

We have completed a standalone program that will read a text file containing the description of a graph using an adjacency matrix and produce all of the distinct paths from one vertex to another. See the code linked on the course web page.

Now, you are to modify that program so that it works using our existing `AbstractGraph`, `Graph`, and `UnweightedGraph` classes. Thus, you are to include a method in the `AbstractGraph` class:

```
public ArrayList<String> getAllPaths(int u, int v)
```

that will return all of the distinct paths from vertex `u` to vertex `v`, each as a string. Your main program should read the graph from a text file as we did in Lab5 and effectively test your method.

Turn in a printed copy of your source code and sample execution output. You only need to print the parts of the `AbstractGraph` class that you have added or modified.