**Bacon Number FAQ**

***Do I need an Actor and Movie class?***

You *could*, but that would complicate the logic somewhat - you'd have to do a lot of mapping. You could treat actors and movies as Strings (or integers, their ID numbers), and your graph would be an adjacency list / map of Strings. It's up to you.

***Do I need a Node class to bundle an Actor and their visited status?***

You can, although I didn't. I used a Set to remember the visited actors.

***How do I iterate over all the entries (key/value pairs) in a HashMap?***

HashMap objects have an entrySet method that will return an Iterable (a Set<Entry>). Entry is an inner class the bundles together a particular entry's key and value. Entry has getKey and getValue methods. Example:

//for-each Entry object in the Set of Entries for this map...

for (Entry<String, Set<String>> entry : map.entrySet()) {

String key = entry.getKey();

Set<String> value = entry.getValue(); //a node's neighbors

//do some weird stuff

}

***I have my graph and BFS working. How do I actually calculate / store the distances?***

I used a Map, mapping an actor to their "distance" from Kevin Bacon; however, there are many ways this could be done. Recall that the distance from actor b to c will be one more than the distance from a to b.

***How long should it take to find the Bacon number with the larger files?***

It takes a while to build the graph if using the non-test files. Think about the algorithm: what is the Big-O of forming the graph? What is the Big-O of running a BFS?

***Why can't I locate \_\_\_ in a Set or Map?***

Did you override BOTH the equals and hashCode methods? (This is already done if you're using Strings, however if you're using a Vertex or Actor class, etc., you'll have to do it yourself.) The default implementation of hashCode, inherited from Object, provides (generally) unique hash codes for unique objects.