CS 253 Mark Holliday (written by Dr. Andrew Scott and Dr. Mark Holliday)

Project 1: `simpleton.json` Project 1 Output

The following is the output from using the `simpleton.json` file. This assumes that `simpleton.json` is in the same directory as the client and server JavaScript files.

Section 1: Network tests

In one shell the command below is used.

```
node railway_network.js
```

In another shell the command below is used

```
node client_network.js simpleton.json
```

The output is below.

```
===Network TEST=1=NETWORK=NAME===
Simpleton Railway System

===Network TEST=2=GETTING=ROUTES=ARRAY
There are 1 routes on this network
The type of the routes is object

===Network TEST=3=ROUTE=NAMES===
[ 'Simpleton' ]

===Network TEST=4=ROUTE=NAMES=TOSTRING===
Simpleton

===Network TEST=5=Total_Stations===
There are 5 stations in this network.

===Network TEST=6=FIND=LONGEST=ROUTE===
Longest route is: ROUTE:Simpleton(Red)
STATIONS:
1 Alphaville 0 miles
2 Betaford 25 miles
3 Gammaton 50 miles
4 Deltafield 75 miles
5 Epsilon 100 miles
Total Route Distance: 100 miles
```

Section 2: Route summary tests

In one shell the command below is used.

```
node railway_routeSummary.js
```

In another shell the command below is used

```
node client_routeSummary.js simpleton.json
```

The output is below.

```
ROUTE SUMMARY Tests

===Route Summary TEST=1=ROUTE=SUMMARY===
Routes Summary
==============
Simpleton            - Alphaville      to Epsilon         - 100 miles

===Route Summary TEST=2=SORT=ROUTE=BY=NAME=(ASC)===
Routes Summary
==============
Simpleton            - Alphaville      to Epsilon         - 100 miles

===Route Summary TEST=3=SORT=ROUTE=BY=NAME=(DESC)===
Routes Summary
==============
Simpleton            - Alphaville      to Epsilon         - 100 miles

===Route Summary TEST=4=SORT=ROUTE=BY=LENGTH=(ASC)===
Routes Summary
==============
Simpleton            - Alphaville      to Epsilon         - 100 miles

===Route Summary TEST=5=SORT=ROUTE=BY=LENGTH=(DESC)===
Routes Summary
==============
Simpleton            - Alphaville      to Epsilon         - 100 miles
```

Section 3: Route tests

In one shell the command below is used.

```
node railway_route.js
```

In another shell the command below is used

```
node client_route.js simpleton.json Simpleton Betaford Epsilon
```

`Simpleton` is the route used in the first three tests. `Betaford` and `Epsilon` are the two stops for the extra credit test. The extra credit test determines if there is any single route that contains both of those stops. If there is such a route, it returns a string specifying that route and the number of stops and distance traversed getting from the first to the second stop. Note that the route (if any) found in the extra credit test need not be the same route as the route specified as a command line argument.

In this example `Betaford` and `Epsilon` are both on the `Simpleton` route. The output is below.

```
ROUTE Tests

===Route TEST=1=GET=ROUTE===
Found: Simpleton

===Route TEST=2=ROUTE=TO=STRING===
ROUTE:Simpleton(Red)
STATIONS:
1 Alphaville 0 miles
2 Betaford 25 miles
3 Gammaton 50 miles
4 Deltafield 75 miles
5 Epsilon 100 miles
Total Route Distance: 100 miles

===Route TEST=3=ROUTE=DISTANCE===
Distance of Line as calculated: 100

====(OPTIONAL) Route TEST=4=BONUS1=FIND=FROM=TO===
Simpleton Betaford to Epsilon 3 stops and 75 miles
```