hw5changes

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November 2018

1 Changes1

I switched the data structure for storing edges from $HashMap < String, TreeSet < String >>$ to $HashMap < String, HashSet < String >>$ and the data structure for storing nodes from $TreeSet < String >$ to $HashSet < String >$ because using hash set is more efficient than using tree set especially when there are lots of adding operations.

2 Changes2

I add a method in Graph.java called $TreeSet < Edge > getTwoNodeEdges(Stringnode1, Stringnode2)$ because it helps me to get all edges between two nodes and sort these edges after determining two nodes.

3 Changes3

I add a method in Graph.java called $Iterator < String > getNeighbors(Stringparent)$ because it helps me to get all child nodes of a parent nodes and sort those nodes when finding paths.

4 Changes4

I override equals() and hashcode() in Edge.java because I have to make sure that two equivalent edges will have the same hash codes and be managed properly in a hash set.