## **Oueries**

**Query 1:** Identify all passengers who are 18 years of age or older, with an occupation 'Student', and have taken flight '11' on January 20. Do not include duplicates.

Query 2: Which airline (carrier, name) had the most revenue (in terms of ticket sales)?

**Query 3:** Find all airlines (carrier, name) that have experienced an arrival delay. Sort your results in descending order by the number of delays.

**Query 4:** Find all cities (name) that have three or more airports.

**Query 5a:** Return the routes (origin, destination airports) that carry the least number of flights.

**Query 5b:** Find the airlines (carrier, name) that serve exactly one route

Query 5c: Find the airlines that only serve routes originating from airports 'EWR' or

'JFK'. Note the airline(s) may serve more than one route.

Query 5d: Find the airlines (carrier, name) that serve up to and including two routes.

**Query 6a:** For each airline, how many passengers flew with each airline during January 1st to January 3rd, 2013? Show results per airline.

**Query 6b:** Find all routes carrying (strictly) greater than 500 passengers. For popular routes containing the same pair of cities, return only one direction, e.g., return only one of [JFK, LAX] or [LAX, JFK].

**Query 6c:** Find the cities (name) with the largest number of arriving passengers (via an arriving flight that lands in that city).

**Query 7:** Identify all the passengers (ID, first name, last name) who took a round trip flight from January 1st to January 31st.

**Query 8:** Find all passengers (ID, first name, last name) who have taken flights from at least 3 different airports departing from the city of 'Los Angeles'. For example, Fred has taken 4 flights departing from airports 'LAX', 'LGB', 'SNA', 'BUR', all of which have a departure city of 'Los Angeles'. Do not include duplicates.

**Query 9:** Find all airports that served greater than 1000 passengers from January 1st to January 7th.

**Query 10a:** Which routes are served by 5 or more airlines?

**Query 10b:** Which route is the most profitable?

**Query 11:** Find the airlines that sell at least one flight ticket at the same price as another airline for the same route. Do not return duplicate airlines. E.g., Airlines AA and UA both sell tickets on route [EEN, TEB] for \$500.

**Query 12a**: Which person(s) have never taken a flight?

**Query 12b:** Which passengers have taken flights but not returned to their home (residential) city?

**Query 13:** For each airline, return its fleet of airplanes (using tail number). If an airplane is not currently operational (i.e., not associated to an airline) - include these airplanes in the output