--Report 1

select td.yearnumber,nd.nationality, sum(Total\_number\_\_transactions) as CountPassengers

--Report 13

Select sa.country, sa.city as CityName, sa.name as SourceAirport,

To\_char(sum(rf.total\_service\_cost)) as Service$,

Rank() Over (Partition By sa.Country

ORDER BY sum(rf.total\_service\_cost) desc) as RankScore

from source\_airport\_dim sa, ROUTE\_FACT rf

where rf.SOURCEAIRPORTID = sa.airportid

group by

sa.country, sa.city, sa.name;

--Report 14

Select \*

from (Select td.YEARNUMBER, nd.NATIONALITY, pt.PASSENGER\_TYPE,

To\_char(sum(tf.TOTAL\_TOTAL\_PAID)-sum(tf.total\_fare)) as Revenue$,

Percent\_Rank() Over (Partition By nd.NATIONALITY

ORDER BY sum(tf.TOTAL\_TOTAL\_PAID)-sum(tf.total\_fare) desc) as PercentRankScoreNationality,

Percent\_Rank() Over (Partition By PASSENGER\_TYPE

ORDER BY sum(tf.TOTAL\_TOTAL\_PAID)-sum(tf.total\_fare) desc) as PercentankScorePassenger

from nationality\_Dim nd, transaction\_fact tf, PASSENGER\_TYPE\_DIM pt, TIME\_DIM td

where tf.NATID = nd.NATID

And tf.PASSENGER\_TYPE\_ID = pt.PASSENGER\_TYPE\_ID

and td.TIME\_ID = tf.TIME\_ID

group by

td.YEARNUMBER, nd.NATIONALITY, pt.PASSENGER\_TYPE

order by

td.yearnumber) q1

where PercentRankScoreNationality < 0.1

Or PercentankScorePassenger < 0.1;

/\*

The Rank Operation helps to sort out the results in any preferred (ascending/descending) way. Whereas the Percent Rank helps in determining the position of that particular row in comparison with the row with the highest measure.

In our example for Query 13 a partial rank has been introduced.

Here we can see that the ranking has been done on the service cost within the country. So every country has its own separate ranking and we can easily determine in a given country which has city and which airport has the most service cost. Like for an example in Algeria, Houari Boumediene in the city Algier has the most service cost. So from here we can easily determine the top 5 airport which has the most service cost.

In Percent Rank we actually compare the position a particular row with the position of the row with the highest measure in a sorted list. The percent rank is a value between 0 and 1. 0 represents the highest value.

Let us take an example from the above screenshot and consider the nationality = Burmese. Burmese has three passenger type (Children, Senior Adult, Young Adult) in the screenshot. The column PercentRankScoreNationality explains the percent rank of the passenger type of a given country. So from this column we can see for Burmese Nationality Children has a score of 0. If we see the revenue, we will notice that children produced the most revenue in the year 2008 for Burmese. Then Senior adult has the next percent rank .07 as it was second in the most revenue earning list for the Burmese. Earning least revenue Young Adult has the percent rank of .14.

Rank percent is more efficient when we have to consider the top n% (top 10%)of any amount of data. We do not actually have to know the total amount of data to get the top n% data using percent rank. We cannot get the top n% data using the rank operation if we do not know the total amount of rows in the list or table. But if we want to get the top n (e.g top 5) we have to use rank.

\*/