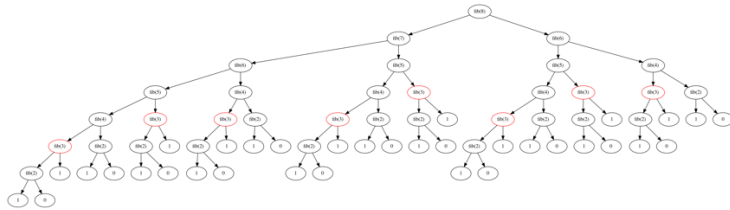


CPSC 5031 Homework 6 (5 pts)

Visualizing Graphs

Let's write more code!

Remember this image?



Per the post in Announcements, this was generated using a toolkit called GraphViz (<http://www.graphviz.org/>). It's a very handy tool to have in your personal toolkit. You can download/install it from these directions: <http://www.graphviz.org/download/>

Assignment

Write a program that can take an adjacency matrix file and generate a GraphViz "dot file". Run the dot files through `dot` (one of the GraphViz command line tools) and generate a PNG file.

Example command line:

```
dot -Tpng myfile.dot -o myfile.png
```

OH, ONE LITTLE DETAIL:

You must determine if the adjacency file could be a digraph. If it is, use the `digraph` command in your dot file. Otherwise, use `graph`. Remember, unless it's a directed graph, there shouldn't be two edges connecting the same two vertices.

What you need to turn in:

1. Your code. (I don't need the dot files.)
2. An explanation of the test cases you used.
3. The images generated for each adjacency matrix included in the homework.

FAQ

How do I use GraphViz?

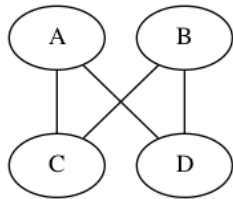
Read the directions. Here's the reference: <http://www.graphviz.org/pdf/dotguide.pdf>

What are some example dot files I can look at?

Check out <https://graphs.grevian.org/example>

How about a little hint?

Okay, the graph for adj1.txt should look like this:



Do I need test cases for this?

Always! See #2 of the checklist of things you need to turn in. 😊