This week there is only one discussion and one assignment. HOWEVER, THERE IS A LOT OF READING AS WE GO INTO DATA WAREHOUSING, SO PLEASE DO ALL THE PREWORK FOR THE NEXT MODULE!.

This assignment is to create a single query that has various types of subqueries within it. **This assignment is a bit tricky, so take advantages of the hints and detail *.**

Create a query to show planes that have flights ** into the highest altitude airport in the North California *** area in July of 2013. Only includes planes that also flew on the hottest day(s) of that month ****. For each plane show the average arrival delay and (for comparison) the average arrival delay of ALL planes going to that airport for the same month. Other plane / flight details to show are the airline name, the tail number of the plane, the airport name that the plane is flying into, the engine types, # of engines, the # of seats and the type of plane, ordered by the tail number.

* Remember to do this modular, starting with the various 'inner queries'. Sometimes there are conditions in the subquery that also need to be considered in the outer query. Remember subqueries can be in the Select, From and Where.

** Note that the airport must actually have defined flights going to it - how can you ensure that?

*** For this exercise and given only latitude and longitude is provided, "North California" means latitude between 35 and 43 and longitude between -124 and -120

**** To ensure flights flew on the hottest day, you may need the 'exists' clause instead of 'in'

Once completed, rewrite and run again using a single subquery to implemented as a CTE.

Please submit the SQLs and the results - you can show intermediate results if you like.