Jason Curate

IS362 Week 1 Assignment

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| 1. How many airplanes have listed speeds? What is the minimum listed speed and the maximum listed speed?  SELECT count(tailnum) FROM flights.planes where speed is not null; **23**  SELECT min(speed) FROM flights.planes where speed is not null; **90**  SELECT max(speed) FROM flights.planes where speed is not null; **432**  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?  SELECT sum(distance) FROM flights.flights where year = 2013 and month = 1; **27,188,805**  SELECT sum(distance) FROM flights.flights where year = 2013 and month = 1 and tailnum = ""; **81,763**  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? **The Inner join only shows records that have matching planes from both tables while the Left join also shows records without matching planes in the planes table.**  Inner Join: **755,337**  Left Join: **883,008**  SELECT sum(flights.distance), planes.manufacturer  FROM flights.flights join flights.planes  on flights.tailnum = planes.tailnum  where flights.year = 2013 and flights.month = 7 and flights.day = 5  group by planes.manufacturer  order by planes.manufacturer;   |  |  | | --- | --- | | 195089 | AIRBUS | | 78786 | AIRBUS INDUSTRIE | | 2199 | AMERICAN AIRCRAFT INC | | 937 | BARKER JACK L | | 335028 | BOEING | | 31160 | BOMBARDIER INC | | 1142 | CANADAIR | | 2898 | CESSNA | | 1089 | DOUGLAS | | 77909 | EMBRAER | | 1157 | GULFSTREAM AEROSPACE | | 7486 | MCDONNELL DOUGLAS | | 15690 | MCDONNELL DOUGLAS AIRCRAFT CO | | 4767 | MCDONNELL DOUGLAS CORPORATION |   SELECT sum(flights.distance), planes.manufacturer  FROM flights.flights left join flights.planes  on flights.tailnum = planes.tailnum  where flights.year = 2013 and flights.month = 7 and flights.day = 5  group by planes.manufacturer  order by planes.manufacturer;   |  |  | | --- | --- | | 127671 |  | | 195089 | AIRBUS | | 78786 | AIRBUS INDUSTRIE | | 2199 | AMERICAN AIRCRAFT INC | | 937 | BARKER JACK L | | 335028 | BOEING | | 31160 | BOMBARDIER INC | | 1142 | CANADAIR | | 2898 | CESSNA | | 1089 | DOUGLAS | | 77909 | EMBRAER | | 1157 | GULFSTREAM AEROSPACE | | 7486 | MCDONNELL DOUGLAS | | 15690 | MCDONNELL DOUGLAS AIRCRAFT CO | | 4767 | MCDONNELL DOUGLAS CORPORATION |   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. |

How many Boeing flights flew into LAX in June, 2013? **967**

select count(flights.flight), planes.manufacturer

from flights.flights

join flights.planes on flights.tailnum = planes.tailnum

join flights.airports on flights.dest = airports.faa

where flights.year = 2013

and flights.month = 6

and planes.manufacturer = "BOEING"

and airports.faa = "LAX";