

IS 362 Assignment 1: SQL and Tableau (Review)

Part 1. SQL and NULLs

Please use the tables in the `flights` database. Your deliverable should include the SQL queries that you write in support of your conclusions. You may use multiple queries to answer questions.

1. How many airplanes have listed speeds? What is the minimum listed speed and the maximum listed speed?
2. What is the total distance flown by all of the planes in January 2013? What is the total distance flown by all of the planes in January 2013 where the tailnum is missing?
3. What is the total distance flown for all planes on July 5, 2013 grouped by aircraft manufacturer? Write this statement first using an INNER JOIN, then using a LEFT OUTER JOIN. How do your results compare?
4. Write and answer at least one question of your own choosing that joins information from at least three of the tables in the `flights` database.

Shown below: results on the inner join:

manufacturer	SUM(distance)
AIRBUS	195089
AIRBUS INDUSTRIE	78786
AMERICAN AIRCRAFT INC	2199
BARKER JACK L	937
BOEING	335028
BOMBARDIER INC	31160
CANADAI	1142
CESSNA	2898
DOUGLAS	1089
EMBRAER	77909
GULFSTREAM AEROSPACE	1157
MCDONNELL DOUGLAS	7486
MCDONNELL DOUGLAS AIRCRAFT CO	15690
MCDONNELL DOUGLAS CORPORATION	4767

Part 2. Comparing Performance in Tableau

Your task is to use Tableau to compare flight performance within a category for 2013. For example, you could show average monthly departure delay across the three New York airports. You may use this example, but you're strongly encouraged to come up with your own example that you might find more interesting.



Your deliverables should be posted in GitHub, with a link to your GitHub repository in your assignment submission.

1. The SQL script used to pull data into a .CSV file.
2. The Tableau workbook (or better, a link to your Tableau Public workbook)

Since some IS 362 students may be new to Tableau, and other students worked with it extensively in a recent semester, a minimal deliverable that meets the requirements stated above is acceptable. If you are more experienced with Tableau, you are encouraged to use Tableau to help you to tell a story with your data. Working in small groups is fine.