```
----------------------------For YoY Total Value-------------------------------------------------------------------
SELECT
    YEAR(date) AS year,
    SUM(total_value_inr) AS total_value,
    LAG(SUM(total_value_inr)) OVER (ORDER BY YEAR(date)) AS last_year,
    ROUND(
        (SUM(total_value_inr) - LAG(SUM(total_value_inr)) OVER (ORDER BY YEAR(date)))
        / NULLIF(LAG(SUM(total_value_inr)) OVER (ORDER BY YEAR(date)),0) * 100,
    2) AS yoy_total_value_pct
FROM trade_cleaned
GROUP BY YEAR(date)
ORDER BY year;


--------------------------------for YoY Duty Paid---------------------------------------------------------------------
SELECT
    YEAR(date) AS year,
    SUM(duty_paid_inr) AS duty_paid,
    LAG(SUM(duty_paid_inr)) OVER (ORDER BY YEAR(date)) AS last_year,
    ROUND(
        (SUM(duty_paid_inr) - LAG(SUM(duty_paid_inr)) OVER (ORDER BY YEAR(date)))
        / NULLIF(LAG(SUM(duty_paid_inr)) OVER (ORDER BY YEAR(date)),0) * 100,
    2) AS yoy_duty_pct
FROM trade_cleaned
GROUP BY YEAR(date)
ORDER BY year;
```

```
---------------------------------------- for YoY Grand Total ----------------------------------------------------
SELECT

    YEAR(date) AS year,

    SUM(grand_total_inr) AS grand_total,

    LAG(SUM(grand_total_inr)) OVER (ORDER BY YEAR(date)) AS last_year,

    ROUND(

        (SUM(grand_total_inr) - LAG(SUM(grand_total_inr)) OVER (ORDER BY YEAR(date)))

        / NULLIF(LAG(SUM(grand_total_inr)) OVER (ORDER BY YEAR(date)),0) * 100,

    2) AS yoy_grand_pct
FROM trade_cleaned
GROUP BY YEAR(date)
ORDER BY year;


-------------------------------------Pareto -------------------------------------------------------------------------------
WITH hsn AS (

    SELECT

        hs_code,

        SUM(grand_total_inr) AS total_value

    FROM trade_cleaned

    GROUP BY hs_code
),
sorted AS (

    SELECT

        hs_code,

        total_value,

        SUM(total_value) OVER (ORDER BY total_value DESC) AS cumulative_value,
```

```
        SUM(total_value) OVER () AS total_sum

    FROM hsn

)

SELECT

    hs_code,

    total_value,

    cumulative_value,

    ROUND((cumulative_value / total_sum)*100, 2) AS cumulative_pct

FROM sorted

ORDER BY total_value DESC;
```

---------------------------active vs churned suppliers--

```
WITH hsn AS (

    SELECT

        hs_code,

        SUM(grand_total_inr) AS total_value

    FROM trade_cleaned

    GROUP BY hs_code

),

sorted AS (

    SELECT

        hs_code,

        total_value,

        SUM(total_value) OVER (ORDER BY total_value DESC) AS cumulative_value,

        SUM(total_value) OVER () AS total_sum

    FROM hsn
```

```
)
SELECT
    hs_code,
    total_value,
    cumulative_value,
    ROUND((cumulative_value / total_sum)*100, 2) AS cumulative_pct
FROM sorted
ORDER BY total_value DESC;
```

---------------------------------------END---