Assignment #4 - Airline network Algorithms and Datastructure

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In groups:

Implement a directed Graph for flight routes using the source data from Github in the `/general/assignments/04+Assignment+Airline+Network` directory, which will be available Monday 20. March.

The graph representation should be such that it is both efficient in terms of memory use and time taken to do the following operations.

1. Find if an airport can be reached from another using only a single airline company. You should compare
   (a) Breadth-first
   (b) Depth-first
2. Finding shortest path (distance) from one location to another (Dijkstra's algirithm)
3. Finding shortest path (time) from one location to another, assuming that each transfer takes one hour.
4. Finding airline that has widest coverage (Minimum Spanning Tree)

Defend the choice of datastructure with regard of time and space complexity (big O).

The solution accompanied with a description in a README.md file should be uploaded (pushed) to a git repository, and a link should be handed in, in Moodle no later than Wednesday April 5. 12:00.