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Lab 2
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INSTRUCTIONS

Make sure you're in the right directory

'make' will compile the program, you can also compile manually with 'g++ main.cpp'

The executable is named 'a.out'

To run the program:

`./a.out input.txt`

where 'input.txt' is the name of the input file defining the routers and costs

while the program is running, you have two choices:

- 0 – run the bellman ford algorithm until stability in the network is reached.
 - this option also suppresses output, and displays a timer at the end
- 1 – iteratively run the algorithm, showing the results of updating at each step.
 - 'c' – continues through one more iteration
 - 'l' – allows the user to enter a new value for a given link between two routers
 - o enter the # router to start
 - o enter the second # router to end
 - o enter the new cost value for the link between start and end

WRITEUP

I assumed that the routers will be numbered starting at 1

There are no known bugs

99 represents "infinity" – if there are any cost values greater than this in the input file, my program will not work. I could've made this value INT_MAX or something, but 99 makes printing prettier.

RESULTS

When run in stable mode, the algorithm executes to completion in 32 microseconds on average!