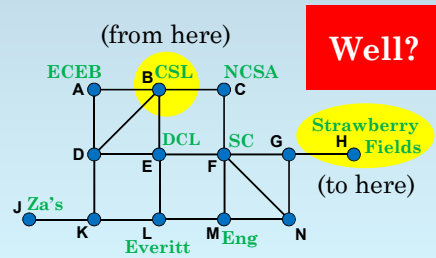


Please Teach My Computer to Do What You Did

Here's the map. I want to be able to find a path from any node to any other.



Here's One Approach to Finding the Shortest Path

Don't panic!

I have **An Idea™!**

Here it is:

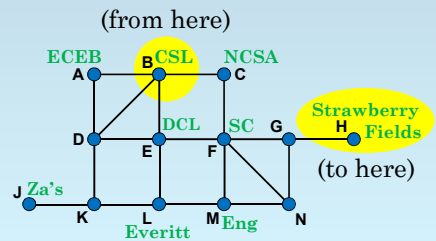
1. list all paths,
2. measure all of the paths, and
3. pick the shortest one.

Sound good?

Let's Try My Idea: First, List the Paths

Starting from **B...**

B → A → B → A → B → A → B → A → B → A



Professors Shouldn't Be Allowed to Wander in Circles

Don't panic!

I have ~~An Idea™!~~

a better idea

Here it is:

1. list ~~all paths,~~ **all simple paths,**
2. measure all of the paths, and
3. pick the shortest one.

In mathematics, a "simple path" is one that includes any node at most one time. (So we can't go back to a place we've been already.)