Project 2

1. List All Airlines

Query: Select airline from airlines

2. Count the Number of Airports in Each Country.

Query: Select count(airport), country from airports

3. Find Flights with Duration Longer than 5 Hours.

Query: SELECT DISTINCT S.FLIGHT\_NUMBER, A.AIRLINE, ROUND(S.AIR\_TIME/60,2) as "Duration" from "Sample\_flights" S

left join "airlines" A

on S.AIRLINE = A.IATA\_CODE

where AIR\_TIME/60 > 5

ORDER BY AIR\_TIME/60 DESC

4. Find the Top 10 Longest Flights by Duration.

Query: SELECT DISTINCT S.FLIGHT\_NUMBER, A.AIRLINE, ROUND(S.AIR\_TIME/60,2) as "Duration" from "Sample\_flights" S

left join "airlines" A

on S.AIRLINE = A.IATA\_CODE

ORDER BY AIR\_TIME/60 DESC limit 10

5. What is the IATA\_CODE for the airline that had greatest number of flights in 2015?

Query: SELECT A.AIRLINE, COUNT(A.IATA\_CODE) as "Number of flights" from "Sample\_flights" S

left join "airlines" A

on S.AIRLINE = A.IATA\_CODE

GROUP BY A.AIRLINE

ORDER BY count(A.IATA\_CODE) DESC LIMIT 1

6. What is the name of the airline that had the greatest number of flights in 2015?

SELECT A.AIRLINE, COUNT(A.IATA\_CODE) as "Number of flights" from "Sample\_flights" S

left join "airlines" A

on S.AIRLINE = A.IATA\_CODE

GROUP BY A.AIRLINE

ORDER BY count(A.IATA\_CODE) DESC LIMIT 1

7. On which day of the week was there the greatest number of flights?

SELECT DAY\_OF\_WEEK, count(DAY\_OF\_WEEK) as “Number of Flights”

from "Sample\_flights"

group by DAY\_OF\_WEEK

order by count(DAY\_OF\_WEEK) desc limit 1

8. On which day of the week was there the least number of flights?

SELECT DAY\_OF\_WEEK, count(DAY\_OF\_WEEK) as “Number of flights” from "Sample\_flights"

group by DAY\_OF\_WEEK

order by count(DAY\_OF\_WEEK) asc limit 1

9. On which day of the year 2015 did Delta Airlines have the greatest number of Flights?

Query: SELECT A.AIRLINE, S.DAY\_OF\_WEEK, COUNT(A.IATA\_CODE) as "Number of flights" from "Sample\_flights" S

left join "airlines" A

on S.AIRLINE = A.IATA\_CODE

Where A.AIRLINE = "Delta Air Lines Inc."

GROUP BY A.AIRLINE, S.DAY\_OF\_WEEK

order by COUNT(A.IATA\_CODE) desc limit 1

10. What is the name of the airline that had the least number of flights during 2015?

Query: SELECT A.AIRLINE, COUNT(A.IATA\_CODE) as "Number of flights" from "Sample\_flights" S

left join "airlines" A

on S.AIRLINE = A.IATA\_CODE

GROUP BY A.AIRLINE

ORDER BY count(A.IATA\_CODE) asc LIMIT 1

11. Which airline had the greatest average "departure delay" times?

Query: SELECT A.AIRLINE, ROUND(Avg(DEPARTURE\_DELAY),2) as "Average Delay in Departure" from "Sample\_flights" S

left join "airlines" A

on S.AIRLINE = A.IATA\_CODE

GROUP BY A.AIRLINE

ORDER BY Avg(DEPARTURE\_DELAY) desc LIMIT 1

12. Which ten airports was the most frequent destination airport?

Query: SELECT A.DESTINATION\_AIRPORT, B.AIRPORT, COUNT(A.DESTINATION\_AIRPORT) FROM "Sample\_flights" A

LEFT JOIN "airports" B

ON A.DESTINATION\_AIRPORT = B.IATA\_CODE

Group by A.DESTINATION\_AIRPORT, B.AIRPORT

order by COUNT(A.DESTINATION\_AIRPORT) desc limit 10

13. Which ten airports where the most frequent originating flights?

Query: SELECT A.ORIGIN\_AIRPORT, B.AIRPORT, COUNT(A.ORIGIN\_AIRPORT) FROM "Sample\_flights" A

LEFT JOIN "airports" B

ON A.ORIGIN\_AIRPORT = B.IATA\_CODE

Group by A.ORIGIN\_AIRPORT, B.AIRPORT

order by COUNT(A.ORIGIN\_AIRPORT) desc limit 10

14. Which airline had the greatest percentage of "departure delay" flights?

Query: SELECT A.DEPARTURE\_DELAY/100, B.AIRLINE FROM "Sample\_flights" A

LEFT JOIN "airlines" B

ON A.AIRLINE= B.IATA\_CODE

WHERE DEPARTURE\_DELAY/100 >= 1

ORDER BY DEPARTURE\_DELAY/100 DESC

15. Find All Airports in the State of California.

Query: SELECT AIRPORT, STATE FROM "airports"

where STATE = "CA"

16. List All Flights with a Distance Greater Than 1000 Miles.

Query: SELECT FLIGHT\_NUMBER, DISTANCE FROM "Sample\_flights"

WHERE DISTANCE >= 1000

17. Top 5 Airlines with Most Flights.

Query: SELECT B.AIRLINE, count(A.FLIGHT\_NUMBER) as "Number of Flights" FROM "Sample\_flights" A

JOIN "airlines" B

on B.IATA\_CODE = A.AIRLINE

group by B.AIRLINE

order by count(A.FLIGHT\_NUMBER) desc limit 5

18. Total Number of Flights from Each Airport.

Query: SELECT B.AIRPORT, count(A.FLIGHT\_NUMBER) as "Number of Flights" FROM "Sample\_flights" A

JOIN "airports" B

on B.IATA\_CODE = A.ORIGIN\_AIRPORT

group by B.AIRPORT

order by count(A.FLIGHT\_NUMBER) desc

19. Average Flight Duration for Each Airline.

Query: SELECT S.FLIGHT\_NUMBER, A.AIRLINE, AVG(ROUND(S.AIR\_TIME/60, 2)) as "Duration" from "Sample\_flights" S

left join "airlines" A

on S.AIRLINE = A.IATA\_CODE

Group by S.FLIGHT\_NUMBER

ORDER BY AVG(ROUND(S.AIR\_TIME/60, 2)) DESC

20. Top 5 Longest Flights by Distance.

Query: SELECT DISTINCT S.FLIGHT\_NUMBER, A.AIRLINE, S.DISTANCE as "Distance" from "Sample\_flights" S

left join "airlines" A

on S.AIRLINE = A.IATA\_CODE

order by S.DISTANCE desc limit 5