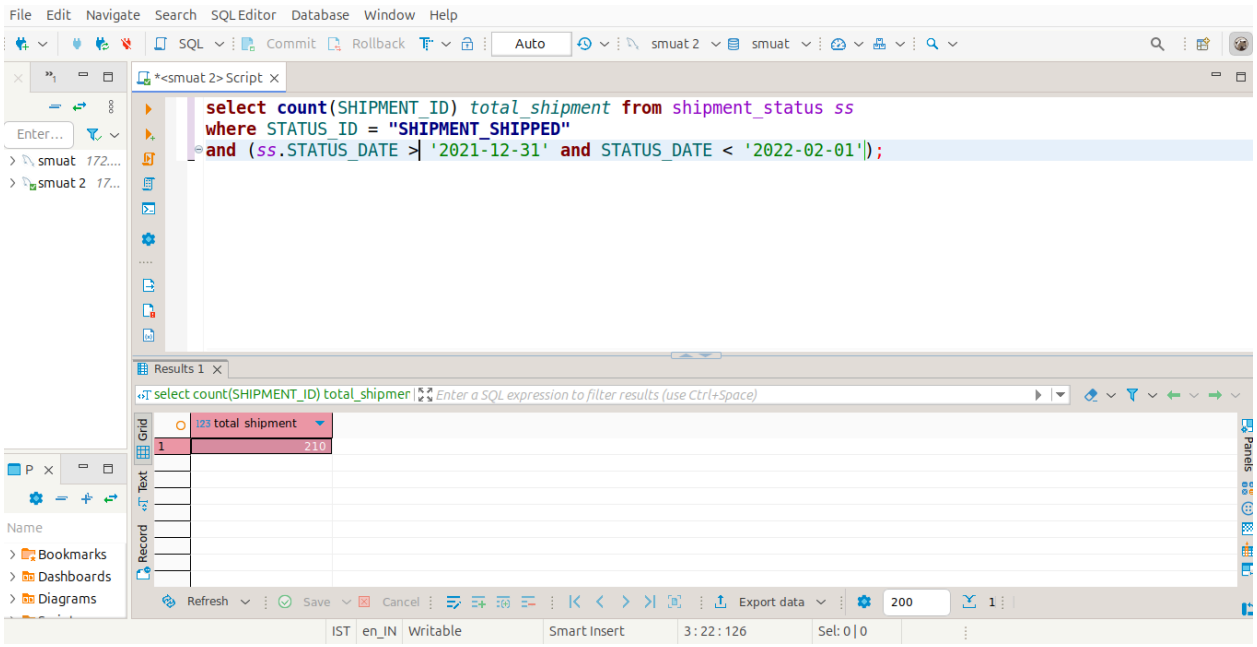
SQL ASSIGNMENT 1

1. **Total number of shipments in January 2022 first quarter:**
    - Determine the total count of shipments made during the first quarter of 2022, specifically in the month of January.

Query:-

```
Select count(SHIPMENT_ID) Jan_shipment from
shipment_status ss
where STATUS_ID = "SHIPMENT_SHIPPED"
and (ss.STATUS_DATE >= '2021-12-31' and ss.STATUS_DATE
<= '2022-02-01');
```



Explanation :-

The SQL query counts how many shipments were shipped in January 2022. It looks at the `shipment_status` table and checks for entries where the `STATUS_ID` is "SHIPMENT_SHIPPED." It only counts those shipments whose `STATUS_DATE` is between December 31, 2021, and February 1, 2022. This helps

