Team-Y (Chandu, Saran, Wen)

Project Title: Analyzing the flight delays in United States and providing insights to passengers for better planning their travel

Conclusions and Future Work:

In the process of answering various questions during our analysis, we came up with various insights which will help the customer in better planning their flight. Combination of the answers can be used to further answer complex questions and come up with logical conclusions. The conclusions from this analysis are as follows:

- If there is more is the number of flights, the more options a passenger can choose from. There are more number of flights on Friday of the week.
- There are more number of flights in the evening time i.e from 1600 hours to 2000 hours (Evening Time) which is indicative of the people travel during the evenings more.
- The less is the delay on a given weekday, the better it is to travel on that weekday. Wednesday and Thursday has less overall delay and are better days for minimizing the delays.
- The information on the delays can be used by authorities to understand the delays and act upon by taking suitable actions in minimizing delays.
- In one of the graphs, we have dept. delay categorized into 4hour slots shows that delay is minimum during the 4-8 hours (morning time). It indicates that travelling during that time-period will certainly help in reducing the delay.
- We have listed the airports with more departure delay, and this information helps us in trying to avoid travelling from those airports and choose an alternative (if possible)
- Similarly, we have listed the airports with more arrival delay, and this information helps us in trying to avoid travelling from those airports and choose an alternative (if possible)

- The best combination of airports to travel is given based on the values of departure and arrival delays. Thus, while planning a trip it is advised travelling to these combinations of airports.
- Similarly, the worst combination of airports to travel is given based on the values of departure and arrival delays. Thus, while planning a trip it is advised to avoid travelling to these combinations of airports.

Predictive Analytics:

In our future projects, we plan to come up with the predictive models on top of this data which will help in predicting the flight delays based on the information we already had.

Prescriptive Analytics:

We plan to come up with the prescriptive analytics based on the results of the data. Airport authorities can take right actions to reduce the delay once the reasons for the delay are known. Similarly, a passenger can use our prescriptive models to identify the right airports to travel, right day and right time of the day to travel.