CS 225 Project Goal

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Overview:

For our final project, we plan on using the OpenFlights dataset. We are using the datasets from https://openflights.org/data.html. The code for our project will traverse through the airports in the dataset using BFS, determine the shortest path between two airports using Dijkstra's algorithm, while also implementing the mathematical concept of strongly connected components in graph theory to determine if all airports can be reached from one airport given a set number of airports. This will also allow us to identify an airport that is capable of reaching all other airports in our dataset.

• Features:

- o **Traversal:** BFS (Breadth First Search)
- Algorithms/Concepts:
 - Dijkstra's Shortest Path Algorithm
 - Strongly connected component (graph theory)