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 flights
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.

The output should contain all the attributes as different columns in the DataMart created.

SELECT

airline\_code,

airline\_name,

COUNT(DISTINCT(flight\_number)) AS total\_flights,

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

100.0 \* SUM(CASE WHEN arrival\_delay > 0 THEN 1 ELSE 0 END) / COUNT(\*) AS percentage\_delayed\_flights,

SUM(CASE WHEN was\_cancelled = true THEN 1 ELSE 0 END) AS total\_cancelled\_flights,

100.0 \* SUM(CASE WHEN was\_cancelled = true THEN 1 ELSE 0 END) / COUNT(\*) AS percentage\_cancelled\_flights,

RANK() OVER (ORDER BY (100.0 \* SUM(CASE WHEN arrival\_delay > 0 THEN 1 ELSE 0 END) / COUNT(\*))) AS delayed\_flight\_rank,

RANK() OVER (ORDER BY COUNT(DISTINCT(destination\_city))DESC) AS destination\_rank,

AVG(distance) AS average\_distance,

AVG(arrival\_delay) AS average\_delay\_minutes

FROM tutorial.flights

GROUP BY airline\_code, airline\_name;

