INFO 102 Lab 6: Directional Graphs, PageRank, and The Halting Problem

Partner #1: Name: _____ Net ID: _____

Partner #2: Name: _____ Net ID: _____

What is the **Halting Problem**? Is it **decidable**?

Represent the following in a graph:

The wikipedia page about RAM links to the wikipedia pages about SSDs and HDDs.
The wikipedia page about the CPU links to the wikipedia pages about RAM, the ALU, and the clock.
The wikipedia page about the ALU links to the wikipedia pages about the CPU and the clock.

Note: should your edges be directional or not?

Open the Google Co-Lab notebook for today's lab at: **https://go.illinois.edu/info102-pagerank-notebook**
Upload two files from the course website's Labs page into your Google Co-lab: articles.txt and links.txt.

Follow the directions in the notebook and execute the code as the notebook describes.

Looking over the random walks, what articles showed up frequently?

Were there common themes in the articles you encountered most often? Why did the random walk visit these pages so frequently?

What are some of the Wikipedia articles that have the highest PageRank in our dataset?

Why might they have such a high PageRank?

What are some of the Wikipedia articles that have the lowest PageRank in our dataset?

Why might they have such a low PageRank?

What is the total of all the PageRank values? Why is that the total?

When you're done, check out with a TA or CA, and hand over this completed worksheet.

Bye!