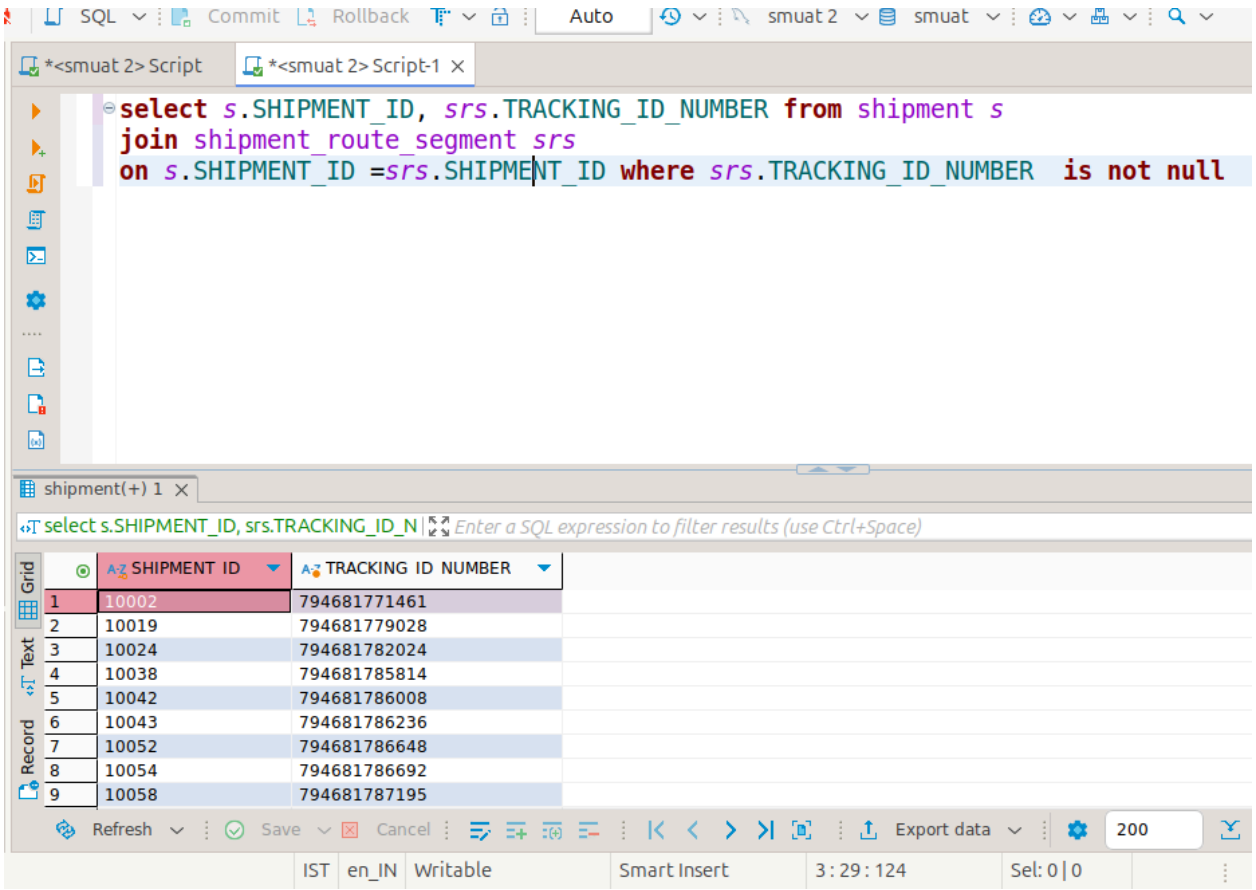
to find out the total number of shipments made during January 2022. You can change the dates or add more filters if you want to get different information.

2. Shipment by Tracking number:

- View or analyze shipments based on their unique tracking numbers. Each shipment is identified and tracked using a specific tracking number.

Query:-

```
select s.SHIPMENT_ID, srs.TRACKING_ID_NUMBER from
shipment s
join shipment_route_segment srs
on s.SHIPMENT_ID =srs.SHIPMENT_ID where
srs.TRACKING_ID_NUMBER  is not null
```



Explanation:-

This SQL query retrieves the `SHIPMENT_ID` and `TRACKING_ID_NUMBER` for shipments that have a tracking number associated with them. It does this by selecting data from two tables: `shipment` (aliased as `s`) and `shipment_route_segment` (aliased as `srs`). The query uses a JOIN to combine the two tables based on matching `SHIPMENT_ID` values. The condition `srs.TRACKING_ID_NUMBER is not null` ensures that only the shipments that have a valid tracking number are included in the results. This helps identify which shipments can be tracked.

3. Average number of shipments per month:

- Calculate the average number of shipments made per month by dividing the total number of shipments by the number of months.

