

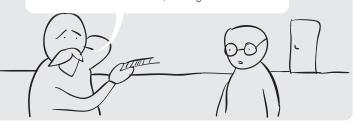
Introduction



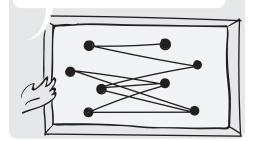
You have been down in the basement all evening!



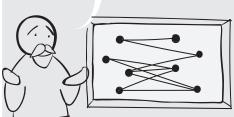
It's my model railway, son. It has "derailed" me a bit. I have been trying all night to re-arrange the railway connections to match this map of city links...



... but I fear it is just too complex for me.

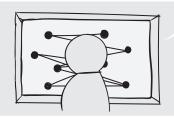


I just can't keep "track" of all the connections!

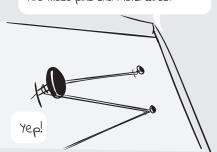


OK, enough with the dad puns, dad!

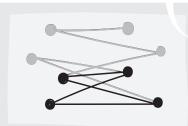
I think I have an idea.



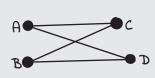
Are these pins and metal wires?



Let's focus on a small subset to begin with.



what would happen if you pinch wires together if their starting pins are connected to both end pins?



For example, we can bundle the AC and BC wires, because both A and B connect with C.



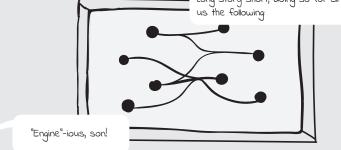
Similarly for wires AC and AD, A is connected to both C and D, so we could bundle them too.



wires BC and AD can likewise be bundled, as can AC and BC, AD and BD.



Long story short, doing so for all edges gives



You need to "train" me to do this on my own.

