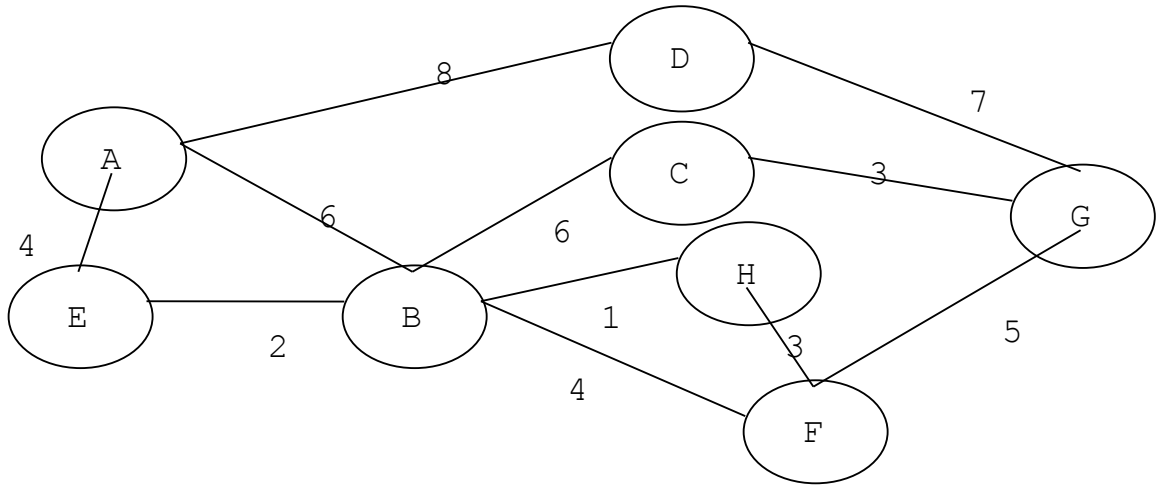


1. You are to implement Dijkstra's algorithm to find the shortest path between 2 points in a graph. (You do not need to use classes)

The graph you are to use is the one used in the diagrams in the lecture overheads (shown below).



2. Once you have a working shortest path between 2 nodes, update the algorithm so that it will print out the shortest route from any node to EVERY OTHER NODE on the graph.
3. This is not related to Dijkstra's algorithm, in a word document, and in your own words explain each of the five the different ways of type casting in C++ (Implicit conversion, regular C style cast, `dynamic_cast`, `static_cast`, and `reinterpret_cast`).