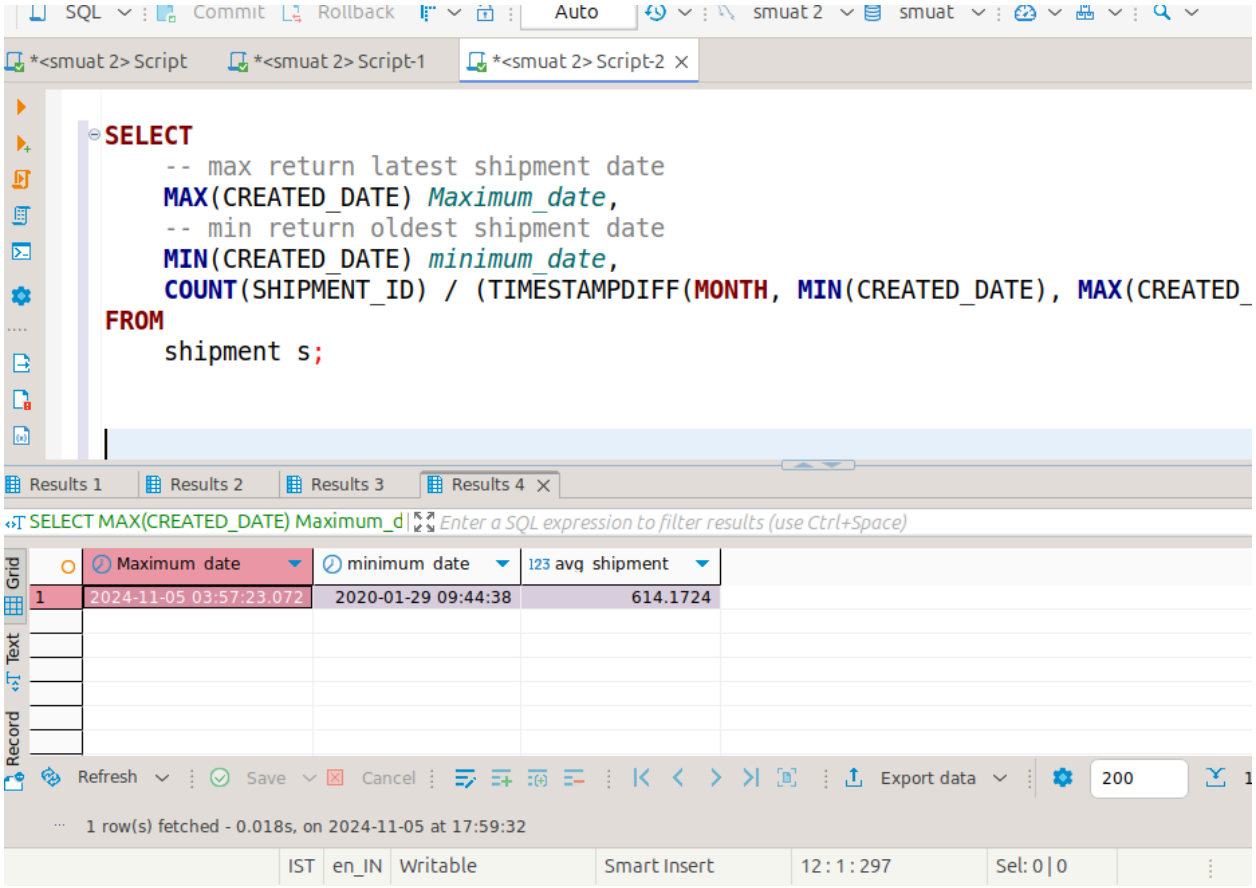
Query:-

```
SELECT
    -- max return latest shipment date
    MAX(CREATED_DATE) Maximum_date,
    -- min return oldest shipment date
    MIN(CREATED_DATE) minimum_date,
    COUNT(SHIPMENT_ID) / (TIMESTAMPDIFF(MONTH,
MIN(CREATED_DATE), MAX(CREATED_DATE)) + 1) AS
"avg_shipment"
FROM
    shipment s;
```

Explanation:-

This SQL query calculates important details about shipments from a table called `shipment`. It finds the most recent shipment date and the oldest shipment date. It also counts how many shipments there are in total. Then, it calculates the number of months between the earliest and latest shipment dates and adds one to include both months. Finally, it divides the total number of shipments by the number of months to determine the average number of shipments per month.

The results include the maximum date, minimum date, and the average shipments per month.



4. Shipped units By Location:

- Identify the number of units that have been shipped, categorized by different locations ;. Gain insights into the distribution of shipped units across various locations.