

Download the file `ZCScix35_Graph_Gift20180423.zip`. This contains the complete Netbeans project to implement the low level classes for the Graph Theory project. Make this your project. Henceforth, I wish to you add methods to your project.

For today, implement the following methods in the `Graph` class.

**Program 1.** Create a method `public List<Vertex> adjacents(Vertex v)` returns a list of the vertices which share an edge with  $v$  (excluding  $v$ ). Create another method `public List<Vertex> associates(Vertex v)` returns a list of vertices which may be visited by a walk initiating at  $v$  (including  $v$ ).

Use the above methods and recursion to accomplish the next task.

**Program 2.** Create a method `public boolean isConnected()` which returns `true` if the graph is connected, and `false` otherwise.

After your have read this, please acknowledge that by filling out the following Google Forms checkin.

0402 AP Computer Science Checkin