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Coms472
Lab 1
Lab Report

Task 2
A)
The heuristic that I use is not admissible, this is because we are not checking the whole page contents but we are only checking the number of the word “QUERY” being repeated in the page.

C)
It perform well better than original breadth first search and depth first search.

Results:
BFS
Visited 91 nodes, starting @ /Users/pfong/Desktop/coms472/Lab1/intranets/intranet1/page1.html, using: breadth search.
Length of traversed path is 4.
Path list is: page1.html -> page18.html -> page29.html -> page99.html -> page50.html

Visited 88 nodes, starting @ /Users/pfong/Desktop/coms472/Lab1/intranets/intranet5/page1.html, using: breadth search.
Length of traversed path is 8.
Path list is: page1.html -> page40.html -> page99.html -> page89.html -> page87.html -> page96.html -> page95.html -> page72.html -> page62.html

Visited 56 nodes, starting @ /Users/pfong/Desktop/coms472/Lab1/intranets/intranet7/page1.html, using: breadth search.
Length of traversed path is 6.
Path list is: page1.html -> page48.html -> page71.html -> page57.html -> page62.html -> page61.html -> page86.html

DFS
Visited 58 nodes, starting @ /Users/pfong/Desktop/coms472/Lab1/intranets/intranet1/page1.html, using: depth search.
Length of traversed path is 15.
Path list is: page1.html -> page23.html -> page60.html -> page39.html -> page78.html -> page25.html -> page42.html -> page84.html -> page30.html -> page68.html -> page93.html -> page87.html -> page79.html -> page2.html -> page83.html -> page50.html

Visited 42 nodes, starting @ /Users/pfong/Desktop/coms472/Lab1/intranets/intranet5/page1.html, using: depth search.
Length of traversed path is 10.
Path list is: page1.html -> page40.html -> page99.html -> page5.html -> page97.html -> page68.html -> page48.html -> page7.html -> page95.html -> page72.html -> page62.html

Visited 12 nodes, starting @ /Users/pfong/Desktop/coms472/Lab1/intranets/intranet7/page1.html, using: depth search.
Length of traversed path is 9.
Path list is: page1.html -> page48.html -> page71.html -> page57.html -> page90.html -> page39.html -> page60.html -> page11.html -> page78.html -> page86.html

BEST

Visited 16 nodes, starting @ /Users/pfong/Desktop/coms472/Lab1/intranets/intranet1/page1.html, using: best search.
Length of traversed path is 5.
Path list is: page1.html -> page14.html -> page95.html -> page56.html -> page99.html -> page50.html

Visited 23 nodes, starting @ /Users/pfong/Desktop/coms472/Lab1/intranets/intranet5/page1.html, using: best search.
Length of traversed path is 13.
Path list is: page1.html -> page70.html -> page93.html -> page8.html -> page83.html -> page40.html -> page99.html -> page88.html -> page19.html -> page42.html -> page35.html -> page95.html -> page72.html -> page62.html

Visited 18 nodes, starting @ /Users/pfong/Desktop/coms472/Lab1/intranets/intranet7/page1.html, using: best search.
Length of traversed path is 6.
Path list is: page1.html -> page48.html -> page71.html -> page57.html -> page62.html -> page61.html -> page86.html

BEAM

Visited 21 nodes, starting @ /Users/pfong/Desktop/coms472/Lab1/intranets/intranet1/page1.html, using: beam search.
Length of traversed path is 5.
Path list is: page1.html -> page14.html -> page95.html -> page56.html -> page99.html -> page50.html

Visited 23 nodes, starting @ /Users/pfong/Desktop/coms472/Lab1/intranets/intranet5/page1.html, using: beam search.
Length of traversed path is 13.
Path list is: page1.html -> page70.html -> page93.html -> page8.html -> page83.html -> page40.html -> page99.html -> page88.html -> page19.html -> page42.html -> page35.html -> page95.html -> page72.html -> page62.html

Visited 18 nodes, starting @ /Users/pfong/Desktop/coms472/Lab1/intranets/intranet7/page1.html, using: beam search.
Length of traversed path is 6.
Path list is: page1.html -> page48.html -> page71.html -> page57.html -> page62.html -> page61.html -> page86.html

Intranet #	BFS	DFS	BEST	BEAM
1	91/4	58/15	16/5	21/5
5	88/8	41/10	23/13	23/13
7	56/6	12/9	18/6	18/6