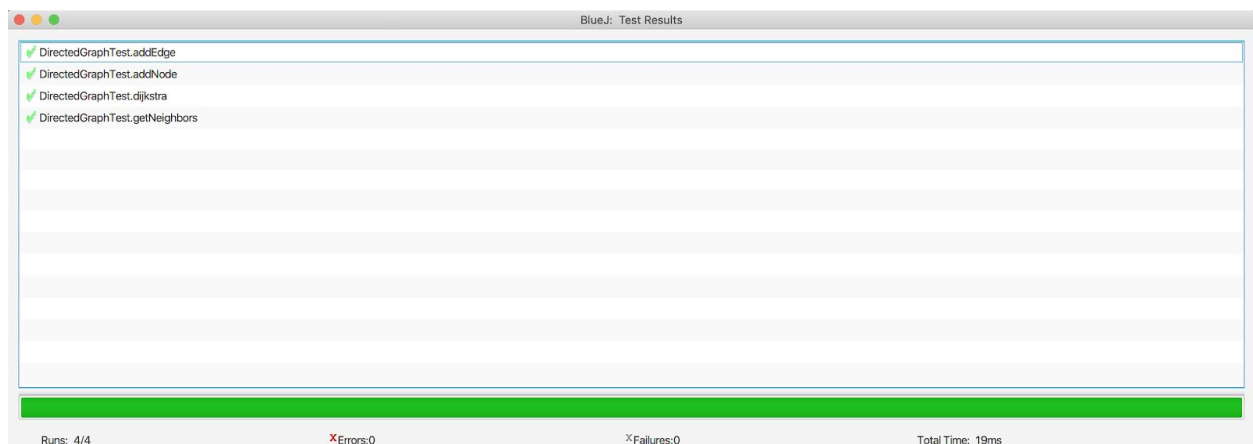


Dylan Maloy  
CS150 Lab 10  
Lab #10 write-up  
11/18/19

### Introduction:

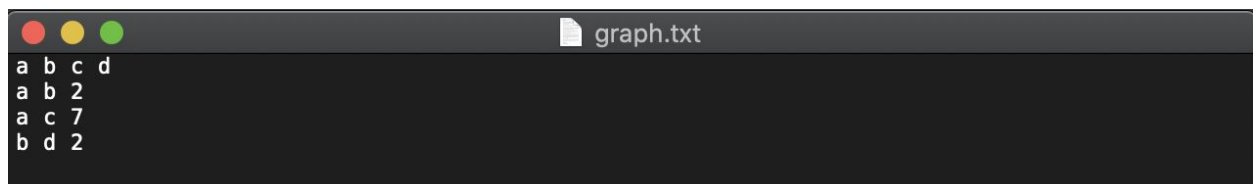
The goal of this lab was to become more familiar with maps containing vertices and edges as well as dijkstra's shortest path algorithm. These skills will come in handy when working on our current ride-share project in regards to the map's functionality. This lab contained 4 classes, one of which ran the simulation from the file, while the others dealt with graph functionality (**DirectedGraph**, **DirectedGraphNode**, **DirectedGraphEdge**). All together, the purpose of the lab was to create a graph which can have nodes added and connected to other nodes with weighted edges that represent distance. They then can be traversed via dijkstra's shortest path algorithm in order to find the distances from one node to every other reachable node in the graph.

### Unit Tests:



- BlueJ unit test window output

### Required Output:



- Input file contents

```
DylanMaloy@Dylans-Macbook-Pro lab10 % java GraphExperiment  
a 0 b 2 d 4 c 7
```

- Command line output of command “java GraphExperiment” using input file referenced above

**Trouble Report:**

This section is not applicable because all of my methods work as intended.

**References:**

Lysecky, R. (2019). Data Structures Essentials. ZyBooks.