**SQL Assignment-2**

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Create a DataMart at airline level with different features like​

1. Total Number of flights​
2. Total Number of delayed flights (Based on arrival delay)​
3. Percentage of delayed flightsS​
4. Total Number of cancelled flights (All reasons)​
5. Percentage of cancelled flights​
6. Give Rank number to each airline based on percentage of delayed flights​
7. Give Rank number to each airline based on number of destinations it covers​
8. Add additional features which can help understand airlines better based on their performance

**Query-**

SELECT airline\_name, count(\*) AS total\_no\_of\_fligths,

SUM(CASE WHEN arrival\_delay>0 THEN 1 END) AS total\_no\_of\_arrival\_delayed\_flights,

ROUND(SUM(CASE WHEN arrival\_delay>0 THEN 1 END)::numeric/count(\*) \*100,2) as perc\_arrival\_delayed\_flights,

SUM(CASE WHEN departure\_delay>0 THEN 1 END) AS total\_no\_of\_departure\_delayed\_flights,

ROUND(SUM(CASE WHEN departure\_delay>0 THEN 1 END)::numeric/count(\*) \*100,2) as perc\_departure\_delayed\_flights,

SUM(CASE WHEN security\_delay>0 THEN 1 END) AS total\_no\_of\_security\_delayed\_flights,

ROUND(SUM(CASE WHEN security\_delay>0 THEN 1 END)::numeric/count(\*) \*100,2) as perc\_security\_delayed\_flights,

SUM(CASE WHEN weather\_delay>0 THEN 1 END) AS total\_no\_of\_weather\_delayed\_flights,

ROUND(SUM(CASE WHEN weather\_delay>0 THEN 1 END)::numeric/count(\*) \*100,2) as perc\_weather\_delayed\_flights,

SUM(CASE WHEN was\_cancelled = true THEN 1 END) AS no\_of\_cancelled\_fligts,

ROUND(SUM(CASE WHEN was\_cancelled = true THEN 1 END)::numeric/count(\*)\*100,2) as perc\_cancelled\_flights,

DENSE\_RANK() OVER(ORDER BY ROUND(SUM(CASE WHEN arrival\_delay>0 THEN 1 END)::numeric/count(\*) \*100,2)) as rnk\_perc\_delay,

COUNT(distinct destination\_city) as no\_of\_distinct\_dest\_city,

COUNT(DISTINCT origin\_city) AS no\_of\_distinct\_origion\_city,

COUNT(DISTINCT destination\_airport) AS no\_of\_distinct\_dest\_airport,

COUNT(DISTINCT origin\_airport) AS no\_of\_distinct\_origin\_airport

FROM tutorial.flights

GROUP BY 1

Result

Table

Description automatically generated

A screenshot of a computer

Description automatically generated with medium confidence

A screenshot of a computer

Description automatically generated with medium confidence