Documentation for Extra Credit 1

1. Libraries to use: No extra libraries needed
2. How to compile and run:

* Step 1: In the second line of the file “extra-1-3512891128.lsp”, replace “SOMEPATH” with the actual path to “graph” file (in the same directory as “extra-1-3512891128.lsp”).
* Step 2: Launch LISP interpreter and do

(load "SOMEPATH/extra-1-3512891128/extra-1-3512891128.lsp")

Note that you also need to replace SOMEPATH here

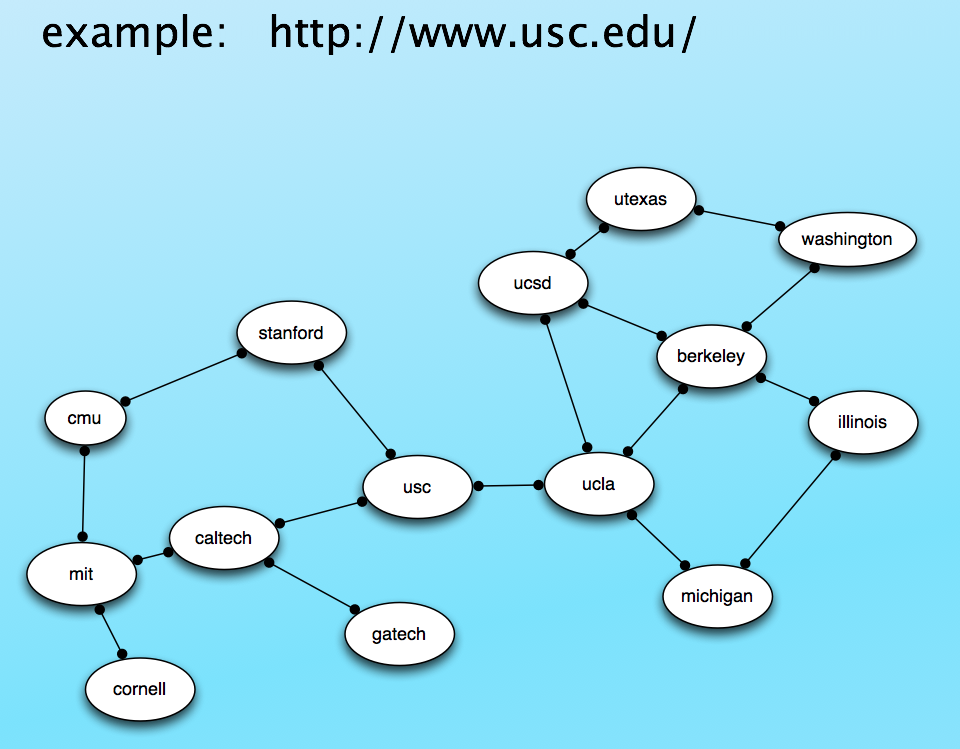
* Step 3: Run the program by doing:

(find-URL-path "http://www.usc.edu/" "http://www.berkeley.edu/")

Please see next page for more test examples.

1. Test examples:

* The topology specified in the file “graph” is shown below   
  (use “usc” instead of “<http://www.usc.edu>” for simplicity):



Test cases:

1. Same start and goal:

Input: (find-URL-path "http://www.cmu.edu/" "http://www.cmu.edu/")

Output: ("http://www.cmu.edu/")

2. Start not in graph:

Input: (find-URL-path "http://www.uofphoenix.edu/" "http://www.washington.edu/")

Output: (PLEASE CHECK THE START PAGE)

3. Goal not in graph:

Input: (find-URL-path "http://www.usc.edu/" "http://www.oxford.edu/")

Output: (PLEASE CHECK THE GOAL PAGE)

4. Normal test case (1)

Input: (find-URL-path "http://www.cornell.edu/" "http://www.washington.edu/")

Output: shortest path is found

(("http://www.cornell.edu/" "http://www.mit.edu/") ("http://www.mit.edu/" "http://www.caltech.edu/") ("http://www.caltech.edu/" "http://www.usc.edu/") ("http://www.usc.edu/" "http://www.ucla.edu/") ("http://www.ucla.edu/" "http://www.berkeley.edu/") ("http://www.berkeley.edu/" "http://www.washington.edu/"))

5. Normal test case (2)

Input: (find-URL-path "http://www.usc.edu/" "http://www.mit.edu/")

Output: shortest path is found

(("http://www.usc.edu/" "http://www.caltech.edu/") ("http://www.caltech.edu/" "http://www.mit.edu/"))

6. Normal test case (3)

Input: (find-URL-path "http://www.utexas.edu/" "http://www.michigan.edu/")

Output: shortest path is found

(("http://www.utexas.edu/" "http://www.ucsd.edu/") ("http://www.ucsd.edu/" "http://www.ucla.edu/") ("http://www.ucla.edu/" "http://www.michigan.edu/"))